

**INFORMATION LAW  
TOWARDS  
THE 21ST CENTURY**

**Willem F. Korthals Altes (ed.)  
Egbert J. Dommering (ed.)  
P. Bernt Hugenholtz (ed.)  
Jan J.C. Kabel (ed.)**

INFORMATION LAW SERIES - 2

INFORMATION LAW  
TOWARDS  
THE 21ST CENTURY

**KLI archive copy**

## **International Board of Editors**

### EDITORS-IN-CHIEF

Prof. Egbert J. Dommering  
Dr. P. Bernt Hugenholtz  
Institute for Information Law  
University of Amsterdam  
*The Netherlands*

### MEMBERS

Prof. Eric Barendt  
University College London  
*England*

Prof. Martin Bullinger  
Institut für öffentliches Recht  
Albert-Ludwigs-Universität Freiburg  
*Germany*

Herbert Burkert  
Gesellschaft für Mathematik und Datenverarbeitung, Cologne  
*Germany*

Prof. Michael Lehmann  
Max-Planck-Institut für ausländisches und internationales Patent-, Urheber- und Wettbewerbsrecht  
Munich  
*Germany*

Prof. André Lucas  
Université de Nantes  
*France*

Prof. Ejan Mackaay  
Université de Montréal  
*Canada*

Prof. Eli M. Noam  
Center for Telecommunications and Information Studies  
Columbia University, New York  
*U.S.A.*

INFORMATION LAW SERIES - 2

INFORMATION LAW  
TOWARDS  
THE 21ST CENTURY

*Editors*

Willem F. Korthals Altes  
Egbert J. Dommering  
P. Bernt Hugenholtz  
Jan J.C. Kabel

*Contributors*

Jens C. Arnbak  
Eric M. Barendt  
Ton A.L. Beers  
Jon Bing  
Michael Botein  
Herbert Burkert  
Jean-Pierre Chamoux  
Egbert J. Dommering  
Véronique Faure  
F. Willem Grosheide  
Jacques Habib Sy  
Cees J. Hamelink  
Frauke Henning-Bodewig  
P. Bernt Hugenholtz  
Jeff A. Keustermans  
Wolfgang Kleinwächter  
Michael Lehmann  
Ejan Mackaay  
Willem C. van Manen  
Antoon A. Quaedly  
Jerome H. Reichman  
Stefano Rodotà  
Hendrik J. de Ru  
Jaap H. Spoor

1992  
KLUWER LAW AND TAXATION PUBLISHERS  
Deventer • Boston



*Kluwer Law and Taxation Publishers*

P.O. Box 23  
7400 GA Deventer / The Netherlands  
Tel.: +31 5700 47261  
Fax: +31 5700 22244  
Telex: 40205

6 Bigelow Street  
Cambridge MA 02139 / USA  
Tel.: +1 617 342 0140  
Fax: +1 617 354 8595

Printed and bound by CPI Antony Rowe, Eastbourne

Cover design: Studio DUMBAR

WEB-ISBN 978-90-411-7693-6

© 1992 Willem F. Korthals Altes, Egbert J. Dommering, P. Bernt Hugenholtz, Jan J.C. Kabel, Jens C. Arnbak, Eric M. Barendt, Ton A.L. Beers, Jon Bing, Michael Botein, Herbert Burkert, Jean-Pierre Chamoux, Véronique Faure, F. Willem Grosheide, Jacques Habib Sy, Cees J. Hamelink, Frauke Henning-Bodewig, Jeff A. Keustermans, Wolfgang Kleinwächter, Michael Lehmann, Ejan Mackaay, Willem C. van Manen, Antoon A. Quaëdvlieg, Jerome H. Reichman, Stefano Rodotà, Hendrik J. de Ru, Jaap H. Spoor, c/o Kluwer Law and Taxation Publishers, Deventer, The Netherlands

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the publisher.

# Preface

*Information Law towards the 21st Century* is the title of the conference organized by the *Institute for Information Law* of the University of Amsterdam in June 1991, in cooperation with the Netherlands Conference Bureau (NCB), Eurocongres, RAI International Congress Center and the Royal Netherlands Academy of Sciences (KNAW).

This book, the second in the Information Law Series, contains a selection of the contributions made to the conference. The titles of the chapters correspond with the themes which served as a basis for the discussions.

The themes of Chapters Two, Three and Four are intended to provide the reader with a clear picture of the various topics of information law. Each of them is preceded by a short introduction by one of the editors. The conference has proved convincingly that the information law approach of relevant laws and technologies combined with the theories of the economic analysis of intellectual property and fundamental freedoms enriches the debate and offers new perspectives for further analysis of topics discussed in this book. Chapter One contains introductions on a number of general elements of information law, such as the fundamental freedoms and the economic aspects, and an overview of recent developments in telecommunications and broadcasting in the European Community. In the first part of this introductory chapter, Professor Egbert J. Dommering, Managing Director of the Institute for Information Law, gives a general introduction on information law and the themes of this book. Willem F. Korthals Altes, who organized the conference, did the general editing. We are very grateful to Monique Gerritsma, who assisted in editing this book.

*The editors*



# About the Authors

**Jens C. Arnbak** is Professor of Tele-information Techniques at Delft University of Technology, The Netherlands. He received his Master's and Doctor's degrees from the Technical University in Denmark. He has published numerous papers on electromagnetic wave propagation, satellite communication systems and packet radio, and has participated in various telecommunication policy studies commissioned by the Dutch Government. He is a member of the Council for Post and Telecommunications advising the Dutch Government on PTT matters.

**Eric M. Barendt** is Goodman Professor of Media Law at University College, London. He was a Fellow at St. Catherine's College in Oxford and Lecturer at the University of Oxford from 1971 to 1990. He was a Visiting Professor at Santa Barbara University, California (1981), and a Jean Monnet Research Fellow at EUI in Florence (1987-1988). Prof. Barendt is the author of a considerable number of publications on social security, freedom of speech, broadcasting law and other topics.

**Ton A.L. Beers** is Assistant Professor at the Department of Constitutional and Administrative Law, Catholic University Brabant. Previously, he served as a civil servant at the Ministry of Defense, dealing with, i.a., the Dutch Public Access to Information Act. He is the author of '*Commentaar op het voorstel voor een nieuwe Wet openbaarheid van bestuur*' (Comment on the proposal for a new Public Access to Information Act) (1987) and numerous articles in law journals.

**Jon Bing** did his law exam at Oslo University in 1969 and graduated in law in 1982 (Legal Communication Processes). In 1970 he co-founded the Norwegian Research Center for Computers and Law, currently a department of the Faculty of Law. He holds a chair in Legal Informatics and is Chairman of Computers and Law. Prof. Bing did research on several issues within the area of computers and law. He has been a Consultant in Data Protection for the Council of Europe, the Commission of European Communities and the World Health Organization, and has published many papers.

**Michael Botein** (B.A., Wesleyan University, 1966; J.D. (with distinction), Cornell University, 1969; LL.M., 1972, and J.S.D., 1979, Columbia University) is Professor of Law and Founding Director of the Communications Media Center, New York Law School, New York. He is an Associate Scholar at the Center on Telecommunications and Information Policy, Columbia University Graduate School of

Business, and a Member of the Promotion & Tenure Committee. He has been a consultant and a reporter on behalf of many authorities and a member of several Law Committees. Prof. Botein is the author of many articles, books and monographs.

**Herbert Burkert** is an attorney at law at the Cologne Bar and Senior Researcher and Deputy Director of the Research Center for Information Economics at GMD. He has studied law, economics, political sciences and modern history at the University of Cologne and at University College, Dublin. He is a Project Manager for the EC Joint Studies on Data Security and Confidentiality (I) and (II), as well as regulatory policy studies for the EC DG XIII, a Consultant to the OECD Directorate Information, Computer and Communications Policy and the Council of Europe Working Party on Data Protection, a Member of the EC DG XIII Legal Advisory Board, and a Professeur Invité at the Université Laval (Quebec, Canada).

**Jean-Pierre Chamoux** is an international expert in computer science and telecommunications. Graduated from the University of Paris in 1967, he holds a Master's Degree from the University of Wisconsin (1964). He is currently teaching at 'Le Conservatoire des Arts & Métiers' in Paris. He founded and chaired the private research center 'Droit & Informatique' in Paris from 1975 to 1986. He has published several books on communication and computer science and many articles in the trade press and scientific journals, both in France and abroad.

**Egbert J. Dommering** studied law at the University of Amsterdam Faculty of Law. He has been a member of the Bar of The Hague since 1968 and from this time he has been with the law offices of Buruma, Maris, Scheer, van Solkema. In 1988, he was appointed Professor of Information Law at the University of Amsterdam and in 1989 he became Managing Director of the Institute for Information Law. He published numerous articles in the field of information law and is co-author of the report '*Verbindend en Ontvlechting in de Communicatie*' (Connectivity and Unbundling in Communications), commissioned by the Dutch government (1990). He is a member of several advisory committees (i.a. on the implementation of the EC protection software Directive in Dutch legislation) and co-editor of legal journals in the field of computer law, media law, telecommunications law and copyright.

**Véronique Faure** is a jurist at the Commission of the European Communities, DG XIII, Telecommunications, Information Industries and Innovation. Her main tasks are the verification of the implementation of directives concerning the opening of the telecommunications markets, the follow-up and analysis of complaints files of these directives, and the legal support of the 'Telecommunication' unit (Division D1) for matters of community law in general and telecommunications law in particular. Ms. Faure took her law degree at the University of Bordeaux I and took DEA's of Community Law and Business Law at the University of Paris II.

**F. Willem Grosheide** is Professor of Private Law and Copyright Law at the University of Utrecht (Centre of Intellectual Property Law - CIER) and practicing lawyer, partner at Höcker, Rueb & Doeleman (Amsterdam). He is the author of numerous publications on private law and intellectual property law. His main work is *Auteurs-*

*recht op maat* (Tailor Made Copyright), published in 1990. Prof. Grosheide is an editor of two leading journals on intellectual property law: *Informatierecht/AMI* and *Intellectuele Eigendom & Reclamerecht*.

**Cees J. Hamelink** is professor of International Communications at the University of Amsterdam and the Institute of Social Studies at The Hague. He is also President of the International Association for Mass Communication Research. He has written numerous articles and books on international communications.

**Frauke Henning-Bodewig** studied at the Universities of Münster and Munich ('Rechtsreferendarin', 1972; 'Assessorin', 1974; J.D. 1980). She is a Staff Member of the Max-Planck-Institut for Foreign and International Patent, Copyright and Competition Law (since 1978) and Head of the Benelux Department. She was a visiting scholar at Stanford University Law School (1984-1985). Dr. Henning was a Lecturer of Law at the University of Munich until 1987 and has been a Lecturer at the Bavarian Advertising Academy since 1986. She is a member of the German Bar Association.

**P. Bernt Hugenholtz** is a university lecturer and research fellow at the Institute for Information Law and an attorney at law with the law offices of Stibbe & Simont (Amsterdam and Brussels). He was a visiting scholar at UCLA School of Law (1983-1984). He has written several books and numerous articles on copyright and information law, most notably on the protection of data banks, works of fact and computer software, and on telecommunications and broadcasting law. Dr. Hugenholtz is vice-chairman and co-founder of the Dutch Association of Media and Communications Law, and member of the Board of the Dutch Advertising Code Foundation (*Stichting Reclame Code*).

**Jan J.C. Kabel** is a university lecturer and senior research fellow at the Institute for Information Law, specializing in intellectual property law, advertising law and privacy protection law. He has written several books and numerous articles. He is a member of the Committee of Experts of the 'Commissariaat voor de Media', a member of the editorial board of *Intellectuele Eigendom & Reclamerecht*, Vice Chairman of the Direct Marketing Chamber of the Code Committee on Advertising, and a member of various advisory committees in consumer affairs.

**Jozef A. Keustermans** has Belgian law degrees from the University of Antwerp (U.F.S.I.A.) and Leuven (K.U.L.). He obtained a Master of Laws degree from the University of California at Los Angeles (U.C.L.A.). He is admitted to the Bar in New York and licensed to practice law in Belgium (Turnhout). He teaches Computer Law and is a researcher at the Center for Intellectual Property Rights at the Catholic University of Leuven (K.U.L.) School of Law. He is co-author (with Ingrid Arckens) of '*International Computer Law*', a loose-leaf book published by Mathew Bender & Co. (New York). He is a member of the Board of Editors of '*Computerrecht*' and the '*International Computer Law Adviser*'.

**Wolfgang Kleinwächter** was Professor of International Relations at the University of Leipzig until 1991. Before 1989, he was a member of the communication section of the GDR UNESCO Commission. He participated as an expert in a number of UN, UNESCO, ITU and CSCE conferences. In 1989, he became a member of the GDR Media Law Commission and the Parliamentary Media Council and was also involved in the elaboration of media laws in Saxonia. In 1989/1990 he was the Director of the Institute for International Studies at the University of Leipzig. In 1990 he was elected as president of the Law Section in the International Association of Mass Communication Research. He has published numerous articles and some books on international communication law.

**Willem F. Korthals Altes** is a university lecturer and research fellow at the Institute for Information Law and an Adjunct Professor at New York Law School, New York. He studied law at the University of Amsterdam Faculty of Law and at New York University School of Law (MCJ 1982). He is admitted to the Bar of the State of New York and licensed to practice law at the Bar of Amsterdam. He worked as an attorney at law with Loeff & Van der Ploeg, Amsterdam, and as an Assistant Professor at the Institute of Social Studies, The Hague. He is the author of numerous publications on press law, broadcasting law, telecommunications law and privacy protection law. Dr. Korthals Altes is co-founder and secretary of the Dutch Association of Media and Communications Law and secretary of the Arbitration Commission on Complaints about Telecommunications Services.

**Michael Lehmann** studied law and economics at Munich University. He obtained his doctorate degree with Prof. Gerhard Schricker (1973). The title of his thesis was '*Werbung mit Geschenken*' (Publicity with Gifts). He attended the University of Chicago as a visiting Professor and postgraduate student (1980-1981). In 1982, he became a Professor of civil law, commercial law, economic law, and comparative law at the University of Munich, and a scientific member of the Consumers Council of the German Federal Ministry of Economy. For several years, he has been editor of the series '*Rechtswissenschaftliche Forschung und Entwicklung*' (Legal Scientific Research and Development), Munich. Prof. Lehmann is a member of the Board of Directors of the 'European Association for Law and Economics' (since 1984).

**Ejan Mackaay** is Professor of Law at the Université de Montréal, Canada. He got his LL.D. in Amsterdam and his LL.M. in Toronto. He is a correspondent of the Royal Netherlands Academy of Sciences. His teaching subjects are Civil law, Computer law, Economic analysis of law and Legal informatics. He is a member of the editorial board of several journals and book series. Prof. Mackaay is the author of many articles, books and monographs.

**Willem C. van Manen** is an attorney at law with Nauta Dutilh (Amsterdam), specializing in press law, broadcasting law and advertising law. He has written various articles in books and law reviews. Together with Ludwig Baeumer he wrote volume II, 2 the Netherlands of '*Das Recht des unlauteren wettbewerbs in den Mitgliedstaaten der EWG*', edited by Eugen Ulmer.

**Antoon A. Quaedvlieg** has been Professor of Intellectual Property Law at the University of Nijmegen since 1990. Until then, he was an attorney at law with *Trenité Van Doorne* (Amsterdam). He has written a doctoral thesis entitled *Copyright in Techniques* and numerous articles on copyright, patent and trade law.

**Jerome H. Reichman** (B.A. University of Chicago, 1955; J.D. Yale Law School, 1979) is Professor of Law at Vanderbilt University, Nashville, Tennessee, USA. He teaches Intellectual Property law, Contracts and the Law of International Trade. The author of recent monographs on the protection of computer programs, industrial designs, and the role of intellectual property in international trade, Professor Reichman serves as an Advisor to the Office of Technology Assessment, U.S. Congress, and he sits on the Board of Directors of the Copyright Society of the South. He has also been nominated as Trustee of the Copyright Society of the United States. He was a Fellow of the German Marshall Fund of the United States in 1985-1986.

**Stefano Rodotà** is Professor of Private Law at the Faculty of Law, University of Rome. He has given lectures and participated in seminars at the universities of Oxford, Edinburgh, Strasbourg, Luxembourg, Frankfurt, Barcelona, Lima, Caracas and Rio de Janeiro. He has been a Visiting Fellow at All Souls College, Oxford and Visiting Scholar at Stanford University School of Law, California. He is Editor of the reviews 'Politica del diritto' (since 1970) and 'Rivista critica del diritto privato' (since 1983) and member of the Italian Parliament and the Parliamentary Assembly of the Council of Europe. In the past, he was a member of the European Parliament. Prof. Rodotà is the author of a considerable number of publications.

**Hendrik J. de Ru** studied at Vrije Universiteit Law School and the Faculté de Droit de Strasbourg in France and graduated from the University of Utrecht (1981). He is a Professor of Constitutional and Administrative Law at Law School of Vrije Universiteit. He was a visiting Professor at the University of California, Berkeley. Presently, Professor De Ru is a member of the Advisory Board on Post and Telecommunications (RAPT), Vice-President of the Board of the Postgraduate School on Legislation and Regulation (IIWO), member of the Editorial Board of several professional Dutch journals and of the International Review of Administrative Sciences. He is author of a study on State owned companies and privatization and numerous articles on regulatory issues.

**Jaap H. Spoor** is Professor of Intellectual Property Law, Vrije Universiteit Amsterdam, and Attorney, member of the Netherlands Bar, *Trenité Van Doorne*, Amsterdam. He specializes in copyright, computer law, trademark law and other intellectual property law topics. He is a Board member of the Netherlands Society of Copyright Law, Editorial Board member of the monthly magazine *Informatierecht/AMI*, and Executive Committee member of the International Copyright Law Association (ALAI). He co-authored a treatise on Dutch copyright law and published several other books and numerous articles on copyright, industrial property and computer law.



ABOUT THE AUTHORS

**Jacques Habib Sy** took his B.A. at the Universities of Dakar (Senegal) and Montréal (Quebec) in 1973, his M.A. and D.S. (Doctorat de Spécialité) both at the Institut Français de Presse et des Sciences de l'Information and at the Sorbonne University of Paris II (1975), and his Ph.D. at the School of Communication, Howard University, Washington, D.C. (1984). He has been a Research Assistant Professor at the University of Dakar, Instructor at Howard University, visiting Assistant Professor at the Temple University of Philadelphia and Texas Southern University, graduate Associate Professor at Bowie State University, Maryland, Assistant to the General Director of the Pan-African News Agency, a UNESCO Consultant and Commissioner in Senegal and France, and Director of the African Cultural Institute in Dakar, Senegal. He is the author of a large number of articles, monographs and books.

# Table of Contents

<b>PREFACE</b>	V
<b>ABOUT THE AUTHORS</b>	VII
<b>CHAPTER I GENERAL INTRODUCTION</b>	1
Egbert J. Dommering, <i>Information Law and the Themes of this Book</i>	3
1. Key Concepts of Information Law	3
Information Services, Transportation (Telecommunication) Services, and Infrastructure	3
Public Service and Private Service	4
Political Speech and Commercial Speech	4
Personal Information and Object Information	4
Free Flow of Information and Exclusiveness of Information	4
2. Access to the Media Market, Public and Private Relationships	5
2.1 Competing Infrastructures, Unbundling of Services, Convergence of Communication Policies	5
2.2 Mobility, Individualization, Connectivity	7
2.3 Information: Economic Commodity, Public Good	7
2.4 Conclusion	8
3. Intellectual Property	9
Digitalization and Dematerialization	10
4. Information Technology and Culture	10
Short Bibliography	11
Eric M. Barendt, <i>Fundamental Freedoms</i>	13
1. Fundamental Freedoms and the Press	13
2. Freedom of Speech and the Broadcasting Media	14
2.1 Program Content	15
2.2 Advertising	16
2.3 Access Rights	17
3. Groppera and Autronic	17
4. Balancing of Media Freedom and Other Interests	19
4.1 Sports Contracts	20
4.2 Freedom of Information	21
4.3 Central Role of Information Rights	22

TABLE OF CONTENTS

5.	European Community Law	23
6.	Final Remarks	24
Véronique Faure, <i>Telecommunications and Broadcasting Law in the EEC</i>		
1.	The Green Paper of 1987	27
2.	Liberalization Measures	28
2.1	Terminal Equipment	28
	Type Approval	28
	Terminal Equipment Market	28
2.2	Telecommunications Services	29
	Open Network Provision	30
	Specific Directives	30
3.	Other Steps towards the Opening of Telecommunications Markets	31
	Opening of the Market of Receive-only Antennas Not Connected to the Public Network	31
	Separation of Operational and Regulatory Activities	31
	Opening of the Market in Respect of Public Procurement	31
	Standardization and ETSI	32
	Guidelines on the Application of Competition to the Telecommunications Sector	32
4.	Which Way for the Future?	33
	Implementation of ONP	33
	Implementation of the Principle that Tariffs Should Follow Overall Cost-trends	33
	Introduction of Value-added Tax to Telecommunications	33
5.	Mobile Communications	34
5.1	Mobile Cellular Telephony	34
5.2	The Paging System	35
5.3	Cordless Telephone and Telepoint	35
6.	The Green Paper on Satellite Communications	36
7.	Broadcasting	37
7.1	'The Rules of the Game'	37
	Television without Frontiers	37
	Copyright	37
	Merger Rules	38
7.2	Promotion of the Program Industry and Technology	38
8.	Data Protection and the Protection of Privacy	39
9.	External Relations	40
10.	Conclusion	41
Ejan Mackaay, <i>An Economic View of Information Law</i>		43
<b>Outset</b>		43
<b>An Economic View</b>		45
<b>Ordering Principles</b>		47
1.	Scarcity	47
2.	Exclusive Rights or Property Rights	48
2.1	Non-transferable Rights	48

TABLE OF CONTENTS

Features	48
Exclusivity	48
Incentive and Information Effects	49
Personality Rights as Non-transferable Rights	50
The Emergence of Exclusive Rights	51
2.2 Transferable Rights	52
3. Information as a Peculiar Commodity	54
<b>Information Law</b>	57
4. Information Law among Private Persons	57
4.1 'Seeds'	57
Free Flow	57
Non-transferable Exclusive Rights	57
Transferable Exclusive Rights	58
4.2 Balancing the 'Seeds'	59
Free Flow versus Non-transferable Rights	59
Free Flow versus Transferable Rights	59
Non-transferable versus Transferable Rights	60
Balances Involving all Three 'Seeds'	61
5. Information Law with the State as an Actor	61
5.1 Reflections about the State	61
5.2 Balancing the Functions of the State and the 'Seeds'	62
Power of Coercion and Free Flow	62
Power of Coercion and Privacy/Confidentiality	63
Monopoly and Reasonable Access	63
6. Conclusion	64
 <b>CHAPTER II ACCESS TO THE MEDIA MARKET</b>	 67
 Egbert J. Dommering, <i>Introduction</i>	 69
 <i>TECHNOLOGICAL ASPECTS</i>	
 Jens C. Arnbak, <i>Economic and Policy Issues in the Regulation of Conditions for Subscriber Access and Market Entry to Telecommunications</i>	 71
1. The Case for 'Natural Monopoly' Reviewed	72
2. The Economies of New Technologies	75
3. Regulatory Problem No. One: Competition or Not?	77
4. Regulatory Problem No. Two: Fair Competition	78
 Jean-Pierre Chamoux, <i>Connectivity: A Powerful Concept to Develop Access to Electronic Media</i>	 83
1. Connectivity in VAN's	84
2. Connectivity in Radiocommunications	84
3. Concluding Remarks	85

TABLE OF CONTENTS

*INFRASTRUCTURE AND COMPETITIVENESS*

Michael Botein, <i>The Competitiveness of the US Telecommunications Industry</i>	87
1. Historical Background: The AT&T Divestiture	90
2. Foreign Competition in the US	90
2.1 Research & Development and Market Size	92
2.2 Telecommunications Service Providers	93
3. US Competition Abroad	93
4. Effect of Telecommunications Industry's Development on US Economy	95
4.1 Cost and Availability of Services	95
4.2 Potential Impact of Increased Telecommunications Revenues: A New York State Study	97
4.3 Labor Issues	99
5. Conclusion	101

*COMMUNICATIONS IN EASTERN EUROPE AND THE THIRD WORLD*

Wolfgang Kleinwächter, <i>Broadcasting and Telecommunications in Transition: The Wind of Change in Europe</i>	105
1. The End of the East-West Conflict	105
2. Differences in the Legal Systems	106
3. Historical Lessons	106
4. From Deregulation to Re- or Self-regulation?	107
5. An All-European Approach is Needed	109
6. Underdevelopment as a Burden of the Past	110
7. The German Example	111
8. A Complicated Situation in Eastern Europe and the Soviet Union	113
9. Conclusion	115
Jacques Habib Sy, <i>African Nations and Access to Telecommunications</i>	117
1. In Search for an Integrated Telecommunications Network on a Pan-African Scale: Historical Background	118
1.1 Developments in the 1970s	120
1.2 The African Response	121
1.3 PANAFTTEL, AFSAT, AFROSAT	122
Other Studies	124
1.4 AFSAT versus AFROSAT	125
1.5 An Important Turning Point: The Second and Third AFSAT CCS Meetings	127
2. Africa and the ITU	128
2.1 Africa's Rejection of the ITU Project	129
2.2 Africa and Intelsat	131
2.3 Go Satellite?	132
The Use of the Gorizont System	133
2.4 No Regional Satellite System	134
2.5 The Attitude of the Western World	135

TABLE OF CONTENTS

	Why Intelsat?	137
2.6	Africa's Position in the Battle for The World Leadership	139
3.	Panaftel: A Poisoned Heritage	140
3.1	The Future of the Panaftel Network	141
4.	Prospective Avenues for Telecommunications Liberation in Africa	144
4.1	Conditions for Success	144
4.2	Conclusions	145
5.	Final Remarks	147
	Cees J. Hamelink, <i>Communications in the Third World: The Challenge of Civil Society</i>	153
1.	The Persistent Problem of 'Information Famine'	153
1.1	Access to the Hardware of the World's Information	154
1.2	Access to the Software of the World's Information	155
2.	The Inadequacy of Current International Regulatory Instruments	157
3.	Communication Structures between States and Markets	157
4.	The Need of Civil Initiative	158
	<b>CHAPTER III PUBLIC AND PRIVATE RELATIONSHIPS</b>	161
	Jan J.C. Kabel, <i>Introduction</i>	163
	<i>THE PUBLIC'S RIGHT TO INFORMATION</i>	
	Ejan Mackaay, <i>The Public's Right to Information</i>	167
1.	Rights	167
2.	Information Rights against the State	178
3.	Information Rights against Private Citizens	171
3.1	Personal Information	171
3.2	Information about Criminals	172
3.3	Information about Hazardous Products and Catastrophic Risks	172
3.4	Information about Competitors	173
3.5	Information on Companies	174
4.	Conclusion	175
	Ton A.L. Beers, <i>Public Access to Government Information towards the 21st Century</i>	177
1.	Terminology	177
1.1	Public Access	178
1.2	Government Information	180
2.	Public Access as a Fundamental Right	181
3.	The Swedish Constitution	182
3.1	Official Documents	182
3.2	Proceedings	183
4.	The US Constitution	184
4.1	Court Proceedings and Records	185
4.2	Legislative and Executive Proceedings and Records	188

TABLE OF CONTENTS

4.3	A Direct Constitutional Right of Public Access?	191
5.	The European Convention on Human Rights	191
5.1	Resolutions and Recommendations	192
5.2	Decisions of European Court and European Commission	194
	The Right of the Public to be Properly Informed	194
	Access to Government Information Not Generally Accessible	195
	Public Access to Generally Accessible Government Documents	197
	Access to Generally Accessible Government Proceedings	198
	Positive Obligations	199
	Conclusions	200
6.	Evaluation	201
7.	Public Access and Information Technology	202
7.1	Object of Public Access	203
7.2	Availability of Electronic Information	205
7.3	Destruction and Alienation of Machine Readable Records	207
7.4	Public Access in Electronic Form	208
7.5	Enhancing Public Access	211
8.	Epilogue	214

*COMMERCIAL USE OF GOVERNMENT INFORMATION*

<i>Hendrik J. de Ru, The Commercial Use of Government Controlled Information; A Guideline for Regulatory Policy Choices</i>		215
1.	Freedom of Information vs. Commercialization	215
2.	Different Types of Government Controlled Information and Their Legal Status	216
2.1	Mandatory Publication	216
2.2	Government Issued Information – Propaganda	217
2.3	Information Available upon Request (Enforceable)	217
2.4	More and Less Valuable Data and Datacollections	218
3.	Consequences of Privatization Policies	218
4.	How to Regulate the Commercial Use of Government Controlled Information?	219
4.1	Constitutional Aspects: General Principle	219
4.2	Public Sector and Taxation Aspects	219
4.3	Public Policy, the Role of the Government	219
4.4	Market Entry	220
4.5	Summary	221
4.6	The Price	221
4.7	Judicial Control	222
5.	Conclusion	222
<i>Herbert Burkert, The Commercial Use of Government Controlled Information and Its Information Law Environment in the EEC</i>		223
1.	Some Information Law Puzzles	223
1.1	Two Cases	223
1.2	Public Information Law	225

TABLE OF CONTENTS

2.	Limitations of Information Management and Information Policy	226
2.1	Information Management Difficulties	227
2.2	Information Policy Difficulties	227
3.	The Need for a Comprehensive System of Public Information Law and Information Law Policy	228
4.	The Issue of Commercialization	229
5.	The Regulatory Framework of Public Sector Information	230
5.1	Data Protection	230
5.2	Access to Government Information	232
5.3	Secrecy	235
5.4	Copyright	235
5.5	Competition Law	236
6.	Towards a Comprehensive Approach	237
6.1	Summary: Inconsistencies in the Present Information Law Framework	237
6.2	Steps Towards a More Consistent and Comprehensive Framework	238
First Step: Comparative Analysis of a European Understanding of Fundamental Information and Communication Rights	238	
Second Step: Operationalizing Constitutional Principles	240	
A Program for the 21st Century?	241	
6.3	Learning from Examples?	241
6.4	New Perspectives on Commercialization	242
Preliminary Conclusions for Information Law Policy	242	
Preliminary Conclusions for Information Policy	243	
References	244	

*PROTECTION OF INFORMATIONAL PRIVACY*

Jon Bing, <i>Data Protection in a Time of Changes</i>	247	
1.	The Changing Technology	247
2.	Data Quality	249
3.	Emphasized Sources of Factual Information	250
4.	Collecting Data at the Source	252
4.1	Electronic Trails of Trivial Data	252
4.2	Data Protection and Electronic Trails	254
4.3	The Possible Developments	256
5.	Personal Power and Self-respect	258
Stefano Rodotà, <i>Protecting Informational Privacy: Trends and Problems</i>	261	
1.	Redefining Privacy and the Sphere of Privacy	261
2.	Privacy in a Public Society: Rights and Interests in Conflict	265
3.	Rules and Legislative Techniques, a Perspective	271



*ADVERTISING AND SPONSORING IN THE MEDIA*

Frauke Henning-Bodewig, <i>Consumers Caught Between Information and Manipulation: The Case of Product Placement</i>	273
1. The Impact of Persuasive Advertising on the Consumer	273
2. Surreptitious Advertising on TV (Product Placement)	275
3. Product Placement and the EC Directive on Broadcasting Activities	277
3.1 General Overview	277
3.2 Regulation of Product Placement	277
4. Legal Assessment of Product Placement in Germany	278
4.1 Media Law	278
4.2 Unfair Competition Law	279
4.3 The First Supreme Court Decision on Product Placement – ‘Who Shot Boro?’	280
4.4 Product Placement in Cinema Films	281
5. Outlook	281
Willem C. van Manen, <i>Advertising and Sponsoring</i>	283
1. Dutch Advertising Codes	284
2. Benelux Trademark Law	284
3. Dutch Media Law	285
4. Germany	286
5. Switzerland	287
6. EC TV Directive	287
7. The European Convention on Transfrontier Television	289
8. Final Observations	289
<b>CHAPTER IV INTELLECTUAL PROPERTY AND INFORMATION TECHNOLOGY</b>	291
P. Bernt Hugenholtz, <i>Introduction</i>	293
<i>COPYRIGHT, PUBLISHERS’ RIGHTS</i>	
F. Willem Grosheide, <i>Copyright and Publishers’ Rights: Exploitation of Information by a Proprietary Right</i>	295
1. Copyright Law	296
1.1 Rationale, Domain and Subject Matter	296
Inner and Outer Limits	297
Neighboring Rights	298
1.2 Cultural Information	299
Informational Works	300
1.3 The Economic Value of Information	301
2. Publishers’ Rights	302
2.1 Publishers’ Activities	302
2.2 The Present Legal Status of Publishers Contracts	304

TABLE OF CONTENTS

	Copyright Protection	305
	Unfair Competition	305
2.3	Proposals of the Dutch Working Party	305
2.4	Alternative Routes to Publishers' Rights	306
3.	Conclusion	307
<i>EC SOFTWARE DIRECTIVE</i>		
Jeff A. Keustermans, <i>The Intellectual Effort Requirement in Chip Protection</i>		
<i>Laws Compared to the Originality Requirement in Copyright Law</i>		309
1.	The Applicability of Copyright Law to Topographies	309
	No Protection for Ideas <i>Per Se</i>	311
2.	Copyright Law Compared to <i>Sui Generis</i> Protection	312
2.1	Originality	312
	No Protection for Staple, Commonplace, or Familiar Topographies	314
2.2	Idea/Expression Dichotomy	314
2.3	Reverse Engineering	315
	Fair Use	317
3.	Conclusion	318
P. Bernt Hugenholtz, <i>Convergence and Divergence in Intellectual Property</i>		
<i>Law: The Case of the Software Directive</i>		319
1.	The Paradox of Originality	320
2.	The Ambiguities of the Idea/Expression Dichotomy	321
3.	Protecting the User Interface	322
4.	The 'Use Right': An Anomaly in Copyright Law	323
<i>LEGAL HYBRIDS</i>		
Jerome H. Reichman, <i>Legal Hybrids Between the Patent and Copyright</i>		
<i>Paradigms</i>		325
1.	Bipolar Structure of the International Intellectual Property System	326
1.1	Nature and Limits of the Dominant Intellectual Property Paradigms	326
	The Patent and Copyright Subsystems	326
	The Line of Demarcation	327
1.2	Negative Economic Premises Underlying the Dominant Legal	
	Paradigms	329
	Patents for Inventions	330
	Literary and Artistic Works	331
2.	Between Art and Inventions: The Proliferating Legal Hybrids	332
2.1	Marginal Cases in the Spectrum of Industrial and Quasi-Industrial	
	Property	335
	Utility Models	335
	Industrial Designs	337
	Plant Varieties (UPOV)	338
	Unregistered Design Right	339
	Unfair Competition as a Technology Law	341

TABLE OF CONTENTS

2.2	Marginal Cases in the Spectrum of Artistic and Quasi-Artistic Property	341
	Technical Drawings, Blueprints, and Engineering Projects	341
	Copyright Protection of Small-Change Literary Productions	343
	<i>Sui Generis</i> Protection of Small-Change Literary Productions	345
	Applied Literature: The French Law on Computer Programs	346
	Integrated Circuit Designs	346
	Unregistered Design Right	347
	Applied Art	348
	Copyright Protection of Functional Designs	348
	Quasi-Artistic Rights Allied to Copyright Law	348
3.	Toward a Third Intellectual Property Paradigm	349
3.1	The Legal Hybrids as an Autonomous Entity	349
	A Different Economic Calculus	349
	A Permeable Line of Demarcation	351
	Overlapping Jurisdictional Spheres	353
3.2	A Unified, Systemic Response	355
	Incremental Innovation Bearing Know-How on Its Face	355
	Logic of a Modified Copyright Approach	357
	Selected Bibliography	360

*STANDARDIZATION AND EXCLUSIVITY*

	Michael Lehmann, <i>Standardization and the EC Directive of 14 May 1991 on the Legal Protection of Computer Programs</i>	363
1.	International Standardization	363
2.	Interfaces	364
3.	Interoperability and 'Reverse Engineering'	365
4.	Conclusion	368

	Jaap H. Spoor, <i>Standardization and Exclusivity in Intellectual Property</i>	369
1.	The Tomado Case	370
2.	Copyright	371
2.1	The British Leyland Case	372
2.2	Computer Cases	372
3.	Patents	374
4.	Trademarks	375
5.	Discussion	376

*ECONOMIC ANALYSIS OF LAW*

	Antoon A. Quaadvlieg, <i>The Economic Analysis of Intellectual Property Law</i>	379
1.	Success of the Economic Analysis of Law	379
	The Economic Approach in Intellectual Property Law	380
2.	An Economic Approach of Patent, Copyright and Trademark Law	381
2.1	Patent Law	382
	Prospect Theory	383

TABLE OF CONTENTS

	Property Rights Theory	383
	Nordhaus Model	384
	Objections to the Patent System	384
2.2	Copyright Law	385
	Distinguishing Copyright from Patents	385
	Economic Assessment of Copyright	386
	A Case Study	387
2.3	Trademark Law	387
	A Different Intellectual Property Right	387
	Monopolistic Effects	388
3.	Property and Monopoly	389
4.	Economics and Justice	391
5.	Conclusion	393



Chapter I

# General Introduction

**Fundamental Freedoms  
Telecommunications and Broadcasting Law in the EEC  
An Economic View of Information Law**



# Information Law and the Themes of this Book

*Egbert J. Dommering*

This book is about information and telecommunications services, commercial use of public and private information, intellectual property and information technology. It brings together in one volume legal subjects that used to be studied separately. Consequently, birds of different feather flock together. It is the hope of the editors that after reading the book the reader will understand that there is some system in this madness and will also understand more of the different legal language or ‘songs’ of the writers.

I will not endeavour to give in this short introduction a full panorama of the system and theory of information law. Those who are interested in a more extensive statement are referred to the introduction to the book *Protecting Works of Fact*. I shall restrict myself to a short explanation of some key concepts. Information law studies the communication processes in society as a whole. In doing so, it uses the concepts to be discussed in the next paragraph.

## 1. Key Concepts of Information Law

*Information services, transportation (telecommunications) services, and infrastructure*

All communication processes consist of one or more services in these three layers. In order to write a letter or to make a phone call, one needs to have access to the education services used to learn how to speak or write the language shared by the one for whom the message is intended. Newspapers need to be produced in huge organizations which themselves make use of other information services. Broadcasting programs are produced by program producers or broadcasting organizations. Data banks put together systematically an enormous quantity of facts with the help of other services.

A communication process cannot be successfully established, however, without the help of the other two layers. Letters, phone calls, papers, broadcasts and data services all need a countrywide or worldwide transportation network and accompanying auxiliary transportation and processing services. Access to the three layers is vital for the free flow of information.



*Public service and private service*

The communication process and the information that fuels it have been traditionally embedded in the social, cultural and political traditions of the human societies to which these processes belong. The broadcasting, postal and telecommunications services have on various grounds been organized as monopolies with mostly ambiguously defined social, cultural or political responsibilities. Press and cultural information services have often been able to count on substantial governmental aid.

The contents of what a public service concept entails and the extent to which the government should interfere in the information and telecommunications market out of a general interest of a non-economic nature (to borrow a term from EC competition law), are the subjects of an ongoing and – as I will show – nowadays topical debate.

*Political speech commercial speech*

In western-styled democracies, communication processes can roughly be divided into a political-cultural and a commercial circuit. The two circuits serve different interests. It is a curious characteristic of information services that they are a combined carrier for delivering a package of both political and commercial speech to the public: editorial information juxtaposed to advertising.

Hence the fact that the media have to perform in two markets: advertisers and audience. Hence the concern too that the circuits are entering into an overly intimate relationship affecting the quality of the communication process in society as a whole. Hence the fear of the Eastern European and Third World countries that their information and telecommunications services will be dominated by Western commercial interests.

*Personal information and object information*

Since the state and society have become inseparable twins, we have become used to the fact that the one twin is continuously trying to get hold of what the other twin is doing. This monitoring of the movement of goods and persons serves a variety of legitimate legislative and policy purposes. However, the increasing possibilities of electronic data storage and registration of these data, notably of personal information, nowadays give rise to an acute awareness of the risks involved in the invasion of the privacy of organizations and citizens. Privacy seems to have become the decade's catchword.

*Free flow of information and exclusiveness of information*

'Free flow of information' is a rather loose category that encompasses various legal notions. The hard core is still formed by the right to express opinions and to seek and impart information without government interference. Around this hard core, we

draw a circle in which we put together access to telecommunications resources such as radio waves, cable and the switched network (the layers I already mentioned) and access to government controlled information and other information sources of public interest. Freedom of Information Acts in this area try to draw the line between exclusiveness in the public interest and free access to information.

In the domain of intellectual property, the free flow of information has to be balanced by the exclusiveness of information. The balance has to be struck between the need of society to share freely in the progress of science and intellectual development on the one hand, and the possibility of earning back one's investment in terms of the time, money and creativity needed to develop new information products and services on the other hand.

The rapid development of information technology poses new challenges forcing us to reconsider the scope of both the entitlement to exclusiveness and free access to intellectual information.

## 2. Access to the Media Market, Public and Private Relationships

After this short introduction to some key concepts, I would like to give a brief outline of what seem to be some of the prevailing trends in the domains covered by the three themes of the study. Necessarily, this outline is a simplification of complex social and technical trends. I shall start with the two first themes labelled '*access to the media market*' and '*public and private relationships*'. Some important trends could be clustered in the terms explained in the paragraphs 2.1-2.3.

### 2.1 COMPETING INFRASTRUCTURES, UNBUNDLING OF SERVICES, CONVERGENCY OF COMMUNICATION POLICIES

An example from a recent press report may serve as an illustration. The democratic elections in India in 1991, which were so tragically overshadowed by the murder of the holder-in-title of the Ghandi-dynasty, presented a new phenomenon in the audio visual landscape: a mobile political video service. The Jain studios – founded by Dr. J.K. Jain, a physician and a member of the pro Hindu Baratiya Janata Party – sold a political candidate or party a complete campaign package. The studio uses over a hundred vans offering a nationwide tele-information service as an alternative to the government controlled television networks. The service makes ample use of India's existing know-how of video and film production and the public's acquaintance with mobile video performances in public areas in small villages. As the report says: '*There is always a guaranteed audience reaction to anything on a screen.*'

A lot could be said about how a new application of a known technology draws on existing production resources and takes advantage of existing consumer patterns. It would also be interesting to consider the striking similarity of the 'guaranteed reactions' of the Indian audience to 'anything on a screen' with the highly educated audience in Western Europe, watching their flickering television screens. The example serves a different purpose, however. It shows how bringing along your own

communication infrastructure strikes a blow at existing communication monopolies.

This is exactly what is happening in the West and most dramatically in the Netherlands. Terrestrial radio-electrical waves could be administrated and exploited on a national basis. They formed the instrument of controlling broadcasting by the organizations allowed to transmit their programs over the air *to* the audiovisual set in the consumer's home. They also formed a shield (often enforced by national standards) to keep out competition from abroad. When cable networks developed into an alternative countrywide network, as they did in the Netherlands, central control of electronic communication processes lost ground, in spite of cable regulations to the contrary. Satellites provided the additional technology allowing the importation of a full alternative to the national radio and television networks. Broadcasting became a matter of competition between national and foreign information and telecommunications services.

These new technical opportunities for the free flow of information of course threaten countries that still do not have fully developed telecommunications and information services, as is the case in Eastern Europe and the Third World. Telecommunications in Western Europe are now going through the same ordeal as broadcasting. Telecommunications used to be one single centrally organized service and terrestrial infrastructure *from* the switched networks *to* the 'phone' and other terminal equipment at home or in the office. First of all, the supply of terminal equipment has been detached from the telephone service, as has been the so-called value added 'telematic' services. In the near future, part of the intelligence used for data services will be lifted out of the switched network and offered on a competitive basis. Mobile telephony will become a competitive service as well. Satellite and cable may become increasingly competing infrastructures for telecommunications services, as the English duopoly review and the EC Satellite Green Paper prove.

The competitiveness of telecommunications and information services is causing what has been labelled as the '*unbundling of services*'. 'Unbundling' means that services that used to be offered in packages to the consumer are separated (unbundled). Broadcasting no longer means that a monopolistic supplier is under a constraint to offer a mixture of information serving all the interests and tastes of the general public. Commercial and special interest services are cropping up in the market every day. Telecommunications no longer means that all communications (be it voice, mail or data) are offered on one single network by one single monopolistic organization under a constraint to offer the full range of these services on a countrywide basis. New 'telematic' and network services will be offered on a competitive basis not only by the switched network but by other infrastructures as well.

In Western Europe, these technical and economic changes are not only the driving force behind EC competition law, fostering EC legislation and Court decisions that shape and direct them. These changes are also confronting governments with the issue of transforming their broadcasting and telecommunications policies into a convergent approach of what should be considered interlocking phenomena, divided and ruled though they still are by bureaucracies, combative rather than cooperative.

## 2.2 MOBILITY, INDIVIDUALIZATION, CONNECTIVITY

A press report published in *The New York Times* in May 1991, headed '*Instant mail, and other slick tricks*', shows a drawing of a palm of the hand carrying a small satellite disk, a small desk with a computer terminal, a phone, and a small filecase. The article was about the new HP 95 LX developed by Hewlett Packard and Lotus for the listed price of US \$699. It is an 11.6 ounce computer that can be held in one's palm. Apart from the text functions, it has a powerful business calculator. Subsequently, it would be modified to work as a digital paging device developed by Motorola that can display and capture messages sent over radio frequencies. As the report goes on: '*[A] nationwide radio frequency could theoretically enable the palmtop and pager to receive messages, even files from an office computer. An executive might eventually be able to receive electronic mail or stock quotes directly into his pocket.*'

The report makes a prediction about highly-equipped very mobile tele-consumers. One should remember that these consumers already have a considerable number of electronic keys in their pockets in the form of credit cards and the like, enabling them to obtain any value in cash or in kind at any place or time. In the near future, tele-consumers will plug their portable electronic communication machines or electronic keys into any telecommunications infrastructure at any time and place they choose to obtain the information, goods or services of their choice. In order to serve the interests of these consumers, all infrastructures and all information files should be accessible and connected to each other. Mobility and individualization of communication go hand in hand with superstructures linking telecommunications and information services.

It is precisely this combination of connectivity, individualization of communication and easy access that offers the opportunity and the means of a wide range of abuses in the field of electronic piracy, joyriding and the like. One speaks of the vulnerability of 'telematic' systems. At the same time, connectivity and individual electronic access offer the opportunity and the means to compile and combine the 'electronic trails' of individuals that may damage their privacy. It seems a historical paradox that the citizens in Eastern Europe, though suffering bad times because of the deplorable state of their economies, may consider the anonymity of no longer being watched by the authorities one of the advantages of the new order, whereas the people of the West, lured by the opportunities of frivolous electronic spending and communication, are helpfully composing their personal files.

## 2.3 INFORMATION: ECONOMIC COMMODITY, PUBLIC GOOD

In considering these new technological and economical developments, we should not forget that it is the information rather than the carrier that keeps the communication machine working. One of the striking features of our society seems to be that information has become one of the major commodities in the marketplace. This brings in full sight the second theme of this book, defined as the tension between information as an economic commodity and information as a public good.

This is not only a new development in the domain of free access to and exclusiveness of information, but also in the domain of political and commercial speech.

If I may recall the metaphor of the twins (government and society), it would seem that the government twin has now compiled so many valuable collections of information that the other twin is becoming eager to exploit them. One can also note an unbundling trend that has to do with the reappraisal of the role of the state authorities in society and which has brought about the privatization of several governmental information services in the Netherlands.

In short: how should we cope with the exploitation of public information? But competitiveness in telecommunications and broadcasting also poses new questions as to how we should regulate (or not regulate) the two public communication circuits of political and commercial speech.

## 2.4 CONCLUSION

If I were to try to summarize some important issues to be addressed by this book under the heading of the first two themes, I would choose the following:

- (re)discovery of the market,
- (re)defining the public service,
- (re)considering content regulation.

Broadcasting used to be studied (and as a matter of fact is still studied) in cultural and political terms. It used to be the subject of intensive regulation regarding the message as well as the organization. Some now advocate the total abandonment of regulation and monopolies. I can quote Professor Cento Veljanovski of the London Institute of Economic Affairs, whose views on this topic are among the bolder:

‘It would be hard to explain to the foreigner how the same department of state (the Home Office) controls both the police force and broadcasting without getting these two functions confused. It was George Orwell in 1984, drawing on his experience in the BBC, who sketched the frightening portrait of state control of using the latest telecommunications technology. Orwell was wrong – technology attracted by the beacon of profits and the call of consumer demand, has been the saviour of the citizen and has broken the state’s stranglehold on broadcasting’.

This hardly seems fair to the public broadcasting service in Britain in particular and in Western Europe in general. However, it may serve as an antidote to our discussions on public broadcasting becoming too sentimental. In non-democratic countries, the police and information services become confused all the time, whereas in democracies the ruling parties confuse them some of the time.

Therefore, we should not abandon the idea of a public service, but we should be aware of ill-founded arguments and covert motives in the debate that merely serve vested interests. We should also be aware of the fact that the debate is no longer confined to broadcasting and telecommunications. It concerns all information services that serve a public interest. The question remains whether the government should interfere in those markets and impose social, cultural and political responsibilities on one or all of the services through legal and financial means.

Competitiveness and the commercialization of telecommunications, broadcasting and other information services force us to reconsider, or consider for the first time, the purpose of a public service *in all those fields*. Which information should be offered by the public broadcaster? Which telecommunications service should be available in which area on which conditions? Which information service should be freely accessible to all citizens?

In Western Europe, the discovery of the market in telecommunications and broadcasting reminds us of the early days of the twentieth century when telecommunications and broadcasting arose from private initiative in unregulated 'wild' markets. The debate in Eastern Europe and the Third World has an entirely different historical flavor. It comes about in a political and economic vacuum or a situation where political and economic forces have as yet failed to crystallize.

Simultaneously with the debate on the relation between the market and the public service, we can observe the discussion on content regulation. Traditionally, broadcasting has been highly content regulation orientated, whereas the telecommunications services as blind carriers are principally opposed to it.

In many Western European countries, the explosion of market forces has been countered by increased regulation of the public broadcasting service programs by way of defending the public service. Stepping-up regulation has often been the response of authorities to social changes they feared would get out of hand. At the same time, the government has left the public use of the switched network by an increasing number of information services offered to the general public, to the private regulation of the market (at least in the Netherlands). On the other hand, we can observe an alarming proliferation of regulation in the field of privacy and information storage. Here, rules of all kind and stature are literally pouring in from all sides.

Regulation of information still seems to be a highly opportunistic affair, fed by tradition and wishful thinking. To put it more cynically: most of the regulation satisfies the needs of our bad consciences rather than effectively controlling and shaping human behaviour. The question therefore should be: why and to what extent do we regulate some of our communications and not others?

### 3. Intellectual Property

Not much has been said yet about intellectual property. However, it has been apparent in many of the topics I have discussed so far. Public service and free access to information have to do with the exploitation of intellectual property rights as well. So has access to the telecommunications service when the protection against piracy is concerned. Connectivity has to do with standards and the issues of public law and intellectual property related to it. When I used the example of the palm top computer, some readers may have pictured the portable audiovisual equipment in our tele-consumer's other hand: the minidisks, digital cassettes and digital audio tape recorders, once called by an editor of the Financial Times a '*cacophony of new technologies*'.

*Digitalization and dematerialization*

If we could try to find a common denominator to describe the new trends, it would be digitalization and dematerialization. Like the government in broadcasting, copyright owners have lost control of the members of their audience. The shift from centralized public communications, such as the cinema, the theatre and the monopolistic broadcasters, to the fully audiovisually equipped and computerized households, has meant a shift from centrally organized and exploited exclusiveness to home taping and other individual electronic carriers, such as CD Rom, that are difficult to control.

Not only has the work of copyright dissolved into an infinity of copies or reproductions that are no longer material and difficult to spot, it has also lost its traditional form and substance that could still be grasped by the human senses. This is what I would call the digitalization of information which transforms any work of copyright into a number of bits. Any work of copyright, whatever its shape or sensory status, may be translated into anything else or fully or partially electronically stored. Pieces of information that used to fall outside the scope of copyright become easily exploitable. Copyright Acts still enumerate the works of copyright as they came to us from the era of analog information. They could now be rephrased in one single sentence: copyright protects bits.

#### 4. Information Technology and Culture

In the famous first chapter of his 'Pensées', Pascal describes man's place in nature as the middle between 'les deux infinis', the infinite largeness of the universe and the infinite smallness of what he called 'le néant': *'L'homme est un néant à l'égard de l'infini, un tout à l'égard du néant, un milieu entre rien et tout.'*

Satellite telecommunications have moved the boundaries of the world into space and made infinity come a little bit closer. This technological change has been accompanied by the discovery that the infinite small was not a 'néant' but a world in itself that could store, process and carry an infinite amount of bits. It was the discovery of the semi-conductor (the chip) that set telecommunications, information and copyright literally 'on the move'.

It is interesting to note that the mask of the chip offers a synthesis of the infinitely large and the infinitely small. Some masks resemble Persian carpets, products of a culture that prohibited its members to picture the image of the infinite god, others look like maps of towns photographed by a remote-sensing satellite.

It may be appropriate to finish this introduction with a reference to the work of the painter Piet Mondriaan. I mean his well-known painting '*New York boogie woogie*'. It is one of his last works done in New York. There, he created his greatest pictures free from the metaphysical hotchpotch that often deludes his earlier vision. Like any great work of art, its meaning changes with time. At the time the painting was done, Mondriaan used the grid of New York's town plan to express the moods of the modern jazz age. Nowadays, a public educated on semi-conductor information technology will look at the work as the foresight of the information society to come: the processing and ordering of bits of information.

Hopefully, it is an image that will give today's telecommunication specialists the feeling that their art is understandable and today's copyright lawyers a sense of relief that art has not been exterminated by technology.

## Short Bibliography

- Jens C. Arnbak, Jan J. van Cuilenburg, Egbert J. Dommering, *Verbindend en Ontvlechting in de Communicatie (Connecting and Disconnecting Communications)*, a study commissioned by the Dutch government, Otto Cramwinckel, Amsterdam 1990.
- Stewart Brand, *The Media Lab, Inventing the Future at MIT*, Viking Pinguin Inc., New York 1987.
- Egbert J. Dommering, P. Bernt Hugenholtz (eds.), *Protecting Works of Fact – Copyright, Freedom of Expression and Information Law*, Information law series no.1, Kluwer Taxation, Deventer-Boston 1991.
- Office of Technology Assessment, *Critical Connections, Communications for the Future*, Washington 1990.
- Scientific American special issue September 1991, Communications, computers and networks.
- Ithiel de Sola Pool, *Technologies of Freedom*, The Belknap Press of Harvard University, Cambridge, Massachusetts, London England 1983; *Technologies without boundaries*, Harvard University Press 1990.
- Cento Veljanovski (ed.), *Freedom in Broadcasting*, Institute of Economic Affairs London 1989.





# Fundamental freedoms

*Eric M. Barendt*

I have chosen to concentrate on fundamental freedoms in the context of the mass media, especially the broadcasting media. But I will also say something about these freedoms in relation to information law generally, particularly about the argument that there is a right to information controlled by the government. The emphasis will be on the fundamental freedoms set out in the European Human Rights Convention, though towards the end I will refer to the alternative approach to this topic in European Community law.

## 1. Fundamental Freedoms and the Press

We take it for granted now in modern western democracies that the media should be free from government control or censorship, and in virtually all countries, except (I am sorry to say) Britain, this has a constitutional dimension. Press and broadcasting freedom are constitutional rights. It is very unusual for this to be spelt out in the text of the constitution. The only major jurisdiction where both press and broadcasting freedoms are expressly covered is Germany, where Article 5 of the *Grundgesetz* protects *Pressefreiheit* and *Rundfunkfreiheit*. But in most jurisdictions the principles of media freedom have been formulated through judicial interpretation of the freedom of speech provision. This is the position in Italy, France (where the *Conseil constitutionnel* has developed the liberty of communication formulated by the 1789 Declaration), Spain, and the United States.

With regard to the press, the application of the principles of freedom of speech or of expression has not proved to be particularly problematic. Indeed some of the constitutions, notably the First Amendment in the United States, cover freedom of speech and of the press in the same sentence. For the most part these are interchangeable terms. Sometimes courts refer to the one, sometimes in the same case to the other. Naturally, there are free speech problems specific to the press as distinct, say, from book publishers or individual writers, though they may also be shared by the broadcasting media.

Let me give just two examples of these. Are rights of reply to defamatory or other attacks in a newspaper compatible with the editor's freedoms of speech and of the press? The provision of such rights is standard in continental European countries, and so far as I know there is little doubt there about their constitutionality. Indeed, they are seen as honouring the free speech rights of the person claiming the right to reply as well as his reputation and other personal rights, and also as serving

the public interest in access to information. However, the United States Supreme Court has held the legislative provision of such a right an abridgement of the editor's First Amendment right to determine the content of his newspaper.<sup>1</sup>

The second question is whether freedom of speech and of the press is infringed when a newspaper reporter is required to disclose his sources or a newspaper office is searched to find evidence relating to criminal charges. Courts have generally been reluctant to recognize a constitutional immunity from these procedures deriving from the free speech clause.<sup>2</sup> Indeed Article 21 of the Italian Constitution, while prohibiting censorship or licensing of the press, explicitly allows the confiscation of press material on a judicial warrant, where this is authorized by the law on the press in the event of a crime. On the other hand, in Germany and the United States it is common for the *Länder* and states to provide some immunity for journalists from the general requirement to reveal their sources.<sup>3</sup>

## 2. Freedom of Speech and the Broadcasting Media

In contrast to the press, the application of freedom of speech principles to the broadcasting media is very complex. From its inception in all European countries, and to some extent the United States, it has been recognized that broadcasting presents problems. Even in a country, such as the USA, where private broadcasting is the norm, scarce frequencies must be allocated. The licensing authority, the *Federal Communications Commission* in the USA, is able to select licensees on the basis of their previous or promised program quality and other criteria, and impose conditions when granting the permit.<sup>4</sup> This limits the broadcasters' freedom to use their air-waves.

In contrast in Europe, until recently radio and television were state monopolies. To some extent, as in argument before the German and Italian Constitutional Courts, this used to be justified on the ground that public broadcasting was the most effective means for securing the freedom of would-be broadcasters and the interests of listeners and viewers in a wide and balanced range of programs.<sup>5</sup> In other words, freedom of speech arguments themselves justified the limits imposed on the freedom of the broadcasters.

- 
1. *Miami Herald Co. v. Tornillo*, 418 US 241 (1974).
  2. See the decision of the United States Supreme Court in *Branzburg v. Hayes*, 408 US 665 (1972). The German Constitutional Court has intimated that in principle the journalists' privilege is covered by *Pressefreiheit* [20 BVerfGE 162, 176 (1966)], although it has not upheld the privilege in any particular case.
  3. For examples, see Press Law for North-Rhine Westphalia of 24 May, 1966, para. 24, and the state statutes in the USA, discussed in M.A. Franklin and D.A. Anderson, *Mass Media Law* (1990, 4th ed.), 604-627.
  4. In the 1980s the FCC repealed its program quality guidelines as part of its bonfire of controls, see Franklin and Anderson, *Mass Media Law*, 767-68.
  5. For a full discussion of the argument before these courts, see E.M. Barendt, 'The Influence of the German and Italian Constitutional Courts on their National Broadcasting Systems', (1991) *Public Law* 93.

This perspective is recognized by the European Convention on Human Rights and Fundamental Freedoms. Article 10, third sentence provides:

‘This article shall not prevent the states from requiring the licensing of broadcasting, television or cinema enterprises’.

The significance of this provision has been much debated before the Convention Institutions and in academic commentary, though its meaning has to some extent, as I will explain later, been clarified by the Court in its recent decisions on broadcasting.

In the last twenty or thirty years the legitimacy of the state broadcasting monopoly has been challenged in those countries, which unlike Britain had not permitted private broadcasting in the 1950s and 1960s. This is not the place for a detailed examination of the arguments, technical, economic and constitutional, which were used against the public broadcasting monopolies. It is sufficient here to say that with the advent of cable and satellite and the emergence of media conglomerates able to meet the costs of national, and sometimes international broadcasting, the justifications for that monopoly no longer carried conviction.

At the legal level, however, the interesting questions were whether there was a right to institute a private broadcasting station, as an aspect of the constitutionally protected freedom of speech, or whether at least freedom of speech was incompatible with the monopoly. The Italian Constitutional Court in its famous ruling in 1976<sup>6</sup> did go so far as to hold that the public monopoly could no longer be held constitutional at the local level, and in its more recent pronouncements has indicated that national networks would be legitimate, provided there were adequate anti-trust rules to prevent the formation of media oligopolies.<sup>7</sup> The German Court and the Spanish Constitutional Tribunal have come to the more moderate conclusion that private broadcasting is legitimate, but not constitutionally necessary under their freedom of expression provisions.<sup>8</sup>

## 2.1 PROGRAM CONTENT

There are other fundamental rights issues in the mass media context, apart from these basic questions about the structure of broadcasting. One concerns restrictions on the content of programs, particularly when these are applied to private broadcasters. The press and broadcasters are of course subject to the ordinary restrictions imposed by the law of libel, the laws protecting state and commercial confidential information, or laws such as obscenity statutes designed to protect public morals. These limits on speech pose little difficulty and Article 10(2) of the Convention expressly permits states to impose them, at least when they are ‘necessary in a democratic society’. Indeed there is sometimes a conflict between the right to free-

6. Decision 202/1976, (1976) *Giurisprudenza costituzionale* 1267.

7. Decision 148/1981, (1981) *Giurisprudenza costituzionale* 1379, and Decision 826/1988, (1988) *Giurisprudenza costituzionale* 3893.

8. See in particular the judgment of the German Constitutional Court in the Third Television case, 57 BVerfGE 295 (1981), and Decision 12/87 of the Spanish Constitutional Tribunal.

dom of speech in the media and the individual's right to reputation or privacy, or copyright.

Positive program obligations are more difficult. Most states require commercial channels to show a news program daily, and in some such as Britain there are detailed requirements with respect, for example, to children and religious broadcasts, current affairs and other serious programs.<sup>9</sup> The first issue is whether these positive obligations interfere with the fundamental freedom of broadcasters.

Arguably they do not, because they are not contents-based restrictions, designed to restrict a particular viewpoint or to inhibit the showing of a particular type of program. Rather they are designed, in the interests of viewers, to encourage the showing of a variety of quality programs and so promote freedom of speech. But if the European Court of Human Rights were to take the view that such rules did inhibit broadcasters' Article 10 rights, it is far from clear how they could be justified under Article 10 (2). I will return to this problem shortly.

## 2.2 ADVERTISING

Another important question concerns the legal status of advertising, the principal financial support for private broadcasting. The questions arising from the Convention here are again the extent to which commercial advertising is covered by Article 10 (1), and then how far limitations on the duration, frequency and content of advertising can be justified under Article 10 (2). The same questions may arise under national constitutions. The French *Conseil constitutionnel* has refused to hold a ban on advertising incompatible with Article 11 of the Declaration on the Rights of Man (freedom of expression) or the right of free enterprise.<sup>10</sup> In contrast, the Italian Constitutional Court ruled the ban on the retransmission of advertising from foreign channels within Italy incompatible with Articles 3 and 41 of the Constitution, protecting equality and the freedoms of private economic initiative.<sup>11</sup>

The reluctance to hold media advertising covered by a freedom of speech provision is an aspect of larger doubts about the status of commercial speech, an issue I cannot explore at length in this article. However, in the *Barthold* case the European Court has held that in some contexts commercial speech is covered by Article 10, and in his separate concurring judgement Judge Pettiti emphasized the importance of advertising to the survival of private broadcasting.<sup>12</sup>

One problem is that if broadcasting commercials are covered by this Article, it may be difficult to uphold limitations on their duration and frequency. It is hard to see, for example, how such limits could be sustained under Article 10 (2), except for prohibitions on advertising tobacco products and alcohol etc. These could be upheld as necessary to protect 'health or morals'. As in the case of positive program obligations, it is hard to apply Article 10 satisfactorily to the broadcasting media.

9. Broadcasting Act 1990, ss. 6 and 16.

10. Decision 82-141 of 27 July 1982. Rec. 1982, p. 48.

11. Decision 231/1985, (1985) *Giurisprudenza costituzionale* 1879.

12. *Barthold v. Germany*, (1985) 7 EHRR 383.

### 2.3 ACCESS RIGHTS

A third question is whether individuals or social and political groups might enjoy rights of access to the mass media. The claim that there are or should be rights of access has often been made in the context of the broadcasting media, but very seldom in the case of the press. The reason for this is that in the case of newspapers, which are generally unregulated save by the criminal and civil law, it is clear that the recognition of access rights would compromise the rights of the editor. This is less apparent in the case of broadcasting, which as I have already said is subject to numerous restrictions designed to ensure its overall balance and impartiality.

At all events, the claim was frequently made in the 1960s and 1970s that true broadcasting freedom entailed the recognition of access rights for the benefit of minority groups whose views were not reflected in the schedules of the broadcasting companies. However, this was for the most part a matter of rhetoric, rather than serious constitutional argument. In the United States the Supreme Court rejected a claim by a pressure group that it had a constitutional right to have paid political advertising shown on the networks.<sup>13</sup>

The truth is that to uphold such a claim would create insuperable practical difficulties, and it would have interfered with the broadcasters' own First Amendment rights. Only (so far as I know) in Italy has the argument been taken very seriously. The Constitutional Court in an important ruling of 1974 held that socially relevant groups should have access to RAI, but this access facility, in contradistinction to the right of reply, was not a matter of constitutional right.<sup>14</sup> Now the argument is much less often made.

Access programs have generally proved to be boring and unpopular. There remains some theoretical case for their recognition in certain contexts, but it is no longer a live issue. There is one exception to this. The access of political parties to the airwaves to make election and other political broadcasts is generally recognized. Indeed the European Commission of Human Rights has intimated that it might hold the denial of a political party fair broadcasting access during an election campaign to be a violation of the Convention (although in the case it held that there was no duty on the part of the authorities to accept political advertising).<sup>15</sup>

### 3. Groppera and Autronic

So far, I have discussed fundamental freedoms in a rather abstract way and from a broad comparative perspective. I would now like to turn to the case law of the European Court of Human Rights. It is clear from its leading decisions that the press and now the broadcasting media are fully covered by Article 10. In the famous *Sunday Times* judgment<sup>16</sup> the Court recognized the distinctive role of the press in west-

13. *Columbia Broadcasting System v. FCC*, 453 US 367 (1981).

14. Decision 225/1974, (1974) *Giurisprudenza costituzionale* 1775.

15. 4515/70, *X and Assoc. of Z. v. U.K.* 38 Coll. Dec. 86.

16. (1979) 2 EHRR 245.

ern democracies in helping the formation of public opinion. More recently in the *Groppera* and *Autronic* cases (1990), it held that Article 10 covers all types of broadcast, whether by terrestrial means, cable or satellite.<sup>17</sup>

The Article covers choice as to the means of communications as it does its contents. Further, the freedom to receive and impart information and ideas extends to light music commercial stations. There is no distinction according to the contents of the programs. The judges emphasized that the right to receive information is protected, as well as the right to transmit it. So in the *Autronic* case, the right to instal a satellite dish to receive programs from telecommunications satellites was upheld. This decision has implications which go well beyond the broadcasting field; telecommunications, and perhaps in some circumstances the communication of information by electric mail or telephone could be covered by Article 10 freedom of expression.

The most difficult question is the significance of Article 10 (1), third sentence. At first glance, this might appear to allow states wide discretion to license broadcasting or cinema on any conditions they think appropriate or even to ban them altogether. Indeed, it used to be argued that the sentence legitimated the public broadcasting monopoly which generally prevailed at the time the Convention was drafted and came into force. However, the mention of 'cinema enterprises' in the sentence really precludes this interpretation. It is just possible that in the 1950s and 1960s it would have been reasonable to concede states broad discretion in the licensing of private radio and television; but it is inconceivable that even then the Convention could have been construed to allow states a power to outlaw or censor films on any grounds they chose. The same conclusion must now be reached for broadcasting.

In its recent ruling in *Groppera*, the Court has made it clear that Article 10 (1), 3rd sentence, must be construed together with the other parts of the Article.<sup>18</sup> States are permitted to control broadcasting by a licensing system designed to organize it, particularly on technical grounds. But the licensing measures, for example, the imposition of program requirements by way of conditions incorporated in the permit, are subject to the constraints of Article 10 (2). That is, they must be justifiable as necessary in a democratic society to achieve one of the ends set out in the second paragraph of the Article, for instance, the prevention of disorder or the protection of the reputation or rights of others. In other words, the states do not have unlimited discretion under the Convention to regulate broadcasting as they think fit, let alone to ban private broadcasting altogether. This casts doubt on the legality of a public broadcasting monopoly, though this is now a very academic question.

The Court's recent rulings on the interpretation of Article 10 (1), 3rd sentence, make it even more important to determine how Article 10 (2) should be interpreted in the context of the mass media. In *Groppera*, the Court held that the Swiss government was pursuing two legitimate aims, when it refused to allow the retransmission by cable of programs emanating from an unlicensed Italian music station. First, the ban might be necessary for the prevention of disorder on the wavelengths, and secondly, it could be supported on the argument that it was necessary to ensure pluralism, and

17. *Groppera v. Switzerland*, (1990) 12 EHRR 321; *Autronic v. Switzerland*, (1990) 12 EHRR 485.

18. (1990) 12 EHRR 321, 339.

so protect 'the rights of others'. Indeed on the facts the ban was upheld as necessary, and the Court emphasized here that it had been imposed to prevent evasion of the Swiss regulations and that it was not designed to censor any programs on the basis of their contents.

It is difficult to draw many conclusions from this ruling. But it does appear that the Court is prepared, as in other cases, to give a broad interpretation to the concept 'the rights of others', and that this will be used to incorporate the values of pluralism into Article 10. This would enable states to justify positive program requirements or advertising restrictions under the Convention, if they were to be challenged as violating broadcasters' Article 10 (1) rights. It could be argued perhaps that these limits were necessary to protect the rights of viewers in a varied and balanced program, and also to protect the rights of other broadcasting companies, or indeed the press, from unfair competition by unregulated private broadcasters.

The *Autronic* case further emphasized the desirability in this context of interpreting the Convention in the light of contemporary developments in the Member States' legal systems. So long as most Member States impose regulatory constraints on broadcasting freedom, I find it hard to believe that the Court will invalidate them. As I have already indicated, press and broadcasting freedom may be restricted where this is necessary in a democratic society to achieve one of the aims set out in Article 10 (2). This may legitimate the Member States's laws of libel, official secrets laws, laws retraining breaches of confidentiality, and obscene publications statutes.

Perhaps surprisingly, there is no specific mention of the restraints on speech to protect privacy rights, but there can be little doubt that they would be upheld in many circumstances as necessary to protect 'the rights of others'. (Further, Article 8 also expressly protects the right to respect for an individual's private life, though perhaps only against invasion by a public authority, rather than the media). The Court's recent decisions in my view show that the right to freedom of expression in the media and competing private rights or interests will be balanced with some sensitivity.

#### 4. Balancing of Media Freedom and Other Interests

It is, however, worth exploring how media freedom and interests in copyright (and other related interests) should be balanced. This is a difficult topic, as yet relatively little discussed in either case law or academic commentary. Similar questions also arise in information law generally. It is clear that freedom of expression, in particular the freedom of the media to report events or to communicate information, may be affected by copyright or other exclusive rights. In some situations it may be possible to deny that there is a conflict by a restrictive interpretation of the scope of freedom of expression.

For example, the European Commission on Human Rights in its Report in the *De Geïllustreerde Pers* case<sup>19</sup> held that there was no breach of Article 10, when Dutch copyright law prohibited the publication by a newspaper of listings of television programs. In the Commission's view, only the person or institution which had

---

19. 8 Decisions and Reports of the Commission 5.



assembled the information had a right to disseminate it, while the public interest in its receipt was satisfied by its availability from the compiler.

Two comments seem appropriate here. First, the specific copyright rules in Britain have been changed recently to allow newspapers and magazines to print television schedules, albeit on payment of a fee to the broadcaster.<sup>20</sup> It is no longer thought in the public interest for the BBC or independent television, for example, to have a monopoly in disclosing this information. Secondly, it is clear that copyright law often does restrict freedom to supply information or ideas which have been put together in a distinctive form. Modern copyright law, under which multiple copyrights can exist in a particular work, such as a television play or documentary, makes it very difficult for the work to be reproduced in its entirety. This may substantially hinder public access to information or to artistic and dramatic performances.

#### 4.1 SPORTS CONTRACTS

Another related area of difficulty is attributable to the increasing phenomenon of contracts to show sports or other events, by which particular television companies, often satellite companies, purchase exclusive rights to cover important football matches or tennis tournaments such as Wimbledon. Other competing companies, whether public or private broadcasters, are then denied access to the sports stadium or other closed venue. It would be a clear violation of copyright for another broadcasting company to show film of the game, pirated from the first company's transmission, even though it could argue that this was reporting a matter of some importance to the public and therefore was in the interests of freedom of expression.

Of course, as in a recent English case, where British Satellite Broadcasting copied highlights from the BBC coverage of World Cup games, a limited right of reporting may be safeguarded by a specific defence in the national copyright legislation.<sup>21</sup> Further, there may be statutory rights of access to make a brief report of the event, as now exists in Germany.<sup>22</sup> The question I want to pose is, however, whether these limited rights are dependent on the particular copyright and competition laws of the Member States, or whether reporting rights might be recognized as a fundamental *freedom* under Article 10 of the Convention.

In this context, it is interesting to note that the recent *Transfrontier Television Convention* of 1989 requires states to examine the legal measures to avoid the public's rights of access to information being undermined by the exercise of a broadcaster's exclusive rights to transmit an event of high public interest.<sup>23</sup> This shows a welcome awareness of the issues, but in my view it falls short of evidencing the existence of any enforceable public right of access to information in this context. One aspect of the legal question here is how far Article 10 of the Human Rights Convention recognizes a right to information, or of access to information, as an aspect of freedom of expression. This is an important issue, which goes well beyond the con-

20. Broadcasting Act 1990, s. 176.

21. *British Broadcasting Corporation v. British Satellite Broadcasting*, (1991) 3 WLR 174.

22. Under the amendment to the *Staatsvertrag* made in March 1990.

23. European Convention on Transfrontier Television, Art. 9.

text of the law concerning the press and broadcasting media. I would like to explore this general question before returning to the particular theme of the relationship of media freedom to copyright and other commercial rights.

#### 4.2 FREEDOM OF INFORMATION

In the last twenty or thirty years, both in the United States and in many European countries, freedom of information has become as important a political and legal demand as a free press was in the eighteenth and early nineteenth centuries. Sometimes this is a matter of rhetoric, but the enactment of concrete statutes giving general rights to information held by government (with of course many important exceptions) or conferring rights in particular contexts, for example to medical records, shows some legal recognition of the freedom. But in what sense or how far is freedom of information a basic human right? How is it related to freedom of expression, which (I will assume) is a fundamental human right? Let me take the latter question first.

Is freedom of information an integral aspect of freedom of speech or of expression? Some constitutions, such as the German Basic Law, protect the freedom to receive information from generally accessible sources.<sup>24</sup> The European Convention refers to 'the right to receive ... information and ideas without interference by public authority ...'. But proponents of freedom of information almost invariably argue for a right to acquire information from a government or authority, or perhaps a private body like a credit agency, which does not want normally to disclose it. Both the German *Informationsfreiheit* and Article 10 of the Convention assume that the disclosure is by a willing speaker.

The paradox of the argument that freedom of information is implicit in, or an essential condition for, freedom of speech, is that its recognition might compel government or some other institution to speak, when it does not want to. And that could be said to be an interference with that body's right of silence. At any rate, the European Court in two rulings has refused to derive an enforceable to government information from the terms of Article 10.<sup>25</sup> On balance, that seems right to me. There is admittedly a powerful argument for saying that the freedom of political expression is not worth very much, unless the citizen has some access right to acquire information to support his arguments. But if there is a fundamental right to acquire information, perhaps courts should also recognize implicit constitutional rights to education and travel, equally crucial (it could be said) to the formation of a citizen's ideas and expression?

Maybe there is some other more promising foundation for rights to information. One possibility in some contexts is the right to privacy. In these cases it can be argued that the ability to check confidential information, such as a medical record, tax or social security information, or one's credit rating with an agency, is an integral aspect of respect for private life. It is a way to stop an institution from proceeding on the basis of inaccurate information and presenting the individual in a false light, a

24. Article 5 (1), S.1.

25. *Leander v. Sweden*, (1987) 9 EHRR 433; *Gaskin v. U.K.*, (1990) 12 EHRR 36.

well recognized type of privacy infringement. Here, however, the aim behind legal recognition of a right to information is not to enable the dissemination of better informed speech to the public, but rather to stop the use (or perhaps the limited disclosure) of inaccurate facts.

The argument does not therefore support the enactment of rights to obtain government information generally. These rights are justified, as I have said, because of the need for an informed public, able in particular to make intelligent electoral and political choices. It is doubtful whether this is a fundamental human right, although it is recognized to some extent in most western democracies for utilitarian political reasons. Further, it does not appear to be recognized by the Convention, or so far as I know, in any constitution. Some limited rights of access, for example to attend court proceedings, may be upheld as aspects of freedom of the press, but information rights are statutory rather than constitutional.

### 4.3 CENTRAL ROLE OF INFORMATION RIGHTS

I suspect that this conclusion has significant consequences for the shape and development of information law. For in this burgeoning area of law, rights of information play the central organizing role that the concepts of freedom of speech and of the press do in media law. Information rights will have to be balanced against copyrights and other property and commercial rights, but this will generally be done through the political process and lobbying, rather than by judicial interpretation of constitutions. In contrast, in the case of the media, there is a clearer constitutional or human rights peg on which to hang arguments that information and reporting rights should sometimes qualify copyright and other commercial rights to exploit information.

It may be that there is no direct constitutional right or right under the European Convention of fair reporting to justify limits on the exclusive rights of broadcasting organizations which have made contracts with the organizers of sports events to show, say, Wimbledon or the World Cup. But this does not end the argument. The legal significance of freedom of expression in constitutions, such as that of France or Germany, is not only that it states a number of individual rights. Basic law rights, to paraphrase the language of the *Bundesverfassungsgericht* in many of its leading judgments, establish a value system, which affects all areas of law, both public and private.<sup>26</sup>

This perspective enables, indeed requires the German courts to interpret, say, competition and copyright law in the light of the dictates of the Basic Law. This was shown last year when the *Bundesgerichtshof* held that the *Globalvertrag* sports agreement with the two public broadcasting authorities infringed the federal unfair competition statute.<sup>27</sup> The Court's approach was influenced to some extent by the consideration that the exclusive agreement was counter to the broadcasting interests of private companies trying to gain access to the market.

26. See the *Numerus Clausus* case, 33 BVerfGE 303, 330 (1972), and the *Abortion* case, 39 BVerfGE 1, 41 (1975).

27. (1990) *Neue Juristische Wochenschrift* 2815.

In some countries, therefore, it is possible to give weight to fundamental freedoms of speech and of the media through interpretation of private commercial law, even if there are no directly enforceable constitutional rights at issue. (This is not, as I have suggested, so easy in the case of the right to information, because that is not to be regarded as a fundamental right of the same order as freedom of speech and the press). I am less sure whether this approach can be adopted by the European Court in developing the Convention.

The text of the Human Rights Convention is drafted in terms of individual rights. More importantly, it is difficult at the moment to envisage that the Court would feel confident enough to establish the same status for Convention rights that the German Constitutional Court, and to some extent the *Conseil constitutionnel* in France,<sup>28</sup> have for the basic rights in their countries. I am therefore doubtful whether the Strasbourg Court would hold, say, national copyright laws incompatible with the Convention, because they were not interpreted in a way which respected the fundamental values of freedom of expression.

## 5. European Community Law

For the most part, I have concentrated on the fundamental freedom stated in the European Human Rights Convention. But of course there is also the perspective on communications, and in particular broadcasting, represented by Community law. From the *Sacchi* case (1974)<sup>29</sup> onwards, the Court of Justice has consistently held that the transmission of television signals across frontiers is covered by the Community provisions on freedom to provide services in Articles 59 *et seq.*<sup>30</sup>

In the well-known *Dutch Advertisers* case,<sup>31</sup> the European Court itself was prepared to characterize the services rendered by the cable companies to the satellite companies and by the latter to the advertisers as transfrontier services. In earlier cases this characterization had been left in the national courts. Another important feature of that case was that the European Court of Justice was willing to countenance limit on advertising frequency and duration provided they were proportionate.

The inclusion of broadcasting within the freedom of services provisions was controversial. It seemed to assume that television was predominantly a commercial rather than a cultural phenomenon, which would have left it a matter for the Member States and more or less entirely excluded Community competence. Indeed it was for that reason that many experts in Britain and other countries initially doubted the legality of the Commission's proposals for the Broadcasting Directive.<sup>32</sup> In fact,

28. See, for example, the treatment of freedom of communication and other constitutional values in the jurisprudence of the *Conseil constitutionnel* on the broadcasting laws of 1986 and 1989: Decisions 86-217 and 88-248.

29. (1974) ECR 409.

30. See in particular *Debaue*, (1980) ECR 833, and *Coditel*, (1980) ECR 881.

31. (1988) ECR 2085.

32. See the Report of the House of Lords Select Committee on the European Communities, *Television without Frontiers* (1985, HL 43), paras. 33-46.

broadcasting is both a cultural and a commercial phenomenon, and may involve both freedom of expression and freedom of services.

Nevertheless, the implications of these two freedoms may diverge in some circumstances. The requirements of diverse and balanced programming from a plurality of sources are aspects of freedom of expression and justify limits on the commercial freedom of broadcasters. On the other hand, restraints on programming or advertising may appear less warranted if broadcasting is viewed primarily or purely as a service (although the *Dutch Advertisers* case does indicate that they may be upheld under the Treaty of Rome).

The Broadcasting Directive itself marks, it seems to me, a welcome shift from the pure freedom of services perspective, which had dominated the Commission's thinking when it prepared the 1984 Green Paper.<sup>33</sup> The Preamble indeed states that the freedom to provide services in the context of broadcasting is actually a manifestation in Community law of the more general principle of freedom of expression formulated in the Human Rights Convention. (This is an unusual example of the fundamental rights provisions in the ECHR being used to interpret the Treaty of Rome in an expansive rather than a limiting way.)

The Preamble also states that it is essential for states to prevent media monopolies or oligopolies, a goal which is inspired by the values of freedom of expression. In this context, what are we to make of the famous quota rules, a prominent feature of both the EC Directive and the Transfrontier Television Convention?<sup>34</sup> There are of course both economic and cultural arguments for quotas. The former predominate in the justifications for their incorporation in the Directive, the latter in the Convention, where the requirement is inserted in an Article headed, '*Cultural objectives*'. Equally some lawyers, particularly from the other side of the Atlantic, contend that quotas are suspect on freedom of expression grounds.

The quotas argument might conceivably one day be resolved by the European Human Rights Court. It would be open to a private broadcaster to challenge national rules implementing the quota requirements on the ground that they interfered with its freedom to transmit the ideas it wanted to do, even if those ideas were United States rather than, say, French soaps. The resolution of this argument depends on free speech analysis: is the freedom restricted by rules designed to promote the variety of programs? How far is the preservation of national identity or culture a legitimate objective under the Convention or for that matter in international law? In my view there is no clear answer to these questions, any more than there is always to questions about how far a state is entitled to impose positive programming obligations on its commercial radio or television stations.

## 6. Final Remarks

These difficulties show therefore the necessity for reflection on the meaning and scope of fundamental freedoms, in this context particularly freedom of expression, for the satisfactory resolution of issues in media and information law. The meaning

33. *Television without Frontiers*, Com(84) 300 final.

34. Directive 89/552, OJ 1989 L 298/23, art. 4; Convention on Transfrontier Television, Art. 10.

of freedom of expression or the right to information is contested, not clear. Then there are further questions how these freedoms are to be balanced against rights to reputation, privacy and confidentiality or property and commercial rights, especially copyright. The answers to these questions are at one level provided by courts and political bodies.

But how satisfactory these answers are is a matter both for philosophical and constitutional analysis and for empirical research. Such research may tell us, for example, how effective positive program obligations are in improving the quality of television schedules, or what are the most efficient methods for protecting privacy rights to data files or for instituting rights of access to government information. An introductory exposition of some of the relevant fundamental freedoms is therefore only the start of the jurist's work. It is a necessary, but not a sufficient step for resolving the problems of media and information law.



# Telecommunications and Broadcasting Law in the EEC

*Véronique Faure*

Traditionally, telecommunications policies in the European Community were a matter for individual Member States, who enjoyed privileged relationships with their national manufacturing industries. The late seventies saw the merging of technology with telecommunications and towards the end of 1983, Member States reached a political consensus that it would be more appropriate to grapple with the issue of telecommunications at the European level. Since then, European telecommunications policies have developed rapidly.

## 1. The Green Paper of 1987

European telecommunications policies revolve around a balance between liberalization and harmonization, the introduction of more competition, and the integration of the different European systems. This is the basis for the *Green Paper on the Development of Telecommunications in the Community*, published in June 1987. The Green Paper sets out a framework for the future development of open market conditions in European telecommunications. By a Council Resolution of June 1988, all Member States of the Community gave unanimous support to the main proposals of the Green Paper and its overall policy approach.

Since the resolution of 30 June 1988, the Community has been concerned with implementing the program envisaged by both the Green Paper and the resolution. Progress has been more rapid in some areas than others. Undoubtedly, the most important changes which have been made concern the monopoly of the telecommunications administration with regard to terminal equipment and services.

Other initiatives have been introduced aimed at creating a single market in telecommunications. There is still a long way to go, however, before the objective of Community telecommunications policy is achieved, namely the creation of a European telecommunications area in which people will communicate freely, effectively and in security.



## 2. Liberalization Measures

### 2.1 TERMINAL EQUIPMENT

The Commission, by virtue of either Article 100(A) or Article 90-3<sup>1</sup> of the EEC Treaty, has launched three initiatives aimed at opening up the market in *terminal equipment* to the whole European Community and at harmonizing the conditions of certification. To open up the market of this type of equipment, it was necessary, not only to withdraw the marketing and maintenance monopoly of the Telecommunications Administration, but also to ensure that the certificates issued in each Member State would be mutually recognized by the other Member States in order to save manufacturers and suppliers both time and money.

#### *Type Approval*

On 24 July 1986, the Commission issued a Directive on the initial stage of the mutual recognition of type approval for telecommunications terminal equipment.<sup>2</sup> This Directive requires Member States to recognize the results of tests conforming to European telecommunications standards conducted by accredited laboratories. On 29 April 1991, the Council adopted a more far-reaching Directive,<sup>3</sup> which will replace the first Directive on 6 November 1992. This new Directive provides for the full mutual recognition of type approval. Terminal equipment authorized for connection to any Member State's network on the basis of European standards is thereby automatically authorized for connection throughout the Community. This step is the final precondition for bringing about a genuine single market in terminal equipment. Member States will have to comply with the provisions of the Directive by 6 November 1992.

#### *Terminal equipment market*

With the purpose of introducing competition in the area of terminal equipment throughout the Community, the Commission issued a Directive on 16 May 1988.<sup>4</sup> This Directive, aimed at suppressing all monopolies granted by Member States concerned with the import, marketing, connection, installation and maintenance of terminal equipment, is in force. All Member States have adopted the necessary im-

- 
1. Article 100(A) aims at the adoption of measures of approximation of laws, whereas Article 90, paragraph 3, imposes on the Commission the task of surveilling the adopted measures by the Member States with regard to the undertakings to which they grant special or exclusive rights. Within the scope of this task of surveillance, Article 90, paragraph 3, confers on the Commission the power to determine and formulate, generally and through directives, the obligations which will regulate the relationship between Member States and the aforementioned undertakings.
  2. Directive 86/361/EEC.
  3. Directive 91/263/EEC.
  4. Directive 88/301/EEC.

plementing legislation. Some problems remain only in Italy (telex, separation of regulatory and operating functions), Greece (first telephone set, separation of regulatory and operating functions), and Spain (first telephone set). They are expected to be resolved in the forthcoming months.

On 19 March 1991 the Court of Justice confirmed the Commission's decision to adopt this Directive,<sup>5</sup> thus strengthening the correctness of the Commission's position regarding both the content and the legal mechanisms which surround it. More precisely, the Court upheld the Commission's decision to abolish the exclusive rights of import, marketing, connection, installation, and maintenance of terminal equipment. It also approved the principle of separation between regulatory and operating functions.

However, the Court nullified the provision requiring the withdrawal of special rights to certain undertakings for the import, marketing, connection, installation, and maintenance of terminal equipment, because neither the provisions of the Directive nor its recitals clause was explicit on what was meant by special rights and how their existence infringed the provisions of the EEC Treaty.

The Court also nullified the provision relating to the termination of long-term contracts for leasing or maintenance. The Court held that, given the wording of the recital to this article, it would have been more appropriate for the matter to have been dealt with by another legal means than by a Directive. Finally, the Court nullified the article stating that Member States must provide the Commission with an annual report allowing it to monitor compliance with the Directive, but only in so far as it relates to the nullified provisions.

The nullification of the above-mentioned provisions, as we will see below, may also have an impact on the Services Directive of 28 June 1990,<sup>6</sup> which was also referred to the Court of Justice by three Member States (Spain, Italy and Belgium). The Services Directive contains provisions for telecommunication services quite similar to those of the Terminals Directive: abolition of special rights to provide telecommunications services and termination of long-term contracts. The question therefore arose inside the Commission and is still under consideration whether, and to what extent, the Services Directive needs to be amended in order to bring it into line with the earlier Court decision.

## 2.2 TELECOMMUNICATIONS SERVICES

The Services Directive was adopted on 28 June 1990, the same day on which the *Open Network Provision* (ONP) Directive was adopted.<sup>7</sup> The measures adopted in this field are the result of a unanimous compromise reached by the Commission and the EC Council of Ministers on 7 December 1989 to strike a balance between the objective of an open market and the value of telecommunications being a public utility. This compromise is reflected in the Services Directive which provides for:

1. a rapid and complete introduction of competition for all value-added services;

5. Case 202/88.

6. Directive 90/388/EEC.

7. Directive 90/387/EEC.

2. a progressive liberalization of data communication services;
3. leased line capacity for simple resale to the public from 1 January 1993 (with the possibility of extending the transition period to 1 January 1996 in Member States with less developed public data networks);
4. Member States to require providers of data communication services to fulfill obligations such as quality and coverage (The Commission is to scrutinize these obligations to ensure that they are based on objective criteria, are non-discriminatory and are in proportion to the objective of the general economic interest which motivates the imposition of those obligations.);
5. the general principle that technical interfaces and service features will be subject to voluntary standards (However, there is reserve power for the Commission to refer to mandatory standards only to the extent necessary to ensure basic interoperability.).

### *Open network provision*

The Commission has always considered that the liberalization of telecommunication services should go hand in hand with the harmonization of services. Therefore, the Open Network Provision (ONP) to a great extent represents the harmonization side of this balance between liberalization and harmonization in the area of telecommunications services.

The basic principles of ONP aim at opening up and harmonizing the conditions of access to the network infrastructure for new service providers or for users. The ONP is to apply in the areas of technical interfaces, usage conditions, and tariff principles. This should open the way for the development of pan-European services, in which service providers will be able to make use of the network in the different Member States according to common principles and forms of access. The conditions of ONP must not restrict access to networks and services except for those reasons based on the essential requirements of Community law, such as security of network operations, maintenance of network integrity, interoperability of services (in justified cases), and protection of data (in justified cases).

### *Specific directives*

A subsequent specific proposal on the role of ONP for *leased lines* was adopted by the Commission on the 14 February 1991. This proposal is at the first reading stage before the European Parliament. The Commission has also adopted a Recommendation to apply the ONP to services for data transmission. In conjunction, work is being carried out on developing proposals for ONP conditions in relation to voice telephony, public data networks, and *Integrated Services Data Network (ISDN)*.

The preparatory work is coordinated by the Commission in close cooperation with the ONP committee established by the ONP framework Directive. The equal involvement of users and industry end operators in the preparation is anticipated. In conjunction, the *European Telecommunications Standards Institute (ETSI)* is requested to draw up European Standards to achieve harmonized technical interfaces

and service features. In December 1990, the Commission published a list of norms for data transmission and ISDN in the Official Journal.

### 3. Other Steps towards the Opening of Telecommunications Markets

In addition to the above, further measures envisaged by the 1987 Green Paper have been implemented :

#### *Opening of the Market of Receive-only Antennas not Connected to the Public Network*

A complete single market for satellite receive-only antennas, as long as they are not connected to the public network, is envisaged in the Commission Directive on the liberalization of the terminal equipment Directive.

#### *Separation of Operational and Regulatory Activities*

This principle is now generally recognized and integrated in all Member States' reform projects, albeit in varying forms. The independence of terminal equipment approval authorities is covered by the terminal equipment Directives. Likewise the independence of the authorities responsible for the authorization of services is included in the Services Directive on competition in the telecommunications services market.

#### *Opening of the Market in Respect of Public Procurement*

In September 1990, the Council adopted a Directive for the opening of public procurement procedures in the areas of telecommunications, water, energy, and transport.<sup>8</sup> For telecommunications, this opens up procurement to bidders from other Member States from 1 January 1993. The aim is to eliminate undue and discriminatory influence on procurement decisions and to base them exclusively on commercial criteria.

The Directive imposes the criteria of openness and non-discrimination in the bidding process by the European operators and service providers, both public and private, if they operate under special or exclusive rights, for example through the granting of a government license. The Directive is drafted in such a way so as to avoid the risk of unilaterally making the Community market more accessible to non-Community members, while at the same time providing for its benefits to be extended to those non-members which offer equal market access.

In addition, an offer from a non-Community firm would count as being of Community origin, and therefore automatically benefit from the provisions of the Directive, if more than half of the subject matter of the offer represents goods or services produced or performed within the Community. This Directive must be understood in the context of the Uruguay Round of talks in the GATT framework. It has been

8. Directive 90/351/EEC.

drafted with these negotiations firmly in mind since the fundamental purpose of equal access is to form the basis for negotiations with non-Member States.

### *Standardization and ETSI*

The creation of a genuine single terminal market in the European Community requires that harmonized European standards be defined. The current standardization framework is based upon Directive 83/189, which requires the Member States to submit all draft standards and technical regulations to the Commission and to the other Member States for prior examination.

In order to accelerate the development of European standards, the Green Paper proposed the creation of a European Telecommunications Standards Institute (ETSI). ETSI was founded in April 1988 and is now the body in charge of the production of European telecommunication standards. Of particular importance for the Commission is the framework agreement with ETSI under which the Commission can place standardization mandates with ETSI for the purpose of implementing or accelerating Community policies. ETSI's operations are based on three underlying principles:

1. The standardization procedure should be accelerated in order to get substantial results before 1992.
2. The principle of consensus, which had hitherto governed the European standardization process, should be replaced by the principle of weighted voting in order to streamline decision-making.
3. The standardization process in ETSI should be open; members of ETSI are not only telecommunications administrations, but also the industry, the public network operators, and the users, including private service providers as well as certain research bodies.

ETSI created a number of new technical committees to examine areas of high priority, notably the Intellectual Property Rights Committee and the Advanced Testing Methods Committee.

### *Guidelines on the application of competition to the telecommunications sector*

The Commission will soon adopt these guidelines and publish them in the Official Journal of the EC. The draft which will be submitted to the Commission takes into account numerous comments presented to it by public operators, private companies, regulatory authorities (including those outside the EC), and governmental experts on cartels and dominant positions on the basis of a draft made public in July 1990.

The draft has been amended, *inter alia*, to further clarify that cooperation between Public Telecommunications Organizations (PTOs) is encouraged when it is aimed at the creation of interoperable public networks to provide European-wide facilities to the user. However, this cooperation cannot hamper competition between PTOs or from third parties in non-reserved markets.

Another important issue which has justified some amendment of the draft is cross-subsidization and discrimination. This particular risk arises from positions of vertical integration (service-product or service-service). Vertical integration is accepted in the Community and even considered beneficial to the extent that it creates economies of scale. But the Commission has to be aware of the risk of cross-subsidization and discrimination, which may be incompatible with EEC competition rules. The Commission may as a consequence impose special obligations or guarantees before clearing joint ventures involving vertically integrated companies under Article 85(3) of the Treaty.

Furthermore, in assessing the existence of dominant positions for equipment or services in the EC under Article 86 of the Treaty, the Commission will consider all relevant factors within the Community and outside, including vertical integration. The Guidelines will apply to all companies without discrimination, whether public or private, and whether or not they are located in the EC.

#### 4. Which Way for the Future?

Considerable progress has been made but work is far from being completed. The next phase of European action will need to produce a more concrete framework for the European user. The following measures still need to be taken:

##### *Implementation of ONP*

The implementation of the ONP still requires specific measures as aforementioned.

##### *Implementation of the Principle that Tariffs Should Follow Overall Cost-trends*

According to the 1987 Green Paper and the Council Resolution of 30 June 1988, Telecommunications Administrations will have to move towards a greater cost-orientation for tariffs. The deadline for this is 1992. The provisions concerning tariffs of international telephone calls are currently under examination in order to determine whether they are compatible with anti-trust law. It is anticipated that an opinion of the Commission on this topic will be published in 1991 and the Commission will conduct a review of progress achieved before 1 January 1992.

##### *Introduction of Value-added Tax to Telecommunications*

The introduction of value-added tax (VAT) to telecommunications – where it does not apply – was to be achieved by 1 January 1991 at the latest. This was foreseen in opinions and draft Directives submitted by the Commission in 1984 and 1987. In the meantime, due to the difficulties inherent in VAT harmonization, this approach has been amended. It is now planned that the Commission will submit a report to the Council of Ministers on the distortion of competition which may result from any non-application of normal VAT procedures remaining at this date. Appropriate proposals may then be taken.

## 5. Mobile Communications

The mobile telecommunications industry in Europe continues to grow. In 1989, the growth rate was a record 30 per cent. New technology and systems will ensure the continuing growth of this market through the next decade. So far, the Commission's regulatory involvement in mobile communications has concentrated on the field of international frequency coordination.

### 5.1 MOBILE CELLULAR TELEPHONY

Mobile communications will develop considerably during the next decade. Cellular mobile telephony in particular is of prime importance. It allows the user telephonic communication at his disposal when he travels. Currently, mobile telephony services are only available in some Member States, and are based on mutually incompatible national systems. This situation is not conducive to a single European economic Community.

In tackling the problem, the Commission wanted to take into account the emergence of mobile telephony systems of the second generation – namely, digital systems to promote the implementation of a single system in the Community, the so-called '*GSM system*'. This system would be available in all Member States. In order to give to the GSM system a real chance of becoming the single pan-European system the Community needs, arrangements have been made so that it is implemented as soon as possible after the preparation of the technical specifications and when manufacturers are able to supply the equipment.

The Commission submitted a Recommendation to the Council on the coordinated introduction of pan-European digital mobile communications in the Community<sup>9</sup> and a Directive making the relevant frequency bands available for those services.<sup>10</sup> The Council adopted these two measures in June 1987. The Recommendation provides that on the basis of the GSM technical specification a digital cellular mobile telephony service will be introduced in the Community from 1991 onwards. The Directive makes common frequencies available for this service (890-915 and 935-960 MHz) to be used throughout the Community as the use of the GSM system develops.

The Council of Ministers has adopted a resolution on the final stage of the coordinated introduction and implementation of GSM within the Community.<sup>11</sup> With the adoption of this resolution on 21 December 1990, Member States have made the commitment to move towards mutual recognition of GSM unit certification and licenses for operating these units in all EC countries. The resolution entails:

1. taking interim measures for the mutual recognition of authorization for GSM terminals;

---

9. Recommendation 87/371/EEC.

10. Directive 87/372/EEC.

11. Council Resolution 90/C 329/09 of December 1990.

2. implementing the mutual recognition of operating licenses for GSM in all Member States;
3. examining the technological and developmental possibilities for the use of higher frequency bands and the use of new systems of personal communication networks;
4. promoting the use of GSM in Eastern European Countries;
5. encouraging the conclusion of adequate agreements on rates and accounts;
6. taking the necessary measures to protect data.

These measures as a whole should allow a rapid and harmonious transition between the current incompatible and fragmented mobile telephony systems and a single system progressively available throughout the Community.

## 5.2 THE PAGING SYSTEM

Public radio-paging constitutes another type of mobile communication system for which there is an increasing demand. This system uses terminals of reduced size and cost, able to deliver to the user an alarm signal or a short alphanumeric message, that would for instance lead him to call a correspondent by phone. As with mobile telephony, there are in the Community several types of mutually incompatible paging systems. This situation led the Commission to take similar action with respect to this service as that for mobile cellular telephony.

Acting on a proposal of the Commission, the Council in October 1990 adopted Recommendation 90/543/EEC. This Recommendation envisages the coordinated introduction of pan-European land-based public radio-paging in the Community from the end of 1992 onwards. The system is based on the common ERMES standard. In addition, the Council adopted a Directive making the 169.4-169.8 MHz frequency band available for this service.<sup>12</sup>

## 5.3 CORDLESS TELEPHONE AND TELEPOINT

The cordless telephone constitutes another mobile communication system which resulted in the Commission introducing to the Council a proposal for a Recommendation and a Directive in order to implement a transeuropean system in the Community. This area of technology is also characterized by the existence of national incompatible laws and even by the use of equipment coming mainly from South East Asia which are placed on the market without conforming to any European standards. This type of practice may present some danger regarding the use of the frequency spectrum.

The common European standard was drafted in 1990. Equipment conforming to this digital standard, called DECT, will offer three types of services:

1. the classical cordless telephone for residential use;

---

12. Directive 90/544/EEC.



2. the telepoint system, made up by landmarks on public highways; and
3. a mobile link, within a company, with the relevant switching system.

For these types of links, the user may use the same portable terminal, the cost of which is thereby reduced in comparison to a mobile telephony terminal. This makes its use interesting, even with its inherent limitations with regard to its receiving abilities. We will have to wait until the implementation of the DECT system, from 1991 onwards, to have a really transeuropean system.

## 6. The Green Paper on Satellite Communications

The 1987 Green Paper did not deal with the issue of telecommunications satellite services. In this field, the challenge for the Community is particularly great since the European internal market is fragmented and the relevant legislation is ten years old. Since then, technology has improved and the need for change is apparent. The fragmentation of the Community's satellite communications cannot be maintained in view of 1992.

In November 1990, the Commission published a Green Paper on satellite communications presenting four major changes to the present regulatory environment. The first modification consists of the full liberalization of the earth segment, including receive-only terminals subject to appropriate type approval procedures when connected to the public switched network. It also includes transmit/receive terminals, subject to appropriate type approval and licensing procedures where justified to implement necessary regulatory safeguards. The second change concerns free access to space segment capacity subject to licensing procedures.

The third proposed modification concerns full commercial freedom for space segment providers, including direct marketing of satellite capacity to service providers and users. Finally, the fourth change consists of the adoption of harmonization measures required to facilitate the provision and use of Europe-wide services. This concerns in particular the mutual recognition of licensing, type-approval procedures and frequency coordination.

In order to implement the proposals, the Commission is to issue six Directives dealing with:

- the mutual recognition of type approval for satellite communication terminal equipment;
- the mutual recognition of licenses for satellite exploitation networks;
- the strengthening of frequency coordination related to satellite communications;
- the strengthening of the coordination between Member States with regard to services to and from non-EC countries;
- a specific definition of an open network provision concerning the connection of satellite terminal networks; and
- the introduction of an intermediate standard for television programs broadcast by satellite or cable.

## 7. Broadcasting

In the words of audiovisual communication, the community audiovisual market has 'the look of a random mosaic'. In order to remedy this fragmentation, the Commission on 21 February 1990 issued a Communication which sets out priority aims for the audiovisual policy of the Community and identifies three main policy strands, concerning the regulatory aspects which constitute 'the rules of the game', technology, and program industries.

How do these three policy strands address the priority aims set out in the audiovisual communication, namely overcoming fragmentation, finding adequate finance, promoting new technologies, diversity, ensuring the transparency of the market, and exploiting Europe's cultural diversity? The three policy strands rely on law to a varying extent. 'The rules of the game' are naturally a legal framework, while 'promotion of the program industry' uses non-regulatory means, mainly industry cooperation. The technology strand also uses non-regulatory methods, but backs them up with the force of community law where appropriate.

### 7.1 'THE RULES OF THE GAME'

#### *Television without frontiers*

The important Directive entitled *Television without Frontiers* addresses in fact both program production and 'the rules of the game', allowing citizens to receive programs across borders, without government intervention. There has been much debate on the original Green Paper and the subsequent Directive, which, however, contains much that is uncontroversial, such as the right of reply or the protection of minors, television advertising, and sponsorship (proportion of advertising spots and their placement).

The most critical fire was attracted by the earlier drafts which stipulated percentage quotas for European products. The Directive now states that 'a majority proportion of transmission time' should be reserved for European works. It also states that broadcasters should reserve at least 10 per cent of the transmission time and 10 per cent of the production budgets for independent producers.

#### *Copyright*

National treatment of copyright is potentially another barrier to transfrontier broadcasting, particularly for new media such as satellites. The framework for copyright law remains national, creating more pieces in the mosaic. The goal of transfrontier broadcasting needs to be balanced carefully against the interests of rights holders. One cannot impose new pan-European systems against the will of rights owners. The challenge is to establish a pan-European approach without confronting anyone and without threatening the whole fabric of national copyright which has grown up in different Member States.

The emergence of satellite broadcasting and transborder cable retransmission provides excellent opportunities for establishing a pan-European approach, because national copyright law is silent on both matters. The Commission consequently prepared a discussion paper entitled '*Broadcasting and copyright in the internal market*', published in November 1990. These proposals would regularize the status of simultaneous, transfrontier cable retransmission, providing for the contractual assent of original rights holders and collective management of rights so that retransmission of a service could not be blocked by a single right holder. Satellite broadcasters within the community need only acquire rights for their country of establishment, but rights contracts would take into account the number of viewers reached in the whole satellite footprint. This is a pragmatic approach to the problem of transfrontier services in the new media.

### *Merger rules*

Moreover, audiovisual is subject to the new merger rules (adopted in December 1989, in force 1991) policed by DG IV. The threshold for such deals is rather high, however. The concept of pluralism of media supply should be noted as a supplementary idea mentioned in the audiovisual communication. The essence is that the pan-European audiovisual sector should not be developed at the expense of pluralism of media supply at the Member State level. Ways of safeguarding pluralism are being studied.

'The rules of the game' are therefore the legal platform for the common community audiovisual policy. Turning to the other two policy strands, programming and technology, policy makers have had recourse to non-legal structures in order to assure a pan-European approach.

## 7.2 PROMOTION OF THE PROGRAM INDUSTRY AND TECHNOLOGY

Concerning the *promotion of program production*, the major constraint is again the different approaches of the Member States. However, it manifests itself not in terms of legal systems, as with copyright, but in differing policies and politics. Simplifying the matter to basics, certain Member States actively support their national program production industries; others are opposed to all intervention. The challenge is to create consensus, despite this major difference. It is worth noting that this policy strand is called 'promoting the program production industry' and not 'supporting the production industry'. DG X has labored to try and bridge this chasm. The result is the MEDIA program.

To move on to the final policy strand, *technology*, the example will be *High Definition Television* (HDTV), basically a standardization exercise, but requiring many supplementary activities to validate it. HDTV is a new medium which affects many sectors: broadcasting, program production, cinema, consumer electronics. They all have to be in place if HDTV services are to be offered to the public using the European transmission standard, HD-MAC. Policy instruments here have been a mixture of legal and non-legal instruments.

The Commission's mandate for a pan-European HDTV strategy was granted in the Council Decision of 27 April 1989. It laid down five objectives as the basis for the strategy:

1. to make every effort to ensure European industry develops in time all the technology, components and equipment required for the launch of HDTV;
2. to promote the adoption of the European proposal as the single world standard;
3. to promote its widest use globally;
4. to promote the introduction as soon as possible of HDTV services in Europe; and
5. to make every effort to ensure that the European film and television production industry achieves the capability to occupy a competitive position on the world market.

Vice-President Pandolfi is currently trying to achieve a consensus on the means of reaching HDTV, because different TV transmission standards are being used by different types of satellites. In order to avoid confusion in the market, there must be convergence towards HDTV. These negotiations are still continuing, a detailed examination is not possible. However, the Vice-President has decided to have both a directive and a memorandum of agreement between the different interests. He attaches the highest importance to having legally-binding agreements among the parties, backed up by a Directive. This is an important difference. Rather than relying on legal instruments exclusively, he puts the emphasis on getting the parties to reach binding commitments among themselves.

## 8. Data Protection and the Protection of Privacy

The protection of privacy is an essential requirement that the European legislation on telecommunication services now has to take into account. In the last few years, it acquired a particular importance given the worldwide development of networks and the penetration of information technology in all economic and social activities. Therefore, the risks that the approximation of all these data can constitute for the citizen's privacy must be dealt with. With the implementation of the internal market, data interchanges across boundaries will increase.

Up to now, the citizen's rights in relation to personal data received very different treatment in the various Member States, in spite of the existence of a Convention of the Council of Europe. Unfortunately, this Convention has often been applied differently by its signatories. Hence, with the support of the European Parliament, the Commission considered it necessary to present to the Internal Market Council of 17 September 1990 a package of six measures covering the three kinds of risks that the citizen is exposed to in this field:

1. the risk arising from the non-control of access to his personal data;
2. the risk relating to data exchange with third countries; and
3. the risk arising from faults in information systems and piracy.

The six measures include a framework Directive aimed at establishing inside the Community a high protection level in order to suppress obstacles to data exchange

which are necessary for the creation of a European area without internal frontiers.<sup>13</sup> Its provisions largely have the Convention of the Council of Europe as their source, but with a more legally-binding effect.

One of the other measures is a specific Directive concerning the protection of personal data and privacy in the context of public digital telecommunications networks, in particular ISDN and public digital mobile networks.<sup>14</sup> It is absolutely necessary to approximate through a complementary Directive the technical and regulatory provisions which concern the handling of customer information and data on traffic, other operational functions and billing. Furthermore, the identification of the calling line, automatic call shifting and finally the technical characteristic of terminals and other equipment was required to ensure the appropriate degree of protection.

The recommended measures aim at minimizing the risks of abuse by limiting the data handled in the context of the operation of public telecommunications to the strict minimum required to ensure an adequate level of use, quality of service, and the functions offered to the customer. They also aim at fully guaranteeing the customer's right to self-determination regarding the divulgence of his private data.

Two other measures which have been presented to the Council concern the application of the basic principles of the framework by the European Institutions themselves and by the Member States in the fields which are not submitted to European law. The adhesion of the Community to the Convention of the Council of Europe is envisaged.

## 9. External Relations

Finally, a word on the external aspects of telecommunications since they have an effect on European telecommunication policies. EC support for the opening of the telecommunications market extends beyond the Community's boundaries. This support for an open international trade order applies as strongly in telecommunications as in all other sectors of the economy.

The Commission considers it particularly appropriate that the discussions in the Uruguay Round of the GATT extend to telecommunications services as well as equipment. The EC view has always been that multilateral fora, in particular the GATT, are the appropriate place to work out the rules for international trade. Bilateral contacts are extremely useful for the flexibility they offer to exchange information and discuss points of view. However, it can only complicate, and ultimately degrade, the international trade situation, if rules are worked out on a bilateral basis rather than multilaterally.

In fact, the Community is firmly committed to successful negotiations in both the Uruguay Round and the exercise to broaden the GATT Procurement Code. This commitment was confirmed in August 1990 by the Community proposals in this area. However, the refusal by the US to make a comparable offer has led to a dead-

---

13. SYN 287.

14. SYN 288.

lock. In an effort to unlock the situation, the EC has offered a solution to the US whereby the EC telecommunications operators would be subject to the code disciplines, provided that the US adopts satisfactory measures granting equivalent access conditions to the US telecommunications equipment market. Negotiations on this basis started in May 1991.

The other major area of concern is, of course, Japan, where the equipment and services markets appear largely closed. Solutions are being sought both in GATT and bilaterally. For the long term survival of the EC industry, it is fundamental to strike a balance between an effective market access in the North American and Japanese markets and what the EC internal market provisions are bound to offer to the operators and manufacturers of these regions. The rules of the game must be equal for all players.

## 10. Conclusion

We may conclude that, to a large extent, the regulatory framework surrounding the establishment on 31 December 1992 of an internal market in telecommunications equipment and services is already in place, even if further measures need to be adopted. The existing legislation will have to be adjusted to experience and technological evolution, as well as to the international context of telecommunications. Therefore, it is essential that the Commission of the European Communities sees to its implementation in the Member States, monitors this implementation, and proposes adjustments as required. Such a review will allow the Commission to evaluate the success of the project and ultimately ensure customer satisfaction.



# An Economic View of Information Law

*Ejan Mackaay*

## **Outset**

What is 'information law?' And what is 'an economic view' of it? These terms of reference must be clarified at the outset. '[I]nformation law studies the legal aspects of the entire communication process.'<sup>1</sup> Dommering, from whom this quotation is taken, later defines information law more specifically as 'the study and the formulation of rules of law in respect of:

- a. the production and processing of information;
- b. the storage of information;
- c. the conversion, transfer and reproduction of information;
- d. the use, consultation and storage of information.'<sup>2</sup>

Information law is, at first blush, an area of uncontrolled growth, a panoply of rights, obligations and legal principles, in which it is difficult to see the unity justifying the use of a single designation. It is 'unruly' in that much law is created informally, by directives, guidelines, understandings.<sup>3</sup> There are laws against misleading, deceptive or outright fraudulent information. There is 'intellectual property', almost a contradiction in terms, as *The Economist* sees it, considering 'that ideas are so different from the physical objects governed by most laws.'<sup>4</sup>

There are rules governing secrets, in trade, the legal profession, banks and government. Some information *may* be kept secret at the discretion of the holder, other information *must* be kept secret or may be divulged only with permission of a third party. Sometimes that permission must be granted by a government agency, in which case some will see censorship, abridging the right of free speech. Some revelations give rise to damage payments as libel, slander, defamation or invasion of privacy.

- 
1. Dommering, Egbert J., An Introduction to Information Law – Works of Fact at the Crossroads of Freedom and Protection, in: *Protecting Works of Fact – Copyright, Freedom of Expression and Information Law*, Egbert J. Dommering and P. Bernt Hugenholtz (eds.), Deventer, Kluwer Law and Taxation Publishers, 1991, 1-40, at 11.
  2. *Id.*, at 20.
  3. Herbert Burkert has drawn attention to this aspect of information law. Burkert, Herbert, Nouveaux objets ou nouveau droit - Une tentative de synthèse, in: *Nouvelles technologies et propriété*, Ejan Mackaay (ed.), Montréal, Éd. Thémis and Paris, LITEC, 1991, 209-212.
  4. *The Economist*, 4 May 1991, 21.



Yet other information *may not* be kept secret but must be revealed, without qualification (latent defects known to the seller of a material object), at the request of a specific person (data in personal information files kept by credit agencies, insurance companies, banks, health agencies and the like, information requested as part of pretrial discovery procedures) or of a member of the public at large (some information in the hands of government, subject to a ‘right of access to information’).

For *The Economist*, the problem can be summed up in three debates, conducted within distinct and dissimilar communities: on privacy, on intellectual property and on freedom of electronic speech.<sup>5</sup>

None of these debates is novel. Each of them has been revived by new technologies. Information in bits is apparently not to be treated like the dusty variety. *The Economist* states that the question of how to regulate information flows can be broached in two ways. One is to extend the indirect protections offered in the physical world; the other is to devise rules for the flow of information itself, rather than the medium through which it flows. Neither approach promises to be easy.

In formulating new law, it is important to understand the properties and constraints of law. Law codifies in abstract form non-violent solutions to conflicts or potential conflicts in society. Originally law would merely articulate rules that had been found satisfactory, bit by bit, as solutions to conflicts among those concerned. In modern times, the legislator usually proposes legal rules before they have been tried in society. Such rules will only last if the solutions they embody are afterwards found workable and are widely accepted. Laws ignored are unworthy of that name and should not be on the books: they tend to undermine the confidence citizens have in the law.

No more than natural languages should law necessarily form a seamless web, a system without internal contradiction, although these qualities make it easier for us to understand it. One cannot hope to create ‘living law’ by legislating logically consistent systems of rules ahead of the discovery – piecemeal and at times chaotic – of what is needed in practice. Adam Smith argued this already over two hundred years ago: ‘[I]n the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse to impress upon it.’<sup>6</sup>

‘We do not [...] make radically new law.’<sup>7</sup> ‘[O]ur view of new law is conditioned by our view of old law.’<sup>8</sup> In the Middle Ages, lawyers fashioned solutions to what they saw as new legal problems by reinterpreting rules developed in Roman law for an apparently very different society. Yet the reasons for human action and the pitfalls of human interaction turn out not to be strictly bound to a certain time and place. The wisdom of legal rules, once discovered, can be carried over to situations not envisaged by those who articulated those rules in the first place. For information law, which appears so novel to us now, we must expect this to be as true as it has been for other areas of law which were new to earlier generations of lawyers.

Can theory help us along in formulating information law? I think it can, by re-

5. *Ibid.*

6. Smith, Adam, *The Theory of Moral Sentiments*, Indianapolis, Liberty Classics, 1982, at 234.

7. Glenn, H. Patrick, ‘Law, Revolution and Rights’, (1990) *Archiv für Rechts- und Sozialphilosophie* (Beiheft 41), 9-13, at 11.

8. *Ibid.*

vealing the rationale and structure of institutions on which information law relies. Theory can also alert us to the particularities of information and to the tensions we must expect between these institutions when applied to information. The body of theory I wish to draw on is the economic analysis of law.

### *An Economic View*

The economic analysis of law is an intellectual movement of the last thirty years. It started in the United States and has gained acceptance in most Western countries.<sup>9</sup> Its basic premise is that it is fruitful to apply economic concepts to the analysis of legal institutions. Economics is the theory of human choice in the face of non-abundant (scarce) resources. It provides an understanding of the ways in which humans react to changes in their environment. It also provides an understanding of patterns of human interaction. Beyond this, economists have also had the ambition to determine whether particular arrangements contribute as much as is possible to human welfare and, if they do not, whether existing arrangements should be changed or corrected.

This last ambition in particular has been carried over to the law. Mainstream law and economics throughout the 1970s and 1980s was bent on showing that common law institutions contribute to 'welfare maximization' (are 'efficient' in that sense) and that much legislation of more recent origin does not.<sup>10</sup> Only a limited amount of empirical research was done to assess that thesis.

Within the economics profession, the very idea that economists should be concerned mainly with the 'maximisation of social welfare' has been attacked. So has the idea that such a basic concept as 'cost' can be objectively measured, given its essentially subjective nature.<sup>11</sup> Within the law and economics movement, several mainstream authors have very recently come to the conclusion that whatever the

- 
9. A thoughtful recent survey of the field in English may be found in Johnston, Jason Scott, 'Law, Economics, and Post-Realist Explanation', (1990) 24 *Law and Society Review* 1217-1254; in other languages: Mackaay, Ejan, 'Verschuivingen in de rechtseconomie – Kroniek over de jaren 1988-1990', (1991) 66 *NJB* 1505-1521; *id.*, 'Het recht bezien door de bril van de econoom', (1988) 1988 *RM Themis* 411-452; *id.*, 'La règle juridique observée par le prisme de l'économiste – une histoire stylisée du mouvement d'analyse économique du droit', (1986) 1 *Revue internationale de droit économique* 43-88. A central book of the movement is still Posner, Richard A., *Economic Analysis of Law*, Boston, Little, Brown and Cy, 1986, (3rd ed.).
  10. Posner, *Economic Analysis of Law*, Basic Books, 2nd ed, 1977, at 179 and 189 (efficiency of the common law) and 404-405 (inefficiency of much social welfare legislation). These positions are softened but essentially maintained in the third edition of 1986 (232-233, 242 and 436).
  11. Buchanan, What should economists do? and Is Economics the Science of Choice? reprinted in *id.* (ed.), *What Should Economists Do?*, Indianapolis, Liberty Press, 1979. In a later essay in that book, *An Economist's Approach to 'Scientific Progress'*, Buchanan goes so far as to say that '[h]is own inclination was, and is, to throw out the whole social welfare function apparatus, which only confuses the issues [']' (at 151).

theoretical status of 'welfare maximization', it does not provide an operational criterion for determining what legal rules should be or for explaining what they are in fact.<sup>12</sup>

What we should draw from the economic analysis of law is more modest than its initial ambitious message. It is an analysis of the effects of legal changes and the functions of existing institutions. One might, for instance, want to help the poorest in society by raising the minimum wage. Yet the effect of that measure is to create more unemployment among the least skilled workers. They are 'priced out of the market': employers, having to pay higher salaries than what they reckon to be the contribution of these workers to production, prefer to automate more or to hire better skilled workers.

Raising the minimum wage will make the number of workers demanded smaller and hence tend to raise salaries of those already in the market and better skilled: mostly unionized workers. This explains the ardour of trade unions in defending increases of the minimum wage as a measure of social justice. Who are to oppose these organized interests? Unorganized and lowly skilled workers: young people in particular, but also immigrants and some women re-entering the labour force. An uneven match.

This man-made unemployment prevents many young from acquiring the skills allowing them to command higher salaries in later life. We may institute programs of financial assistance for them. But this must not blind us to the fact that many may 'miss the boat' and become disillusioned, even demoralized. These effects are clearly not what the supporters of increases of the minimum wage had in mind.<sup>13</sup> But good intentions are no remedy for shortsightedness.

Similar analyses may be undertaken of more complex institutions. They often allow one to see analogies between institutions which the law labels quite differently. This is evident in the analyses of property rights we will draw on in what follows.<sup>14</sup> In the property rights approach, environmental problems, for instance, stem

- 
12. Trebilcock, Michael J., 'The Social Insurance-Deterrence Dilemma of Modern American Tort Law: A Canadian Perspective on the Liability Insurance Crisis', (1987) 24 *San Diego Law Review* 929-1002; *id.*, 'The Role of Insurance Considerations in the Choice of Efficient Civil Liability Rules', (1988) 4 *Journal of Law, Economics, & Organization* 243-265. Posner himself has expressed some doubts about the validity of economic analysis: Posner, Richard A., *Problems of Jurisprudence*, Cambridge, MA, Harvard U.P., 1990, at 31.
  13. This may not be the end of the story. The government may institute training programs for the unemployed. If government deficits grow because of unemployment insurance payments, resentment may build up against those on the dole and other welfare programs. They may be accused of being lazy or of defrauding honest taxpayers and be subjected to rather stringent surveillance measures, which by normal standards should count as unduly invasive of their privacy. Many cases of similar perverse effects could be cited. See for instance Baird, Charles, *Rent Control: The Perennial Folly*, San Francisco, The Cato Institute, 1980; Cayne, David and Michael J. Trebilcock, 'Market Considerations in the formulation of consumer protection policy', (1973) 23 *University of Toronto Law Journal* 396-430; Friedman, Milton, *Capitalism and Freedom*, Chicago, The University of Chicago Press, 1962, Chapter XI; Slagter, W.J., *Schaarse rechten*, Deventer, Kluwer, 1989, at 9-10.
  14. Good introductions to this literature are Barzel, Yoram, *Economic Analysis of Property Rights*, Cambridge, Cambridge U.P., 1989, (Political Economy of Institutions and Decisions); Bouckaert, B., 'Eigendomsrechten vanuit rechtseconomisch perspectief', (1990) 39 *Ars Aequi* 777-786; Libecap, Gary D., *Contracting for Property Rights*, Cambridge, Cambridge U.P., 1989 (Political Economy of Institutions and Decisions).

from the difficulty of maintaining the exclusivity necessary for property rights, which would normally provide the incentives not to overuse the environment. Environmental problems are a result not of too much private property, but of too little.<sup>15</sup>

In what follows, we first present the building blocks: scarcity and property rights, and information as a peculiar commodity. This allows us to look, in Part II, at principles we may expect to find for information law. These principles conflict to some extent with one another and we shall have to discuss some of these conflicts. We then look at the State as a provider and consumer of information. Principles of information law take on a particular colouring where the State is concerned. This is because of the wider role of the State in providing public order and redistribution, and because of specific limitations applicable to the State stemming from its monopoly of power and of the money supply.

## *Ordering Principles*

### 1. Scarcity

An essential problem of any human society is scarcity. Scarcity means that if people could consume to their heart's content whatever they fancied, for most goods there would not be enough to satisfy all.<sup>16</sup> Not all goods are scarce. Clean air and water were, until recently, abundant. Even land was abundant in earlier times, when settlers were lured to undeveloped areas with promises of free land.

Scarcity is not an objective quality of goods; it depends on what people want to do with them. To a hermit, most worldly goods may seem abundant, even as for ordinary people they are not. A good is scarce when it can be used in more than one way, by the same or by different persons. Scarcity obliges one to choose among competing possibilities of using a good. To put it differently, scarcity of goods imposes rationing: decisions about who gets what and how much.

Rationing can be accomplished in various ways: violence, authority, queuing, lotteries, nepotism.<sup>17</sup> It can also be accomplished by prices. In rationing by prices, people decide themselves how much of a good they can afford, considering the sacrifice they have to make in forgoing other goods. Money and prices are the terms in which these choices are made.

---

15. See for instance Anderson, Terry L. and Donald R. Leal, *Free Market Environmentalism*, San Francisco, CA, Pacific Research Institute for Public Policy, 1991.

16. A more extensive treatment of what follows can be found in Mackaay, Ejan, 'Economic incentives in markets for information and innovation', (1990) 13 *Harvard Journal of Law and Public Policy* 867-909; *id.*, 'La propriété est-elle en voie d'extinction?', in: *Nouvelles technologies, supra* note 3, 217-247.

17. Baird, *supra* note 13, Chap. 1.

## 2. Exclusive Rights or Property Rights

Prices require property rights. In essence property rights are institutions attributing the decision on how to use a particular good to a single person or group of persons, to the exclusion of all others; the decision no longer belongs to no one in particular or to the community as a whole. Property rights in this sense are broader than what lawyers use the term for. This may confuse lawyers and at least one economist has argued that another term would have been preferable. But it is too late to change.<sup>18</sup>

### 2.1 NON-TRANSFERABLE RIGHTS

#### *Features*

#### *Exclusivity*

Exclusivity, the possibility of effectively reserving a good to a single person or group, is essential for property rights.<sup>19</sup> Where no means are known to ensure exclusivity for a particular good or resource, it will belong to nobody in particular; everyone will consider it his or hers to use. The result will be squandering, or conflict over how it should be used. This predicament is at the root of current environmental problems.

Such goods are ‘free goods’ or in the economist’s terminology, ‘public goods’. Public goods have two characteristics: if they are available for one person, no one else can be excluded from their use and use by one person does not preclude use by another. Both properties are absent in a typical private good such as an apple or loaf of bread. Economists have long considered that pure public goods must be produced by government; no private person will take on the task without the assurance of recovering costs. It is a matter of debate how many true public goods there are. In recent years, several of what were thought to be unquestionable public goods (public transport, refuse collection, roads) have been shown amenable to private exploitation.<sup>20</sup>

18. Barzel, *supra* note 14, at xi.

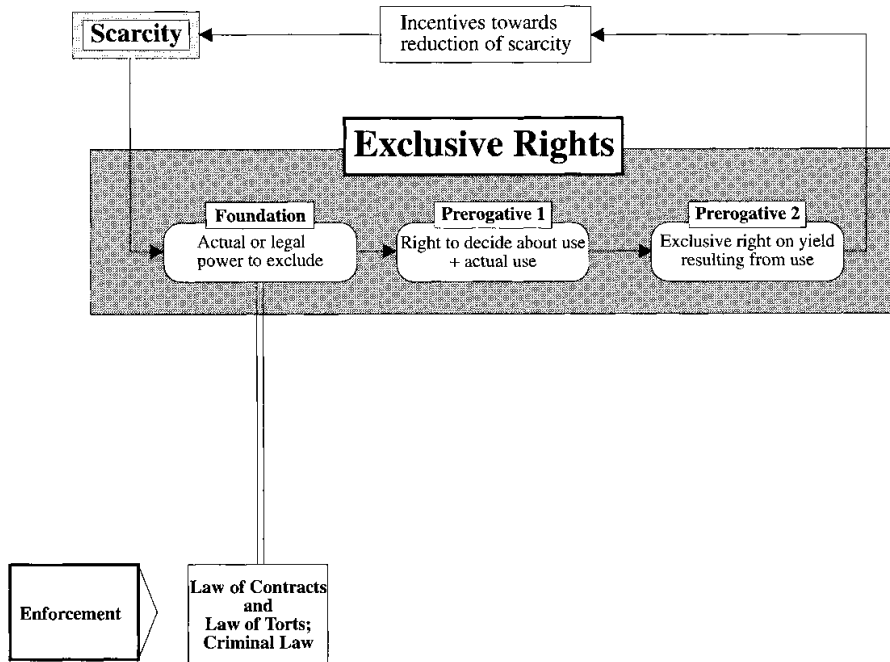
19. This explains the term *exclusive* rights. Civil rights or fundamental rights are attributed to all citizens equally. These rights are not exclusive.

20. Cowen, Tyler (ed.), *The theory of market failure*, Fairfax, VA, George Mason U.P., 1988; De Jasay, Anthony, *Social Contract, Free Ride – A Study of the Public Goods Problem*, Oxford, Clarendon Press, 1989; Schmidt, David, *The Limits of Government – An Essay on the Public Goods Argument*, Boulder, CO, Westview Press, 1991; Sugden, Robert, ‘Rules for Choosing Among Public Goods – A contractarian approach’, (1990) 1 *Constitutional Political Economy* 63-82; Mackaay, *Economic incentives*, *supra* note 16, at 882-885. For a recent reflexion on what else could be ‘privatised’, see Norman Macrae, ‘A future history of privatisation, 1992-2022’, *The Economist*, 21 December 1991-3 January 1992, 15-18.

*Incentive and Information Effects*

Property rights, where feasible, solve the conflict over use of a scarce good. By attributing the good to a particular owner, they give him or her an incentive to husband it carefully: wasting it would harm the owner more than anyone else. Property rights tend to make people responsible: careful or innovative use of a good brings high returns, poor management low returns, *without an outsider having to intervene to establish that link.*

Diagram 1. Exclusive, non-transferable rights



The incentive effect covers not only uses of property one already owns. It also encourages people to invent new or better means of ensuring exclusivity on objects not susceptible of it before. By establishing exclusive control over a good, one has in fact a form of property right on it, whatever its legal qualification. Hence property rights can be created, in tentative form, by individuals looking after their own interests, well ahead of the official recognition of such rights in the legal system. There is, as it were, a laboratory in which new rights can be experimented.

Property rights also have an information effect. To choose among competing uses, owners compare the returns they themselves can expect from these different uses. This is surely a more precise criterion than the extent to which particular uses of a good promote the 'common good' or some such value, which regards many others than the owner himself.

The relationships among the various elements that make up a property right in the broad sense or exclusive right are illustrated in *Diagram 1.*

*Personality Rights as Non-transferable Rights*

This is the structure of the rights recognized to individuals in their person, their reputation, their name, their image, their privacy. They are rights reflecting 'the freedom recognized to each person to determine him or herself the features of his or her appearance in social life.'<sup>21</sup> While these rights are not normally transferable and hence considered 'extrapatrimonial' in civil law parlance, Rigaux correctly observes that these 'personality rights' invariably have patrimonial aspects.<sup>22</sup>

Rigaux goes on, however, to argue that personality rights are freedoms rather than subjective rights (such as property). Subjective rights, in his view, are essentially circumscribed and limited, whereas liberties are essentially open, unbounded.<sup>23</sup> Subjective rights define the prerogatives they confer, liberties, by contrast, allow one to do whatever is not prohibited. Again, property rights, prime example of subjective rights, can be detached from any particular individual; they strictly adhere to their object. Personality rights are liberties specific to individuals, allowing them to express their singularity.<sup>24</sup>

Rigaux is surely correct in arguing that many personality rights have ephemeral objects, which makes it difficult to think of them as subjective rights. Several authors have argued recently that, for this reason, the very idea of intellectual property rights is a contradiction in terms.<sup>25</sup> But they draw from this argument the conclusion that the information supposedly protected by intellectual property rights should circulate freely. Rigaux, by contrast, concludes from it that these freedoms are to be protected by other means than those available for property rights.

All in all, I am not persuaded by Rigaux's distinction. Property rights, too, allow the owner to do with his property as he pleases within boundaries set to protect similar rights of others. Freedoms, in turn, are subject to boundaries similarly defined. The distinction seems to me a matter of degree.<sup>26</sup>

- 
21. Rigaux, François, *La protection de la vie privée et des autres biens de la personnalité*, Brussels, Bruylant and Paris, LGDJ, 1990, at 209 (translation). The same position is adopted in Poulet, Yves, *Le fondement du droit à la protection des données nominatives: «propriétés ou libertés»*, in: *Nouvelles technologies*, *supra* note 3, 175-205.
  22. Rigaux, *supra* note 21, at 733 f.
  23. *Id.*, at 12.
  24. *Id.*, at 738.
  25. Palmer, Tom G., 'Intellectual Property: A Non-Posnerian Law and Economics Approach', (1989) 12 *Hamline Law Review* 261-304; *id.*, 'Are Patents and Copyrights Morally Justified? The Philosophy of Property Rights and Ideal Objects', (1990) 13 *Harvard Journal of Law and Public Policy* 817-865; drawing in particular on Plant, Arnold (ed.), *Selected Economic Essays and Addresses*, London, Routledge & Kegan Paul, 1974; Lepage, Henri, 'Les brevets dans la stratégie des entreprises: le cas français', (1989) 1 *Journal des économistes et des études humaines* 153-177; *id.*, *Propriété industrielle, propriété intellectuelle et théorie de propriété*, in: *La 'nouvelle économie' industrielle*, Henri Lepage (ed.), Paris, Hachette, 1989, 153-177; Bouckaert, Boudewijn, 'What is Property?', (1990) 13 *Harvard Journal of Law and Public Policy* 775-816 and *id.*, *Repliek op Mackaay*, in: *De sociaal economische rol van intellectuele rechten*, M. Van Hoecke (ed.), Brussels, E. Story-Scientia, 1991, 31-37, at 33-35, a reply to Mackaay, Ejan, *Economisch-filosofische aspecten van de intellectuele rechten*, in: *De sociaal economische rol van intellectuele rechten*, in same, 1-30.
  26. Rigaux goes some way towards recognizing this. Rigaux, *supra* note 21, at 753.

### *The Emergence of Exclusive Rights*

If personality rights are a non-transferable<sup>27</sup> species of exclusive rights, as I argue, the framework set out above allows us to say something about their emergence. In the first place, the need to spell out an exclusive right on some object will be felt only when the object becomes scarce, that is as more than a single usage of it becomes feasible. For several personality rights, that situation has recently arisen when new technologies made possible intrusions that previously had been prohibitively expensive. Data banks and subtle surveillance (e.g., eavesdropping) of persons are examples that come to mind. It is therefore not at all surprising that demand for 'new' rights coincides with rapid technological development.

Secondly, the viability of a 'new' right depends on the extent to which exclusivity can be effectively ensured, in fact or by law. '[E]xclusivity is frequently a matter of degree.'<sup>28</sup> It may also evolve over time as a result of new technological developments. Radio waves were long thought to be unalterable public goods, because nobody could be prevented from capturing them. That argument, and also the supposedly limited range of the available wave spectrum, has been invoked for massive government subsidy of that industry and, to varying degrees, control of the broadcast contents.

In some countries, the government makes citizens pay fixed annual sums for listening to radio or watching television, whatever the amount of listening or viewing, and with at best a tenuous link between what programs citizens prefer and what they get. We now know that many more signals can be crammed into the available spectrum than was previously thought possible. We also have found ways (cable, encrypting signals) of creating sufficient exclusivity (at acceptable cost) to make exclusive rights viable.

- 
27. This paper does not deal with the reasons why particular rights might be declared non-transferable or inalienable. On that question see Guido Calabresi and Douglas Melamed, 'Property rules, liability rules, and inalienability: One view of the cathedral', (1972) 85 *Harvard L. Rev* 1089-1128, repr. in: Bruce A. Ackerman (ed.), *Economic foundations of property rights*, Boston, Little Brown, 1975, 39-42; Susan Rose-Ackerman, 'Inalienability and the theory of property rights', (1985) 85 *Columbia Law Review* 931-968 and the comments by Richard A. Epstein, 'Why restrain alienation', (1985) 85 *Columbia Law Review* 970-990; Freeden, Michael, *Rights*, Minneapolis, University of Minnesota Press, 1991, 30-32; Barnett, Randy E., Rights and remedies in a consent theory of contract, in: Frey, R.G., and Christopher W. Morris (eds.), *Liability and Responsibility – Essays in law and morals*, Cambridge, Cambridge U.P., 1991, 135-172, at 156-163; Mackaay, *Nouvelles technologies*, *supra* note 3, at 228-232. In civil law countries the debate turns around the question of whether particular rights are patrimonial (hence transferable) or extra-patrimonial. See for instance Rigaux's discussion of the presumed extra-patrimonial character of personality rights. Rigaux, *supra* note 21, at 757 ff. For the views of economists on related questions: Guido Calabresi and Philip Bobbitt, *Tragic Choices*, New York, W.W. Norton, 1978, 116-117; Arthur M. Okun, *Equality and Efficiency – The big tradeoff*, Washington D.C., The Brookings Institution, 1975, at 6 ff.; Jon Elster, *Ulysses and the sirens – Studies in rationality and irrationality*, Cambridge, Cambridge U.P. and Paris, Éditions de la maison des sciences de l'homme, 1979; *id.*, *Sour grapes – Studies in the subversion of rationality*, Cambridge, Cambridge U.P. and Paris, Éditions de la maison des sciences de l'homme, 1983; Thomas C. Schelling, Ethics, Law and the exercise of self-command, in: *id.*, *Choice and consequence*, Cambridge, MA, Harvard U.P., 1984, 83-112.
28. Cheung, Steven N.S., The Structure of a Contract and the Theory of a Non-Exclusive Resource, (1970) 13 *J. Law Econ.* 49-70, repr. in: Furubotn, Eirik G. and Svetozar Pejovich (eds.), *The Economics of Property Rights*, Cambridge, MA, Ballinger, 1974, 11-30, at 27.



A third interesting aspect of the emergence of exclusive rights is that they may function ‘experimentally’ before formally being recognized in law. This option is open to anyone who can ensure factual control over some object. It requires minimal support from the courts in the form of relatively open tort actions against persons intruding upon something others are using as theirs exclusively. The emergence of new rights therefore need not be the initiative of the legislator or the courts, but can result from actions of individuals seeking to better their lot. Legislators and courts may reinforce such individual initiatives; indeed arrangements developed in that manner ought to be the main source of inspiration for a legislator concerned to produce ‘living law’.

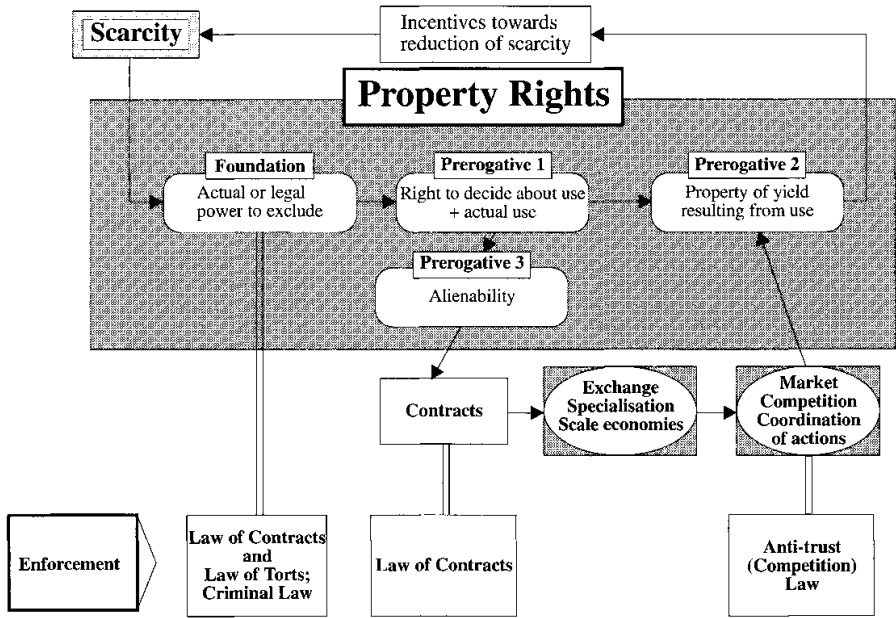
## 2.2 TRANSFERABLE RIGHTS

Where the right sketched above is transferable, its effects are broader (*Diagram 2*). The possibility of transferring property rights from one person to another makes it possible for people to *specialize* in particular activities: one can buy from others objects that, because of specialization, one no longer produces oneself. One can run them the specialized product one now makes exclusively. Specialization makes it possible to attain scale economies. This prospect in turn may stimulate further specialization.

When multiple suppliers and purchasers of the same good interact, markets develop, initially in a single location, later, as information and communication techniques progress, geographically dispersed. The interaction of multiple suppliers and purchasers creates a certain order among the participants. The order has some characteristics beyond what interactions between an individual supplier and an individual purchaser would produce. Prices adjust according to the quantities offered for purchase and those desired by purchasers. Economists have long studied the properties of this spontaneous adjustment process, which they call ‘the market’.

Transferable property rights, traded through markets, enhance the incentive and information effects noted earlier. Besides the current owner, prospective purchasers now scrutinize the use to which particular property is put: they might buy it from the current owner if they think they can make more profitable use of it. They can buy the owner out at a price reflecting current use of the property, and still have the prospect of a profit, reflecting the more profitable use to which they will put it after the sale. The current owner himself has an interest in promoting this phenomenon. As a possible use, he may consider the possibility of selling his property to a person who thinks he can make more profitable use of it. Through this process, property tends to ‘gravitate’ towards its most profitable use as measured by voluntary trades among individuals.

Diagram 2. Transferable property rights



Prices reinforce the information effect. Owners considering several possible uses now compare the prices that each would fetch. Property rights in this richer structure still encourage responsibility. Prospective purchasers act *on the belief* that they can make better use of the property than the current owner. If they are right, they keep the surplus; if they are wrong, they suffer the loss. The test is in the sale of the good and its subsequent use. Short of omniscience, not accessible to us humans, no better way of knowing is available.

To generate knowledge about profitable uses of property, people must be able to use and trade it. This condition is at once necessary and sufficient. No planner can accomplish the task in more than the narrowest of contexts and over short periods of time. This is the message of the impossibility of socialist calculation, demonstrated theoretically between the two World Wars and practically in the Eastern European countries over the past few years.<sup>29</sup>

29. Recent statements: Lavoie, Don, *Rivalry and Central Planning: The Socialist Calculation Debate Reconsidered*, New York, Cambridge U.P., 1985 and Hayek, F.A., Two Pages of Fiction: The Impossibility of Socialist Calculation, in: *The Essence of Hayek*, Chiaki Nishiyama and Kurt R. Leube (eds.), Stanford, CA, The Hoover Press (1984), 1982, 53-61; original papers in that debate are Hayek, F.A., Socialist Calculation I: The Nature and History of the Problem, in: *Individualism and Economic Order*, F.A. Hayek (ed.), Chicago, Henry Regnery Cy (1972), 1935, 119-147; *id.*, Socialist Calculation II: The State of the Debate, in: *id.*, 148-180; *id.*, Socialist Calculation III: The Competitive 'Solution', in: *id.*, 181-208; *id.*, The New Confusion About Planning', in: *New Studies in Philosophy, Politics, Economics and the History of Ideas*, *id.* (ed.), Chicago, The University of Chicago Press (1978), 1976, 232-246.

There are, as I noted earlier, several ways of coping with scarcity, private property rights being only one of them. By encouraging specialization and by making markets possible, private property rights allow all concerned to gain, or at least not to lose as a counterpart to the gains of others.<sup>30</sup> Violence, authority, queuing, lotteries, nepotism, by contrast, only allow some to gain at the expense of others. They tend to be, in the language of game theory, zero-sum or even negative-sum games.

Property rights may not have been created for their incentive and information effects. They may have come about by people ‘grabbing’ objects and fending off others. People may be driven by cupidity, lust for power, concern to ensure a decent life or other motives.<sup>31</sup> The important economic effects of property rights may have been discovered afterwards, almost by accident. Yet it is these economic effects that explain why in Western societies property rights have become the foremost institution for coping with scarcity.<sup>32</sup> They also explain why our normal strategy, in trying to deal with new situations of scarcity, is first to seek to apply the property rights structure to them.

### 3. Information as a Peculiar Commodity

Information is an unruly object of property rights. To understand why this is so, we must know more about what information is. That question has exercised the minds of scientists a great deal. Shannon and Weaver, in formulating their *Mathematical Theory of Communication*,<sup>33</sup> saw a message as all the more informative as it is unlikely, improbable to its receiver.

Hughenoltz, in a single page at the outset of his thesis,<sup>34</sup> succeeds in summarizing the essential ideas for lawyers. Information is the answer to a question, even a dormant one. Information presupposes alternatives and the possibility of choosing among them. It implies novelty or surprise. A receiver who knows the contents of a message he is about to receive cannot properly be said to be informed by it. Information is subjective; a message may be information to some people, yet be noise (redundancy) to others. Information is the counterpart of chaos, of ‘entropy’. It is that which adds – or better, allows someone to see – order, shape, structure, specificity to a world of indeterminacy.

30. Of course, exchange, agreed to because it is expected to lead to gains for each party, need not in all cases produce that result in fact: either party or both may have had mistaken beliefs about what he stood to gain by the exchange. But this will only be discovered *after the fact*.

31. See Sugden, Robert, *The economics of rights, co-operation & welfare*, Oxford, Basil Blackwell, 1986, Chaps. 4 and 5, as well as Mackaay, Ejan, ‘L’ordre spontané comme fondement du droit – un survol des modèles de l’émergence des règles dans la société civile’, (1988) 22 *Revue juridique Thémis* 347-383, and (1989) 3 *Revue internationale de droit économique* 247-287, Section III.

32. North, Douglass C. and Robert Paul Thomas, *The Rise of the Western World – A New Economic History*, Cambridge, Cambridge U.P., 1973.

33. Claude L. Shannon and Warren Weaver, *The Mathematical Theory of Communication*, University of Illinois Press, Urbana, 1949.

34. Hughenoltz, P. Bernt, *Auteursrecht op informatie*, Kluwer, Deventer, 1989, 6-7.

Information is the essential ingredient of human decisions. It is the stuff of which all our thinking is made. Each of us manipulates thousands of pieces of information concerning his or her person, relatives, preferences, ways of doing things, work, things to buy and to sell. Much of this information is continually and almost unwittingly updated. Most of it concerns the holder only and is not intended for communication to others. It is of no legal interest, so long as others have no illicit access to it.

Much information can be shared. Relations among humans consist for a good part in relaying information. Culture and language are typical examples. They are spontaneously created, usually without particular encouragement and are not scarce. This kind of information is a free good. Information of this kind does not give rise to property rights or other means of husbanding scarce resources.

There exist, however, sorts of information that can be communicated and would not be produced or made available without particular encouragement for the creator: information on the quality of products or services, compilations of addresses, artistic works, architectural drawings, scientific discoveries. Scarcity takes the form of the time the creator must devote to producing it, as opposed to spending it on other endeavours. Once available, this information can be used repeatedly, since it does not deteriorate with use, though it may become obsolete. It is surely this kind of information that Knight had in mind when he wrote that it 'is one of the principal commodities the economic organization is engaged in supplying.'<sup>35</sup>

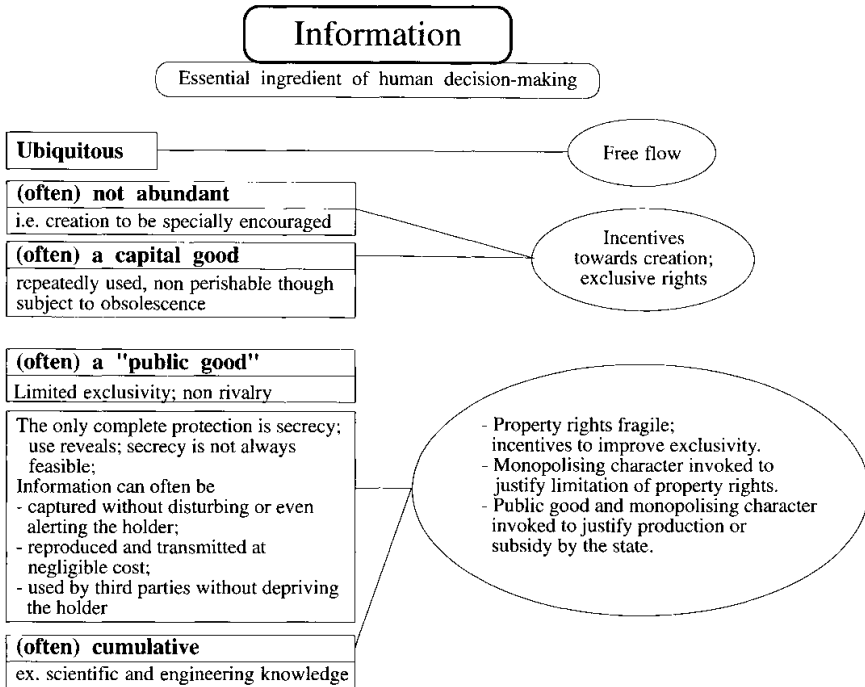
This kind of information is of interest to the law. The encouragement for creators would normally be an exclusive right. Such a right lifts information out of its 'normal' status of free good and makes it, in whole or part, a private good.

The difficulty with this undertaking is that information is frequently not amenable to a level of exclusivity required for a property right. Information can exist in multiple copies without depriving the initial holder of its use; often information is even more like a public good, in that, once it is in circulation, one cannot easily prevent a person from using it. Anyone who has ever shared a secret upon the promise that it will not be further divulged is aware of this. Information can frequently be captured and reproduced at low, even negligible cost. Each technical innovation further detaches information from its support and makes it easier to copy. Candid cameras and electronic listening devices make it ever easier to capture. These characteristics call into question the viability of property rights in information.

---

35. Knight, Frank H., *Risk, Uncertainty and Profit*, Chicago, The University of Chicago Press, 1971, (1921), at 261.

Diagram 3. Overview of the features of information relevant to law



A further shadow cast over property rights in information is that they may entail a measure of monopoly power far exceeding that of corresponding rights in physical goods.<sup>36</sup> Someone owning property in the centre of a large city or in a spot where someone else wants to build a shopping mall appears to have substantial power; it seems to allow him to hold out for an unreasonably high price. But there are other locations and other ventures for investing money. Compare this to the multitude of ideas of earlier inventors incorporated in any one of the ordinary buildings or consumer goods surrounding us. If all these ideas were subject to everlasting rights, society would be hostage to innumerable pockets of monopoly in the hands of the heirs of inventors in earlier generations. Research into new methods could easily be halted. Knowledge is cumulative; too extensive property rights in it would stifle its accumulation. These observations are summarized in *Diagram 3*.

36. Koopmans writes that intellectual property rights create mini monopolies'. (Koopmans, T., Information Monopolies in European Community Law, in: *supra* note 1, 83-91, at 86). But of course, any property right, any exclusivity creates some measure of monopoly. The hard question is where to draw the line of monopolies one deems unacceptable forms of privilege, not to be enforced by State power. There are no incontrovertible answers to it. See Demsetz, Harold, *100 Years of Antitrust: Should We Celebrate?* – Brent T. Upson Memorial Lecture, Arlington, VA, George Mason University School of Law, Law and Economics Center, 1991; Mackaay, *Economic incentives, supra* note 16, at 887-890.

This suggests that rights in information will reflect a trade off between the contradictory needs to make information exclusive in order to encourage its production and to keep it flowing for it to be accumulated. The various intellectual property rights strike different compromises between the scope of the protection and the length of time for which it is granted: patent offers extensive protection, but for a short period; copyright protects form only, but for a longer period.

## *Information Law*

The foregoing considerations lead to three patterns or models to which we may have recourse in dealing with 'new' information problems: free flow, exclusive non-transferable rights and exclusive transferable rights. These patterns are present in a number of established legal institutions. We try to extend their range to new cases. I call them 'seeds'.

### 4. Information Law among Private Persons

#### 4.1 'SEEDS'

##### *Free Flow*

Free flow is, to use a computer term, the default option. Barring special provisions, information, once put in circulation, may be used, copied, transmitted and further circulated freely by anyone who comes by it legitimately. The qualification 'once put in circulation' is important since secrets may be kept. This last principle expresses the autonomy of persons. In commercial matters, it allows someone who has developed a novel idea to establish informally a quasi-property right on it. In this way the law leaves room for informal experimentation with structures that might eventually be recognized as rights.

The qualification 'legitimately' refers to the respect of property rights in particular in physical objects. Free flow can be no excuse for theft or for breaking into people's offices, houses, cars or other exclusive spaces.

One is free to put in circulation information one develops oneself, with or without the help of other information to which one has legitimate access. This freedom is restricted by the obligation not to put false information in circulation. The central role of information in our decisions and the cost of verifying it explain this principle. Rules against fraud and deception give effect to it.

##### *Non-Transferable Exclusive Rights*

Individuals are masters of their life and liberty. This is an essential aspect of individual autonomy on which Western societies are founded. Mastery of one's own life entails a large measure of control over one's public persona, that is the information about one's person that circulates among fellow citizens. Some information

concerning one's person one may withhold or withdraw from public scrutiny, without giving reasons or showing harm caused or likely to be caused by its disclosure. It is an exclusive right, in that it gives its holder freedom to use as he sees fit to the exclusion of others. It is also a non-transferable right. One can no more transfer it than one can transfer one's person, although one can make available the fruits of one's labour.<sup>37</sup>

To other information of a personal kind, legitimately in the hands of others, one has privileged access so as to prevent false information from circulating. This might be seen as an outflow of the principle prohibiting false information.

### *Transferable Exclusive Rights*

Where special effort is necessary to produce information that is useful to different people, exclusive transferable rights are used as institutions creating the proper incentives. These rights are available only to the creators of the information. The creator may transfer his right. Sometimes, he is legally presumed to have transferred it, as in the case of an employee creating a copyrightable work during employment, on which in many countries the employer is the first copyright holder, barring agreement to the contrary.

To function effectively as a property right, the creator's right should produce rewards proportional to the interest of the creation to users as measured by their willingness to pay for it. Problems with exclusivity sometimes make it difficult to satisfy this criterion, as in the case of broadcasts picked up or printed works photocopied by countless individuals. Solutions consisting in collecting fixed fees on blank media (tapes, photostating machines) and distributing the moneys more or less arbitrarily among a class of creators are gratuitous. They tend towards use of State power for redistribution, which is 'an entirely different kettle of fish'.

All rights of this kind, as we saw earlier, are compromises between the need to stimulate creation by awarding exclusivity and the need to limit the monopoly power the exclusivity entails. How the balance between these two opposing principles must be struck is a matter of experimentation. The monopoly power is harmful to consumers in that they pay higher prices. Even more, it harms competitors since they must now 'invent around' the protected information. But each competitor in a given field will be now holder of an exclusive right (as creator), now third party restricted by that right.

The competitors 'in the field' have no interest in favouring one of the two principles over the other. It is therefore meaningful to observe what balance the 'industry' itself strikes, using trade secrets, contracts selectively transferring secret know-how and 'borrowing' tolerated in practice. In a rough and ready way, one may expect that the more monopolizing the right and the stronger its prerogatives, the shorter will be its duration, the narrower its geographical range and the likelier it will impose disclosure of the protected information.

---

37. Randy Barnett has formulated an interesting theory of when specific performance should be granted against natural persons. Barnett, *supra* note 27, at 163 ff.

## 4.2 BALANCING THE 'SEEDS'

### *Free Flow Versus Non-transferable Rights*

This conflict is evident with respect to personal information. In older times, one could freely use and circulate information about another person gleaned in the course of ordinary life. Feeding the rumour mill was frowned upon, but not actionable in law. Defamation (slander or libel) of a person was actionable as a tort, but the defamed person must show the falsity of the information circulated and the intention to do damage to his or her good name. Yet in general, in order to use or circulate information about a person it was not necessary to seek his or her permission.

In recent times, the means of gathering information about a person 'in the course of ordinary life', that is without disturbing that person or intruding upon his property, have increased phenomenally. So have the means of collating, storing and retrieving information of this kind gleaned from different sources. Many organizations have decided to rely on such information for making routine decisions about individuals. In earlier times such decisions would have required personal acquaintance with the person. The new procedure simplifies the decision and reduces its cost; but it compounds the damage done by errors and is open to abuse, as Europeans discovered during the war.

The trend is now to give a person a say over personal information that concerns him or her and is in the hands of others. For photographs or recordings this 'say' means prior permission. It is an exclusive right. Permission means partial or temporary transfer. Total transfer is out of the question. Highly sensitive data, such as race or religion, may not always be stored or if stored, may not circulate at all beyond specifically authorized persons with a need to know. For ordinary data, the 'say' is less powerful, consisting mainly of a right to have access and to have corrections made.

### *Free Flow Versus Transferable Rights*

Conflicts of this sort concern the scope of protection afforded by intellectual property rights. Ideas and mathematical principles are considered part of the public domain – and hence freely flowing – as regards patent and copyright. But the recent chip legislation puts far more in the public domain. Competitors may take apart and analyse protected designs, something the law does not allow them to do with programs subject to copyright. Moreover, a new design incorporating elements of an older one will earn protection of the chip acts if it constitutes a substantial step forward. Again, copyright broaches such a situation differently. It would consider the new design to be a derivative work and as such subject to permission by the copyright holder of the older work. The proper boundaries of intellectual property do not appear to be fixed once for all.

Dommering discusses another case of this sort. Organizers of a sports event ask the media to pay for permission to cover it.<sup>38</sup> Notice that the organizers have no rec-

38. Dommering, Egbert J., *De informatiedriehoek – Enkele beschouwingen over de regulering van informatiestromen*, Deventer, Kluwer, 1989, at 28.



ognized intellectual property right in the sporting event. Yet physical control of access and freedom of contract with whoever wants it suffice to create a property right in a practical sense. Dommering feels that there is a conflict here between the general interest in access to ‘newsworthy’ events and private property rights or the equivalent. But this is misstating the problem. The sports events organizers are subject to competition by other events vying for the public’s attention. There is no reason to interfere with their decision to set prices and to aim at having one or several media present, nor with what stars they hire and what they pay them. These decisions affect their reputation and ultimately the public’s willingness to view – and hence, directly or indirectly, to pay for – the events they organize.

### *Non-transferable Versus Transferable Rights*

These conflicts arise because one set of persons claim a property right as creators of data banks containing personal information and at the same time, the people concerned claim a different sort of property right as an extension of the mastery of their own person. Both are legitimate claims to some form of property right. Recognizing them both leads to a dual property right on the same object, here an information structure.

A similar duality exists where an author assigns his ‘economic’ rights to someone else – a publisher, for instance – retaining only the moral rights (in countries that recognize moral rights as part of copyright).<sup>39</sup> Again where someone’s genetic material is used for research leading to a patent for the researchers involved, there is a conflict between the patent and a right now claimed for all persons to their genetic material.

In legal systems based on the Civil Code, this duality of rights clashes with the principle that any good has only a single owner. Where several rights exist on the same object, one is derivative and temporary. Upon its expiration, the owner would recover full rights to his property. Such would be the case where property is encumbered with a usufruct, a servitude (easement), or with an emphyteutic or an ordinary lease. But in the cases mentioned above one right is not destined to expire and to return to the holder of the other. The data bank owner will not recover whatever rights the ‘data subjects’ have to his records, nor the reverse.

The duality of rights is not altogether unknown in civil law. Historically, plurality of ownership appears to have been common.<sup>40</sup> Current civil law provides, for instance, for condominium ownership, for timesharing arrangements (for apartments) and for joint ownership of assets in an ordinary partnership. In each of these cases the law spells out rules for managing the jointly owned property and for dissolving the joint ownership, should that prove necessary. Parties may contract around these rules, but must then provide for the contingencies the rules are meant to regulate. Similar rules will have to be developed for the problems discussed above.

39. Rigaux, *supra* note 21, at 749 ff.

40. Maine, Sir Henry, *Ancient Law*, New York, Dutton, (1917), 1977. (Everyman’s Library), at 153; Patault, Anne-Marie, *Introduction historique au droit des biens*, Paris, Presses Universitaires de France, 1989, at 22 ff.

### *Balances Involving all Three 'Seeds'*

The conflict between the right to control information about one's person and the free flow of information available through normal contacts concerns what personal information may circulate and whether it is accurate. Often, the conflict has a further dimension, that of controlling just how it will be made public. The image of a publicly known figure is a marketable commodity. Reputations are scarce goods. They help consumers make better choices. The title holder to this commodity is the person him or herself. Publicly known figures exploit their image as a marketable asset in which they have a property right.

This explains the extraordinary complexity of the law with respect to one's image.<sup>41</sup> In some cases, it concerns the boundary between free flow and personality rights; in others, the boundary between free flow and (marketable) property rights. The transition may not be clear; one can imagine instances where all three concerns are at stake.

## 5. Information Law with the State as an Actor

### 5.1 REFLECTIONS ABOUT THE STATE

The State is not an ordinary participant in the economy. In most countries, it is all or most of the following: the central or federal government as well as local governments; the army and the police forces; social services such as the unemployment insurance board, the national health administration and the State automobile insurance agency; educational institutions; the post (and telecom) office; the electricity and gas companies; the railways and the local transportation boards; the national airline.

The State accomplishes special tasks and has special prerogatives. About the tasks the State should properly undertake there exists much disagreement. Correction of 'market failures', such as monopolies, 'public goods' and externalities, has turned out to be intractable as a description of what the government should do.<sup>42</sup> Nor is it very helpful to say that the State must act to promote the general or public interest (*a une mission d'intérêt public*). Presumably, that would include maintaining public order and preserving conditions under which markets can function harmoniously, as well as providing goods markets will not supply or not in sufficient quantity at affordable price ('public goods'). Should it also include the distribution of broadcasting concessions on the basis of religious denominations, as happens in the Netherlands?<sup>43</sup> Or is this abusing State power to maintain a compromise formula that was justified in an earlier state of technology, but is now stifling the adjustment to changed consumer priorities and technical possibilities?

In practice, governments in most Western societies take on the tasks of provid-

41. Molinari, Patrick A., Observations sur la production des théories juridiques: les images floues du droit à l'image, in: *Nouvelles technologies*, *supra* note 16, 11-29; Rigaux, *supra* note 21, Chap. XIII to XV. Also Dommering, *supra* note 38, at 31.

42. Cowen, *supra* note 20.

43. Dommering, *supra* note 38, at 26.

ing public order, economic infrastructure (education, transportation) and redistribution. Much as government officials may decry the limited scope for government action,<sup>44</sup> there is no denying that since the Second World War governments in Western countries have continually expanded the range of aspects of society they felt called upon to involve themselves with. There appears to be no practical limit to the tasks interest groups of one kind or another can convince governments to take on.<sup>45</sup>

It is easier to get a handle on the special role of government by looking at the special conditions under which it operates. First, government agencies cannot go bankrupt as private actors can. Substantial losses can be covered by public funds. Money can be printed to pay for government expenditures.<sup>46</sup> Government agencies are frequently run as monopolies: post office, telecoms, electricity, gas, coal production, railways, airlines.<sup>47</sup> As a result, government agencies are usually not subject to market discipline as are individuals or private agencies. Offensive practices cannot be corrected by consumers switching to competitors, as they would be in the private sector.<sup>48</sup> Innovation in the direction desired by consumers is less likely to be forthcoming.

In the second place, the State has the monopoly of legal means of coercion. It can make individuals pay taxes and force them to divulge information, for all sorts of purposes. Related to this is the State's monopoly on legislation. It can adopt laws that harm some individuals or groups for the benefit of others (protectionist measures, 'closed shop' laws and other barriers to entry). These laws may authorize the deprivation of liberty as a sanction for disobeying them.

## 5.2 BALANCING THE FUNCTIONS OF THE STATE AND THE 'SEEDS'

Because of the special conditions under which the State operates, the balancing of the 'seeds' cannot be extended to its activities without qualification.

### *Power of Coercion and Free Flow*

Monopoly of power calls for means of controlling those who exercise it. The first of these is an obligation of openness (access to information). Those who exercise power must provide information on their decisions. They must do so to any member of the public, whether or not that person intends to disseminate the information and

44. Wellink in 'Comments 5' (in: *The Economic Role of the State*, Arnold Heertje (ed.), Oxford, Basil Blackwell, 1989, 145-164, at 149) on Stiglitz, Joseph E., On the Economic Role of the State, in *idem*, 9-85.

45. The wellknown economist Lipsey is not as pessimistic; he believes that as the process goes overboard, countervailing forces will be awoken to halt it (Lipsey, Richard G., Can the market economy survive?, in: *Probing Leviathan – An investigation of government in the economy*, George Lerner (ed.), Vancouver, The Fraser Institute, 1984, 3-37, at 33-34).

46. Ultimately this is self-defeating. The verdict may come through runaway inflation (as it has recently in several South American countries) or as lack of confidence on the part of creditors (as happened in the period leading up to the French revolution. See Aftalion, Florin, *L'économie de la révolution française*, Paris, Hachette, 1987 (coll. Pluriel).

47. Stiglitz, *supra* note 44, at 14.

48. *Id.*, at 52.

make a profit with it. The free flow principle takes on special colouring where the State is concerned. In principle, its information must be made public; secrets must be justified.

The second means of controlling power goes by the name of freedom of expression. It means that legislative and police powers must not be used to curtail the dissemination of information. This is another aspect of the free flow principle. Access to information and freedom of expression are the essence of the public's 'right to information', the subject of my other contribution to this book.

### *Power of Coercion and Privacy/Confidentiality*

Because the State can force citizens to produce information they would not volunteer, it is under an obligation to ask no more information than is necessary for the specific purpose at hand; to restrict access to those with a need to know; and to withhold from public circulation information citizens would want to keep confidential. This applies to personal information, as it does in relations among private citizens, but more so because of the State's coercive power. It also applies to information that corporate citizens mean to keep confidential but are obligated to provide to the State. In private relationships, contracts regulate what the recipient may and may not do with such information.

The difficulty comes into focus when one considers as an example the possibility of State agencies selling address lists to private companies for commercial purposes. There is of course the laudable consideration of reducing the cost of providing public services. But one must wonder whether the State should have property rights in this information, that is whether it is subject to 'the incentive argument' given earlier as a justification for recognizing property rights. The answer would probably have to be negative. Selling the address lists would then have to be justified by presumed consent of the persons concerned. One would face the question of whether those concerned should not have the option of withdrawing that consent.

### *Monopoly and Reasonable Access*

Where the State 'monopolizes' particular information channels,<sup>49</sup> as in public broadcasting, the post office, telecommunications services in some countries, one must prevent abuse of monopoly power.<sup>50</sup> It means simulating through rights and regula-

49. One might debate whether full proof monopolies can be created.

50. This raises the question of what services the State should run (as monopolies) at all: the 'public goods' and 'natural monopoly' debates mentioned earlier. A real life example is map making. In Canada, for security reasons, the federal government takes upon itself to collect the basic information for maritime maps and to publish the maps, which are subject to Crown copyright. These are now to be put in electronic form and linked with similar maps elsewhere. Should private companies be free to use this information to supply maps such as the public wants? At a conference on the subject, (13-15 November 1990, in Ottawa, Proceedings to be published shortly) representatives of the Canadian government expressed the view that Crown copyright should be used to restrict access to this information to agencies agreeable to the government, or that the government should be the sole publisher of such maps. The untenability of this position became patent when it turned out that (maritime) maps in the United States are subject to no copyright at all, without there being noticeably more accidents than in Canada.

tory schemes the discipline that competition imposes on actors in a private market. This explains why such services are under obligation to grant reasonable access to all citizens and usually have their rates regulated.

Whether reasonable access means *equal* access (same rates) for all is debatable. Where production costs are not the same for all users, identical rates mean that some groups 'cross-subsidize' others. If the service is opened up for competition by private companies, these are likely to provide service to the most profitable parts only. This is called 'cream skimming'. It exposes the cross-subsidy and creates pressure towards a system where each group of consumers pays a price corresponding to the costs of the service it uses. This does not mean that 'outlying' regions or 'eccentric' groups will necessarily go without service. But they may pay different rates and receive service in novel forms.

## 6. Conclusion

Information law appears at first blush like a profusion of rules without unity. This paper has sought to detect order in it by identifying its core elements and understanding their interaction.

Information is the essential ingredient of human decision. In most human activities it is generated almost unwittingly. It is 'abundant' in the sense economists give to the term and does not need to be specially managed. Some information, more and more as society comes to rely on specialization and technology, is scarce, in the sense that its creation requires special incentives. Often scarcity is signalled by dispute or conflict. It is here that information law comes into play.

The principal instrument used in Western societies for managing scarcity are exclusive rights or property rights (in the broad sense in which economists use the term). These assign to a particular individual or group of individuals the decision of what to do with a scarce resource, and the benefits or losses that flow from it. Exclusive rights may be attached to the person (non-transferable) or be transferable. We have argued that the so-called personality rights of individuals (privacy, name, reputation) are non-transferable property rights. Transferable property rights create markets and prices.

Property rights analysis allows one to account for several interesting phenomena. Rights are defined as scarcity manifests itself. They are viable only if sufficient exclusivity can be ensured. Even before their official recognition, the form of rights can be experimented by people exercising physical control over some scarce object and being free to contract about it with others.

Information is a difficult resource as regards the establishment of property rights. Often it has the characteristics of a 'public good': it can exist in multiple copies without depriving the holder of the original of its use and, short of secrecy, it is difficult to control copying. This affects the exclusivity necessary for property rights. Moreover, most useful information in society is cumulative in that new ideas incorporate older ones. Property rights in information, as a result, tend to be monopolizing ('information lock-up') and will have to be restricted in their duration.

The information problems in private markets stem from the need to balance three guiding principles in areas where they overlap or conflict: free flow, non-trans-

ferable exclusive rights and transferable exclusive rights. Sometimes, as with respect to a person's image, all three principles are competing.

The foregoing observations leave out the State. The reason for this is that the State is a special actor. It has the power of legal coercion and usually runs its services as monopolies. With respect to the power of coercion, it may be observed that human rights were developed over the centuries to check the abuse of power. Since they are available to all citizens alike, they are non-exclusive rights. In the field of information law, they comprise freedom of expression.

The power of the State to oblige citizens to supply information, even against their will, and to amass and integrate huge amounts of it requires two further principles: one of openness, the other of confidentiality where personal information about citizens is concerned. The requirement of openness is given effect by access to information legislation, among other things. Secrecy of government ought to be the exception and to be specially justified, preferably subject to judicial review.

The position of the State as a monopoly supplier requires yet further rules (regulation) aimed at establishing conditions somewhat analogous to those that would prevail in private markets: equitable access (e.g., to radio waves, postal and telecommunications services, public transport), equal rates, representation of customers to create some sensitivity to customer preferences.

These observations do not mean to belittle the delicate operation of striking balances among competing principles in different areas belonging to information law. But they argue for the point that one can see order in information law in terms of a few well-known guiding principles. Information law is not an arbitrary profusion of rules.



## Chapter II

# Access to the Media Market

**Technological Aspects**

**Infrastructure and Competitiveness**

**Communications in Eastern Europe and the Third World**





# Access to the Media Market: Introduction

*Egbert J. Dommering*

This chapter deals with media and telecommunications from different viewpoints: the Western European and the Eastern European viewpoints, and the perspective of the developing countries, in particular Africa. The discussions show diverging (political) opinions, but also converging issues occurring in different political and economic environments.

From the perspective of the United States, *Botein* analyses telecommunications policies as an essential instrument of trade policies. He demonstrates this in a case study about New York. Sy also stresses the relationship between telecommunications and economics. In Africa, this leads to the vicious circle of not having the economic forces necessary for the development of an independent telecommunications infrastructure, which in turn has a negative effect on economic development. Sy and *Hamelink* show that most of the communication traffic goes from developed countries to developing countries (in Africa following post-colonial patterns) and not among African countries.

This trend has also been translated in terms of international power structures (for example, *Intelsat* is dominated by Western interests but for a comparative large part dependent on African customers, as Sy shows) and access to telecommunications resources (for example, the unequal allocation of space segment in the geo-stationary orbit). Sy writes in detail about the history of African's relationship with *Intelsat* and the *ITU* respectively, and the failure to form effective African 'regional' entities.

*Kleinwächter* points at the *European Economic Community* and the *Council of Europe*, both unable to cope with the new situation in Europe. The situation in Eastern Europe has features in common with Africa, but it comes from an entirely different historical background. Telecommunications policies in Eastern Europe have been fed by motives of national strategy and security (as is often the case in countries ruled by dictators), rather than by motives to reach economic goals. However, the infrastructural deficiencies that have to be solved are the same in Eastern Europe as in Africa.

Today, we consider the economics of telecommunications more akin to general economic phenomena than in the old days when theories about natural monopolies were the prevailing paradigm. The approach is now more market oriented. Liberalization often makes more explicit issues of public policy. Be it in the Bronx in New York, in the rural areas in Africa, or at the occasion of the restructuring of Eastern European public bodies formerly vested with the powers in telecommunications and media, questions about the social need to offer a generally available universal serv-

ice will arise everywhere. The changing paradigm confronts countries all over the world with the question whether the old trustee concept of allocating and assigning scarce telecommunications resources should be replaced by economic criteria. *Arnbak* in particular emphasizes this point.

Arnbak's paper analyzes the interesting Dutch case of the coexistence of three nationwide infrastructures: cable, the radio-electric specter, and the telephone network. Should we allow full competition 'in the local loop'? Countries all over the world sooner or later will have to develop a policy in this respect. Arnbak also demonstrates that all countries will have to face international competition by international business networks. The 'jaws' of wireless infrastructure (contrary to the cost pyramid of national PTO's having low connecting costs to the customer) 'may bite into the most profitable part of the national public network operation, the international traffic'. It is the same jaws Eastern Europe and Africa encounter, lacking strong national public networks.

The development of competing national and international infrastructures and the technological progress towards new transmission techniques (optical fiber) stress the necessity of connectivity. *Chamoux* proposes that lessons could be drawn from the successful French example of Transpac and the European agreement on digital mobile communications (*GSM*).

# Economic and Policy Issues in the Regulation of Conditions for Subscriber Access and Market Entry to Telecommunications

*Jens C. Arnbak*

The editors of this book on information law have asked me, an engineer, to present an introduction on access to the electronic media market. Now telecommunications engineers have a long tradition in striking cosy cooperative deals with each other: it is not quite accidental that the oldest specialized agency of the United Nations, being in fact some 80 years older than its 'parent' institution, is the *International Telecommunication Union* (ITU). In this agreeable communicative spirit, my approach would be the economic and regulatory aspects of access to the variety of networks which form the electronic infrastructure for modern telecommunication and broadcast services.

Now lawyers will protest that at least the regulatory aspects of telecommunications should not be in the hands of engineers. You may well have a point, but I have got one, too: it was always like that in the past! Engineers were able to claim on technical grounds that telecommunication networks could not be economically operated on free-market conditions. Given the high cost of local network access and the shortage of radio frequencies, special regulatory protection was required to ensure the unity and pervasiveness of the public infrastructure. Only in this way could the noble ideal of universal service with equal-access terms for all subscribers, so central in the ITU Convention, be safeguarded.

Without a monopolistic or at least subsidized provision of local access, there could be no introduction – or perhaps even maintenance – of service in regions with low subscriber densities. Hence public policy was required, on the one hand, to legitimate and protect the monopoly and sometimes, on the other hand, also to prevent the incumbent from misusing this unique position against the users. The latter type of regulations was mostly enforced in countries with private network operators. It frequently took the form of some 'rate-of-return' limitation, while stateowned PTTs were often allowed, or even required, to make monopoly profits for the benefit of the public purse. (Don't blame the engineers for that).

Perhaps, there is a better reason today for letting us engineers introduce this issue. Technology is now so rapidly changing that new means of subscriber access are modifying some economic figures of network installation and operation radically. Thus, the classical discussion about the extent of the 'natural monopoly' of the network infrastructure operations is enriched with many new technical and economic arguments. This, in turn, has opened a completely new debate about a very different type of equitable 'access', namely, for new entrants to the market of network facility provision.

In order to distinguish this new issue of fair competition from the classical reg-

ulatory concern with equitable subscriber access conditions, I shall use the term 'market entry' for this novel problem in telecommunications. Obviously, I do not thereby wish to suggest that the two issues of economic welfare of network subscribers and fair competition between network providers can be treated as completely separate; rather, they may be chosen as different points of departure for telecommunications regulations.

In this contribution, we shall first briefly review the traditional arguments for monopolistic network operations in order to ensure universal access. We next turn to a discussion of emerging technologies and their influence on the classical arguments for limiting market entry. In the conclusion, it will be pointed out that deregulation to allow competition is not the same as actually introducing the intended theoretical benefits of a free and dynamic market.

## 1. The Case for 'Natural Monopoly' Reviewed

Terrestrial broadcast transmission, local cable television networks and (PTT) telecommunication infrastructures are generally regulated, organized and operated as separate monopolistic entities within certain geographical areas. Presently, this classical separation raises a number of policy issues about integration of networks, pricing of similar service offerings by different operators, optimal introduction strategies for new services, and common radio spectrum management.

The Netherlands presents a particularly interesting case for empirical study, because cable television now reaches circa 80 per cent of all households. This is a penetration figure much higher than in most other OECD member states, where the majority of citizens seldom has access to three different local electronic infrastructures. However, as long as the services provided over these three infrastructures appeared sufficiently different, the user had access to three different, largely non-competitive and partial communication markets.

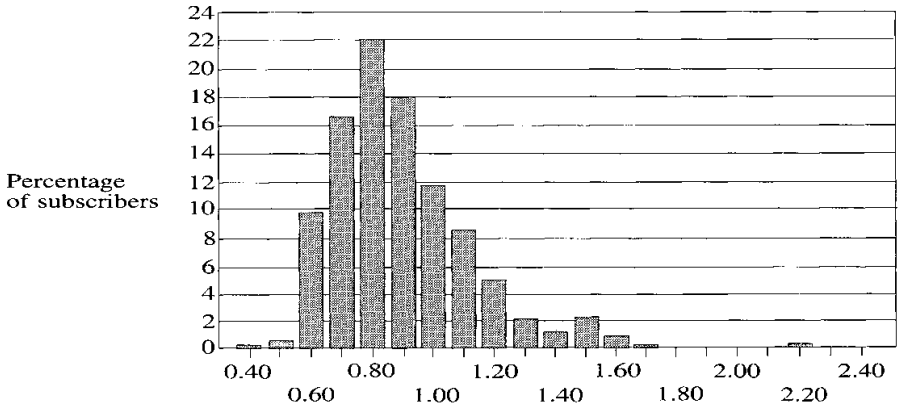
Even from a traditional public-policy view, it may be – and indeed has been – questioned whether such a network fragmentation is the most cost-effective way to provide a given (wide) range of services. However, it should be realized that this evolution of separate subscriber loops for certain services maintained the traditional sharp division of broadcast and telecommunications regulatory powers in the Netherlands, and thus has reduced the political risks of sensitive controversies between the corresponding government departments.

The future may be less serene: an increasing number of policy issues cannot be resolved without a broader perspective. Briefly stated, the dilemma will be how to (de-)regulate the increasing number of new services which could be provided over two, or even all three, different infrastructures. An associated problem is how these public infrastructures should be developed to ensure the widest range of services to interested users: should mutual network competition be allowed as the guiding economic principle as in the U.K. following the dipole review,<sup>1</sup> or are there suffi-

---

1. *Competition and Choice: Telecommunications Policy for the 1990's*. Presented to Parliament by the Secretary of State for Trade and Industry by Command of Her Majesty, March 1991, ISBN 0-10-114612-4.

cient economies of scale and scope to merit integration into one national (broadband) network? Alternatively, should such economic considerations perhaps be considered second to the fundamental human rights of citizens? Both the free flow of (broadcast) information and (telecommunications) secrecy are at stake - two very different principles which may be too difficult to safeguard simultaneously within a single network?<sup>2</sup>



Montly subscription per TV-channel (Hfl)  
 Average channel price: 0,90 Hfl./month  
 Standard deviation : 0,25 Hfl./month

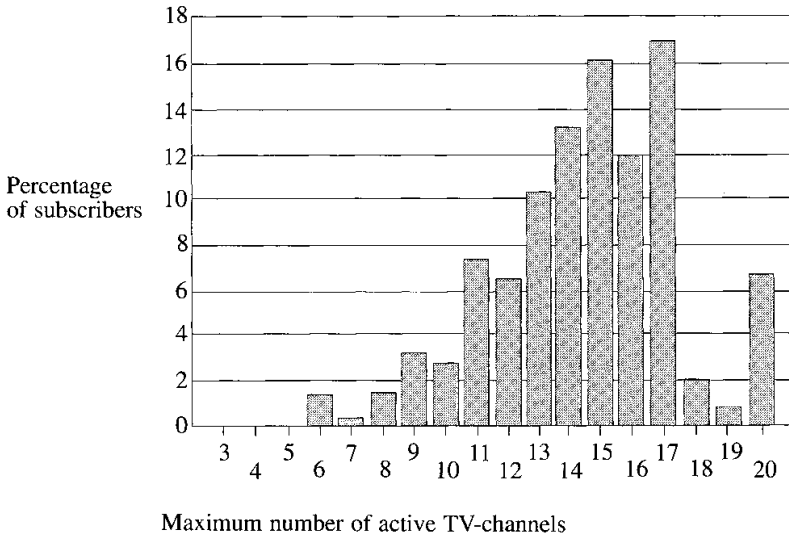


Figure 1 above: Price distribution of Dutch CATV channles (1988)  
 below: TV-service offering of Dutch CATV networks (1988)

2. J. Arnbak: 'Ownership of information in an ISDN-environment', in N. Garnham (ed.): *European Telecommunications Policy Research*, CPR '88, IOS (1989), ISBN 90-5199-013.

In brief, the argument for an integrated network monopoly might run as follows in the Dutch case. Partly due to their gradual technical evolution since the 1970s, and partly due to the very light regulation of their local monopolies, Dutch CATV operators show an extremely wide range of price/performance ratio (Figure 1). The price per delivered TV-channel may differ by a factor of nearly four, while the number of such channels range between 6 and 20 at prime time, with a national average of some 14 TV channels. (In addition, radio channels are distributed, but only some 25 per cent of Dutch subscribers make use of this).

Most CATV-networks have a 'mini-star' architecture, with groups of some 20 subscribers individually connected to a passive star fed by a tree-and-branch repeater network. With few exceptions, there are no switching facilities in Dutch CATV-networks; most subscribers receive a standard program package authorized by the municipality. The program package is multiplexed by the CATV operator from central off-the-air or satellite reception, and increasingly also from total offerings from PTT radio-relay or optical feeder links.

Comparing the three separate Dutch infrastructures, we note that while both the air broadcast operator NOZEMA (providing transmission service to the national broadcast programming organizations) and PTT Telecom BV are obliged to offer uniform nation-wide services, this is not so for the conglomerate of many hundreds of municipal CATV operators (Figure 1). Not only are these allowed to offer price/performance ratios which differ widely between municipalities; there are in fact significant regions in the Netherlands without CATV. Generally, such areas are rural or light residential, with insufficient return on investment to allow profitable cabling and, hence, no CATV market entrants.

Thus, in terms of Friedrich von Hayek's notion of free-market conditions as an empirical discovery procedure ('*Entdeckungsverfahren*'), it may be asserted that even in one of the world's most densely populated countries, 'market failure' is found in several local regions. The indications are that about 10-15 per cent of the Dutch population cannot be served through a fixed cable infrastructure, unless this is subsidized either by public funding or through a suitable national or regional monopoly operation. One reason to maintain air-wave transmitters despite the generally high penetration of CATV is to ensure a basic universal service to citizens (another is, of course, mobile receivers).

In the Netherlands, the average investment in the local PTT telephone subscriber loop exceeds the average network investment per CATV subscriber by a factor of more than two. Most of the higher sunk costs in the narrowband local telephone network are due to the local exchanges and to the Dutch PTT's regulatory obligations to serve all areas and meet high reliability requirements (not imposed by CATV regulations). Within a price cap on the total residential tariff basket, the Dutch PTT is free to choose its tariff structure.

Although the Netherlands had the highest percentage fixed telephone subscriber charge of all OECD-countries in 1989,<sup>3</sup> there is still considerable evidence suggesting that local telephony is strongly subsidized by long-distance and inter-

---

3. OECD Communications Outlook 1990, ISBN 92-64-03336-X.

national calls. About 40 per cent of the present operating revenues and 20 per cent of the profits of PTT Telecom are believed to arise from its international services. Even with an average population density of 345 inhabitants per square kilometer, revenues from local usage thus appear insufficient to fully recover the high infrastructural investments in non-urban regions. This may be interpreted as evidence of natural-monopoly conditions.

Very recently, an additional empirical indication of the high costs of local hard-wired subscriber loops in telecommunication networks has been provided by the interesting case of the refurbishment of the infrastructure in '*die neue Länder*' following the German unification in 1990. The seven-year plan to upgrade the inherited East German public network to West German standards shows a total cost of some 55 Billion D-Mark. Despite Deutsche Bundespost Telekom's ample revenues from the much larger West German network, it must ask government funding for at least 30 per cent.

The economic impact of the many residential subscriber loops needed to meet universal service criteria is demonstrated by the much greater ease of meeting the most essential business needs in Germany. It has proved possible to install a modern digital overlay trunk network connecting the major cities in '*die neue Länder*' with the West in only one year and at a cost of no more than about 7 billion DMark, thus swiftly removing the worst infrastructural bottlenecks for major business and government users.

However, before accepting an economic necessity of 'natural' monopolies in the longer term, it remains to be examined whether such high fixed costs of installing hard-wired local networks cannot be reduced by new technologies (par. 2), combined with innovative regulatory frameworks (par. 3). In addition, it may also be asked how long the high initial sunk costs should continue to determine the terms of competition in the future (par. 4).

## 2. The Economies of New Technologies

One of the interesting promises of modern wireless communications is a lower fixed cost of connecting a subscriber to the network, largely independent of distance. Novel radio technologies such as digital cellular radio, Telepoint, Digital European Cordless Telephone (DECT) and wireless office systems (WOS) may thus provide subscriber access at a variable cost which would mainly be a function of local usage. This contrasts with the high initial cost of hard-wired subscriber loops (whether optical or not), which increases in rural areas, roughly in inverse proportion to the population density (*Figure 2*). It is the perverse latter cost structure which has caused 'market failure' to occur in low-traffic regions until now.

Modern radio technologies may help avoiding any need to subsidize the local loop, because their usage-dependant costs remove the market-failure problem. In *Figure 2*, cellular radio access to the PTT infrastructure would appear preferable to (new) twisted-pair loops left of the point C1, and to optical fibre to the home left of the point C2. In such circumstances, the economies of scale might even be so marginal that local competition could be allowed, given regulatory measures to ensure fair



spectrum allocation and consistent number planning among the competitors (see par. 4).

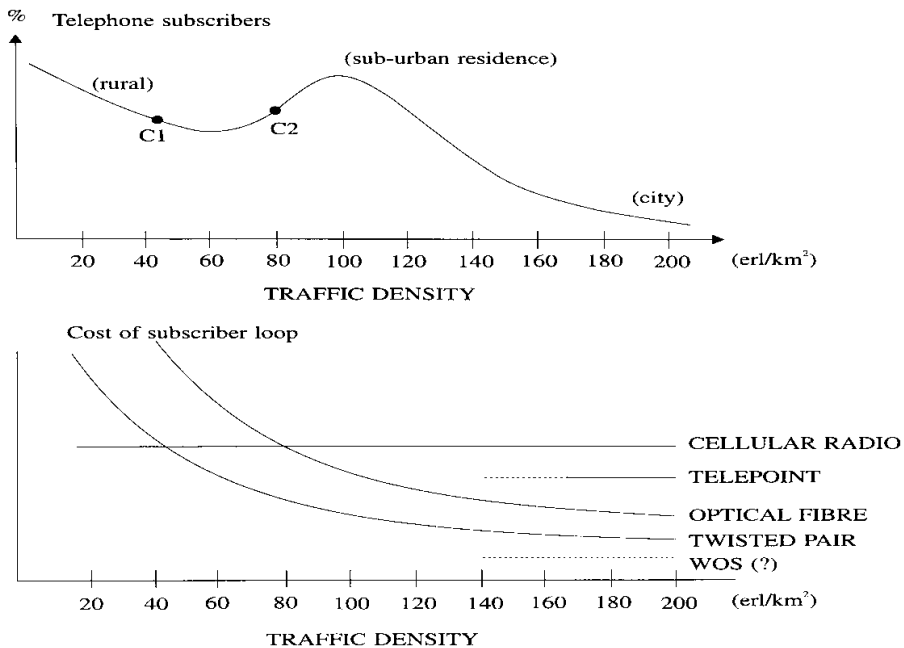


Figure 2 above: National telephone subscriber distribution versus network usage of access network.

below: corresponding costs of different subscriber loop technologies.

Still, it would also have to be considered whether economies of scope might not favor the use of broadband optical fibre above narrowband radio access. The possibility to integrate several services, including video entertainment, into one switched network with usage-dependant charges might repair the 'market-failure' cost structure of the optical fibre loop in Figure 2. However, account would also have to be taken of emerging alternative broadband radio and satellite delivery systems, such as multi-channel multipoint distribution services (MMDS) by microwave 'wireless cable', and direct-to-home satellite broadcasting.

It should be realized that the mere integration of narrowband and broadband (video) services into one infrastructure would only marginally extend the economic basis beyond the present telephone revenues, unless tariffs would change radically. Thus, in the Dutch case illustrated in Figure 1, the combined annual revenues of all CATV operators in 1988 were about 500 million Hfl - less than 10 per cent of the PTT's revenues from national telephony in that year! A nation-wide broadband network operator should not expect any major source of income from video program distribution, unless a dramatic rebalancing of telephone and TV pricing would be acceptable to the general public. Such a rebalancing would hardly succeed in the presence of competing (international) satellite broadcast services directly to homes.

Apparently, an optical broadband network as studied in the EC's RACE program could not be expected to penetrate to the average residential subscriber merely based on his video entertainment budget. Other motives, such as entirely new attractive service offerings or a conscious national refurbishment strategy for the narrow-band local access networks, would seem necessary for widespread introduction of optical subscriber loops in a foreseeable future. It deserves attention that even Germany does not yet see fit to use the exceptional national opportunity in *'die neue Länder'* to install optical fibre to the home of new subscribers. Despite the Bundespost's accepted strong involvement in CATV, the economies of scope are not yet deemed sufficient for an integrated broadband network.

### 3. Regulatory Problem No. One: Competition or Not?

Any development from today's three separate national infrastructures, plus international satellite networks, requires resolution of a number of policy issues. Some of the most evident problems arise from the increasing number of new services which could possibly be provided over two or more different infrastructures. National contenders in the Dutch case might be:

- a. point-to-multipoint data downloading (datacasting) by NOZEMA in competition with PTT;
- b. broadband video services by a future integrated optical PTT network in competition with CATV operators;
- c. local broadcast and commercial broadcast distribution by CATV operators in competition with NOZEMA;
- d. HDTV distribution by all infrastructure operators, as well as by new microwave 'wireless cable' (MMDS), considering the large extra bandwidths that will be required for this future service.

Additionally, a local telephone service might be operated by a CATV operator, as on a few locations in the UK and further accepted in its Dipole Review.<sup>4</sup> Broadly speaking, the national regulatory choice appears to be either reserving existing and new services for specific network operators on the one hand, or allowing more competition among the present 'monopolists' (and any new entrants) on the other hand. In the latter case, a considerable number of fiscal and legal barriers to fair competition would have to be removed. In the Netherlands, NOZEMA and the cable operators do not pay corporate taxes, while PTT does. Conversely, PTT and NOZEMA public services are free of VAT, while CATV services are not. Also, present Dutch frequency assignment procedures do not envisage any competition between network operators, not even in mobile cellular radio systems such as GSM.

The classical international attitude to radio frequency allocation is based on the notion of a benevolent technical authority assigning frequencies to classes of users, such as broadcasters, PTTs and the armed forces. Radiowave propagation does not obey national boundaries and laws, so broad international agreement in technical and administrative bodies under the ITU must precede any national procedures for

4. See note 1.

dividing limited frequency resources between various public and private services. Accordingly, the concept of a national trust of frequencies, to be distributed equitably by a specialized government agency in accordance with (its perception of) the public interest, prevails in most European countries.

However, this 'trustee' concept is now becoming increasingly exposed to critique. The limited access to frequencies hinders rapid development of the new cellular and personal communication systems, which are in much demand. Also, the present erosion of monopoly operation of public telecommunications and broadcast networks makes the existing administrative procedures for frequency management less adequate. In addition, the changes in East-West relations have caused claims that the 'peace dividend' should also include some of the ample frequency bands reserved for military use during the 'cold war' period.

As discussed in par. 2, the emergence of new access technologies – both (broadband) optical and (narrowband) radio means of subscriber access – increases debate of whether local access networks should be considered a 'natural' monopoly, or could be offered on a competitive basis. In the latter case, new regulatory procedures for equitable frequency sharing and number planning will obviously be required.

It is not yet evident on which basis equitable access by competitors to scarce resources can best be granted. In the US, the FCC has replaced the cumbersome administrative hearings by simple lotteries of frequency assignments. This has resulted in rapid profit-taking by some fortunate winners, who simply sold their successful lots immediately after award. Where the Treasury wishes to enjoy the profit from selling frequencies, it must design an auction system and the associated property rights very carefully to avoid being outsmarted by collusions of bidders; this has happened recently in the UK's attempt to auction commercial broadcast franchises.

Despite such practical difficulties, it would appear necessary to assign some price to spectrum occupancy to ensure more efficient use of scarce resources, and especially to avoid extended 'free parking' by inactive users. This also applies even in the absence of competition, since an incumbent holder of frequencies should be given sufficient incentive to vacate them for alternative use if he does not exploit them fully. Examples may be public or private broadcasters outside active operation hours and military users; these categories of users occupy spectrum with considerable commercial value for mobile radio communications.

#### 4. Regulatory Problem No. Two: Fair Competition

After having sketched above some economic issues surrounding the principal policy decision about allowing infrastructure competition or not, I shall conclude by making some observations about the problems facing a regulator wishing to enforce fair competition in network operations (assuming that such a policy decision has been taken). Economic analysis can be used to show that if the theoretical advantages of a free market do not materialize, the network users may be worse off than with a classical, well-organized network monopoly.

Fear of this effect has generally caused liberalization to result in more, rather than less, rules and regulations. This 'reregulation' is meant to protect users and/or

ensure new entrants a sufficient share of the network facility market to reap the intended benefits of competition: lower prices and faster responses to the various market needs.

It is not strange that the introduction of competition is no simple matter in a field hitherto given to the economic doctrine and operational habits of natural monopoly and universal service. The comparison with the change from an Eastern European command economy to a capitalist market economy is frequently drawn, but not quite fair: while a monopolistic telecommunications organization can be turned around in many practical matters by adopting managers from outside, i.e., trained in the market sector, the requirement for universal service does not vanish and so deserves the continued attention of the regulator.

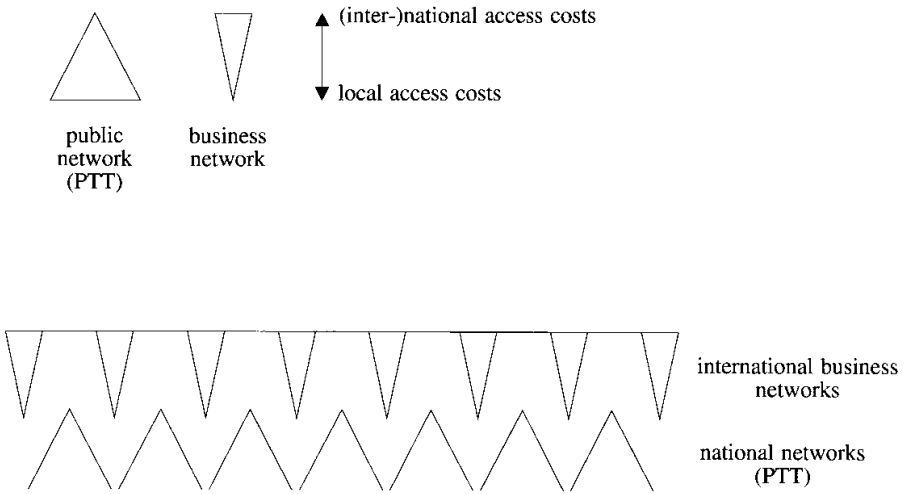


Figure 3 Cost-structure triangles  
*above: National competitors*  
*below: International competitors*

The regulator's problem is to judge how fair competition can best be combined with meeting the universal service demand, especially in non-profitable regions. On the one hand, an incumbent monopoly operator will always argue that he cannot compete on equal terms with a new entrant who is allowed to offer network access only in the most lucrative geographical areas, leaving him to serve the typical 'market-failure' regions with the most perverse local cost structure and lowest traffic densities (Figure 2). Differently portrayed in Figure 3, the classical monopoly operator is forced to maintain a triangular cost structure with a heavily non-profitable base of local districts, with their relatively high installation and personnel costs, and compensated only by the top revenues from international and long-distance operations.

Conversely, unless similarly regulated, the new entrant is free to implement a narrowly profit-oriented inverse triangle: by avoiding the general local network and extending subscriber connections only to big business users, the new entrant can easily undercut the incumbent on general costs and so offer either cheaper or better

international and long-distance operations. Therefore, the incumbent argues, he must be protected from unfair competition by imposing regulations similar to his own service requirements on all new market entrants. This argument is a plea for symmetric regulation of all parties allowed to operate competing infrastructures.

New entrants, on the other hand, will demand asymmetric regulation in favour of them, typically for the following reasons:

- a. unlike the dominant incumbent, they do not (yet) have a large local network generating residential traffic outside business hours;
- b. they have extra initial costs, due to higher growth rates, higher prices from their equipment suppliers as long as orders are small, higher cost of venture capital (compared to cash-flow financing of incumbent) and the need to attract new customers instead of just maintaining subscribers;
- c. they need to price their service below the dominant incumbent, although he can use lower costs due to depreciation of equipment;
- d. most of their customers' calls will terminate or be initiated in the incumbent's network and so generate extra revenues for him and allow him to dictate interconnect conditions, if he is granted pricing freedom.

A regulator will have a difficult task to evaluate the merits of so different arguments, not least if he believes that his position should be disinterested and non-intervening. Notably the issues of interconnect arrangements (d) cannot be resolved without very close economic scrutiny of the dominant network's cost structure. This is quite contrary to the celebrated principles of 'price capping', which leaves an operator with considerable pricing freedom with the regulator at arm's length. However, recent examples from the UK (*Mercury versus BT*) and Germany (the second GSM-operator *D2-Netz versus Deutsche Bundespost Telekom*) show the necessity for the regulator to understand the dominant supplier's pricing and to intervene promptly in the event of abuse of dominant positions.

But although a good technical and economical understanding of network operations is necessary, it does not provide unique solutions to the regulator's dilemma. Especially, it is a matter of good judgment to determine how much more economically efficient a small new entrant will be in a certain market, compared to a historical monopolist. There is now considerable evidence from the US and UK to suggest that it is very difficult for new entrants to reach a significant share of the national telecommunications market, even if granted more regulatory advantages and being considerably more efficient than the incumbent. Both AT&T and BT have fared well, notably in terms of profitability, after exposure to network competition, whereas their new national competitors have not yet seized a substantial share of the market.

In the international business networks market, the case may be different, if the incumbent PTT networks would face coherent competition from an international alliance of business-oriented operators. These would then profit not only individually from their much lower local costs (*Figure 3*, above), but also collectively from their ability to offer one-stop shopping to multinational users. To date, the national PTT's have not been able to offer such internationally managed network services. Hence, the sharp jaws of competition may first bite into the most profitable part of the public network operation, the international traffic (*Figure 3*, below).

This international scenario is now seen as a more serious threat by most PTT's than new entrants in their national markets. They can respond in two principal ways, namely by (i) participating in international joint ventures themselves and (ii) re-balancing their present tariff structures by lowering international prices and raising local charges to remain (sufficiently) profitable. Both of these developments might have unattractive consequences for the service offered to ordinary national users and should therefore be of concern in public policy. As yet, few regulatory tools are available to control such international market developments, if necessary.

In summary, it can be stated that the present erosion of the 'natural-monopoly' doctrine and the emergence of international competition to ITU-based cooperation between public operators raise a number of new policy issues in telecommunications. Resolution of these issues will require innovative regulation of market entry and user access to modern telecommunications networks and services.



# Connectivity: A Powerful Concept to develop Access to Electronic Media

*Jean-Pierre Chamoux*

Connectivity is a new word in French as well as in English, you will not find it either in the Larousse or in the Harrap's dictionaries. It is a powerful new concept, however, for those in charge of the growing international networks operations. In my interpretation, this new concept has a double meaning: first, it covers the ability of a terminal to be connected to a network. An electrical appliance, a telephone, a telex cannot be branched to the power or to the transmission networks if they are not physically compatible with this network (plugs, voltage, and standard procedures for communications). But connectivity also covers transportation means: connection between trains, planes, plurimodal transportation, etc.

Many services delivered to customers include considerations of connectivity: transport, lodging, money arrangements, etc. Hence my feeling that most service sectors are involved in 'value-added-services' much earlier in time than the telecommunications community which only recently discovered the advantage and the meanings of those services providing technical or human connectivity on an heterogeneous network.

The complete service bought by a traveller through his travel agent is quite often based on the service offered by the new international value-added resellers to the travel agent himself, who is an intensive telecommunications user. Service providers like GSI-Transport-Tourism are marketing fine services for them. In my view, both are driven by connectivity. They want a transparent network, easy to use, and technical means convenient to branch and to carry on various places.

My former job, within the French Administration, was aimed at providing the regulatory conditions for a growing compatibility between networks and services put on the market in France. As a telecom regulator, my duty was to enhance connectivity at all levels of the telecommunications world: terminals, switches, transmission links, protocols, etc. In that context, regulation should never impair the transparency of the networks but enhance it for the sake of the consumer. We were considering that, in order to achieve that goal regulation should drive the industrial investment towards an easier connection to the networks and sustain an efficient standardization scheme at all levels.

The way we sustained standardization as a means for an improved connectivity can be illustrated by two examples of the French policy I initiated during the three years I had to carry this job: connectivity in value-added networks and connectivity in radiocommunications.



## 1. Connectivity in VAN's

In September 1987, a serious opening was made to allow more service providers to lease telecommunication lines so that they may be able to provide enhanced communication services to their users. Shared use and resale of traffic from leased lines is now deregulated in France, at least for telematic services. This regulation was confirmed when the Bill on telecommunications was passed in December 1990.

Hundreds of such services have started operating on a nationwide basis. Quite a few of them cover international demand. Those competitive private services have to offer standard access, however, so that users will have some open choice among service providers and equipment sellers. The regulation was drafted so that it would suggest an international standardization for the future, but it has not been immediately burdensome to the existing service providers. The trend towards a standardized system is clear, but a transition period of several years is considered normal, before OSI and similar standards can cover most communication value-added networks and services. This regulatory provision has been even enhanced lately with the Bill on telecom regulation of December 29, 1990.

In order to follow up this new regulation, and to maintain close ties with the professionals, working groups were established. My former staff (the regulatory directorate of the PTT) is in charge of these working groups. One, with industrialists, is associated to the follow-up of the VAN regulation. The other, with highly skilled professionals also, works for the advancement in wireless standards able to be promoted by future regulatory moves. In 1988 five standards to be implemented on VAN provision were published relating to message format and network access. All of them are internationally accepted – widely known and published.

Connectivity and user friendliness is to be enhanced by these regulations. The quick growth of VAN in France, and the enlargement of the purpose of those services demonstrate that regulation may be a useful tool to achieve a connectivity goal at the fringe between computers and telecoms. This tool is still more efficient when sustained by a professional support of the industry. It was the purpose of this French regulation to walk side by side with the industry and also and this is the aim of the European directive on 'open network provision'.

## 2. Connectivity in Radiocommunications

My second example relates to radiocommunication. Public and private radiotelephony were a real mess in France in the late 1980s, as well as in the rest of Europe. Public networks of the various countries were basically incompatible: the market is shared between the British TACS, the German C. NETZ, the French Radiocom 2000, The Nordic NMT, etc. Private networks are split also among proprietary standards from companies whose customers are totally dependent (hardware and software): MOTOROLA and affiliated companies like STORNO; ATR an ALCATEL subsidiary; TRT from the Philips group; R. Bosch in Germany; Siemens Systems, etc. This European patchwork looks like *'a puzzle whose pieces would have been picked up from separate boxes'*, said Philippe Glottin, former head of ATR.

This very scattered picture is all but user friendly. Terminal and operational costs are higher than they should, given the total market size. International competition is hard to cope with, seen from Europe. Third parties from Asia or the US can enter the market with high chances to take over the market. Our will was to stop that anarchy in France and provide a regulatory frame that would drive the market forces towards a better connectivity and some compatibility of terminals and networks at the European level, as soon as possible.

What did we do, and how did we proceed to achieve that goal? We decided to concentrate the regulatory issues on a number of topics.

The first was to define and implement a European compatible cellular public radiotelephone. The European conference of the PTT, led by the French in those circumstances, drafted a digital standard called by the drafting group: GSM (stands for Groupe Spécial Mobile in French). Even with some deficiencies, GSM is now being implemented at the practical level. Most european operators have contracted with industry to develop mobiles, base stations and protocols. The first commercial operation was scheduled for the end of 1991, in France, UK, Germany, etc.

This has moved industry and the administration towards a standardized model for portable radiotelephony, and also toward international compatible operations so that a person can travel through several countries and still keep his terminal working. Several other projects are under study: the British licenses for 'CT2' are the closest to the operational stage today in Europe. The French POINTEL will soon follow and is to be compatible with the British TELEPOINT. Pagers are also becoming standardized internationally.

We wanted to standardize corporate radio networks, which have been totally proprietary until now in France as well as in most countries. When a firm establishes a private radio system, it is then totally relying upon the manufacturer selected from the beginning. We thought some standards had to be implemented in that sector as well, in order to facilitate a smooth market for terminals and other equipment. The demand being high for those systems, it is worthwhile organizing the sector at the present time. A plan is under way to improve standards, frequency use and allocation in France for this sector of private radiotelephone. Trunk operators were introduced on a commercial basis in 1990. This is a continuing process that will last for many years, I believe. It shall end up in new standardized systems, more compatible through Europe, with an improved connectivity of the radiotelephone at the corporate level, as well as at the consumers level.

### 3. Concluding Remarks

These were some hints of the fact that a new process has started in France to sustain the connectivity of private and public networks, taking the regional and international level into account whenever possible. In the field of data communications, very useful for service agents and the media, as well as hotel reservations and train tickets, the French network has gained international leadership. TRANSPAC is, by far, the most successful packet switched network on earth. TRANSPAC is also the largest company selling such a service (5 billions FF/year). This basic X 25 service

is connected to an international service, based on OSI protocols. However, some major providers are plugging their own service on top of TRANSPAC, making it difficult for users to interoperate with other providers. We see a growing demand from these users to find a standardized approach at the provider's door: reservation systems, electronic mail, and, overall, electronic data interchange (EDI) for a wide series of trade documents like: orders, bills, custom files, bill of lading, etc.

In my view, the regulatory objective shall, for a longer period, be to extrapolate the standardized telephone operations to the field of professional data interchange in general, and to EDI in particular. To be efficient and useful to the user, such standards should be reasonably minimal, widely followed, built on a wide consensus, with manufacturers and users agreeing with the regulators on what should become compulsory for the sake of better, cheaper and wider communications. My only fear will be that some might be tempted to be so complete and so perfect as to stop innovation. I think we still have a long way to go before this will happen, fortunately.

I have the feeling that this growing basic connectivity is demanded more clearly by service companies and traders. I feel that other segments of the user community are also becoming conscious of that problem. Corporations like airlines, car manufacturers, oil companies have been driving business towards standardization and inter-operability. They played the game fairly and they should be granted for it.

Hence my pleasure to contribute to this book, and to help in understanding how connectivity can be more effective when sustained by a comprehensive and user friendly regulation. As a former regulator it has been my view of the public interest to help raising that issue and to create an irreversible trend towards this basic connectivity of the mounting European common market in telecommunications.

# The Competitiveness of the US Telecommunications Industry

*Michael Botein*

In the last few years, 'competitiveness' has become an increasingly common – as well as fuzzy – buzzword in U.S. and other nations' economic policies. Viewed as an ideological rather than legal concept, competitiveness's basic concern is a nation's ability to increase its productivity – usually at the expense of other countries – through a variety of means. These include creating a positive trade balance through exports; attracting foreign manufacturing firms to locate within its borders; and, perhaps most important in telecommunications terms, offering an appropriate forum for financial transactions.

For different observers, competitiveness in the telecommunications field includes implementation of activities ranging from high definition television (HDTV) to integrated services digital networks (ISDN).<sup>1</sup> The connection between these rather disparate activities – let alone their contribution to a nation's economy – often is less than clear. For example, even if the U.S. were able to impose an international HDTV standard, it is somewhat difficult to understand how this would translate into either jobs or revenues in the U.S.; although U.S. companies developed most of the initial personal computer (PC) technology, most PCs today are manufactured offshore. Competitiveness thus includes a good dose of jingoism as well as legitimate economic concern.

Until recently, few policymakers seemed to view the development of a sophisticated telecommunications system in industrial policy terms, and less assigned great importance to it. Within the last few years, however, an increasing number of business leaders have begun to appreciate the connection between telecommunications development and a viable economy. A survey showed that 78 per cent of business opinionleaders viewed a sophisticated telecommunications system as 'absolutely critical' and 21 percent 'very important.'<sup>2</sup>

This paper will examine briefly how these issues have arisen – and often been ignored – by both the public and private sectors in the U.S. The discussion will begin by exploring domestic developments affecting the relative competitive posture of the U.S. telecommunications industry, in terms of both hardware and services. It then will analyze the impact of the current situation upon U.S. telecommunications companies and other firms. Finally, it will project in a 'rough-cut' fashion ways in

- 
1. E.g., L. Johnson & D. Reed, *Residential Broadband Services by Telephone Companies?: Technology, Economics, and Public Policy* (1990).
  2. J. Kraemer, *The Impact of Competition and the AT&T Divestiture: A Survey of U.S. Business Leaders* 6 (1989).

which the U.S. public and private sectors might enhance the telecommunications industry's competitiveness – and hence the nation's economy.

Although conclusions are difficult to draw, the questions may have significant implications for both U.S. and other governmental policymakers. The discussion sometimes relies upon developments in the State of New York as examples; this is partially because of the ready availability of primary research sources, and partially because the State provides a good example of accommodating goals in a federalist legal structure – a situation which Europe soon will encounter in a slightly different form.

The U.S. telecommunications industry<sup>3</sup> accounts for a substantial portion of the country's production and employment. U.S. businesses and consumers spend roughly 2.5 per cent of the gross national product on telecommunications services.<sup>4</sup> In today's 'information economy', the telecommunications industry impacts on an increasingly large number of other industries, which rely upon telecommunications to do business. Because of their reliance upon computers to perform routine transactions, banks, stock brokerage houses, airlines and the like cannot operate without affordable, reliable and high-capacity telecommunications. Of these, perhaps the most significant industry in terms of telecommunications usage is the financial services sector – that is, banks, other lenders, and stock brokerage houses.<sup>5</sup>

Whether they operate or regulate telecommunications systems,<sup>6</sup> government agencies confront two main types of policies in setting their goals: telecommunications policy and/or industrial policy.<sup>7</sup> The former concerns itself primarily with insuring that users receive high-quality service at reasonable rates; it tends to focus on issues such as cross-subsidies, 'universal service' and the like. The current U.S. concern with providing low-cost local telephone service for the poor is a classic example of traditional telecommunications policy.<sup>8</sup>

By contrast, industrial policy attempts to manipulate telecommunications entities to improve a country's economic position – or, in the U.S., a state's. Industrial policy looks for ways in which telecommunications companies can improve the market position of *other* firms within a nation. This in turn breaks down into two distinct types of policies. First, nations encourage businesses – usually hardware

3. See P. Huber, *The Geodesic Network* 2.3 (1987) (estimating total LEC and IC service revenues of about \$102 billion in 1985).

4. U.S. Bureau of Census, *Statistical Abstract of the United States* 413-14 (1987) (the 1985 GNP was approximately \$4 trillion). This does not take into account the industry's own expenditures for hardware and software. Even though these costs appear to have levelled off in recent years with the implementation of digital switching, they amount of tens of billions of dollars – and will increase yet again if the industry is allowed to enter the home entertainment market through fiber optics.

5. J. Fernandez, *Electronic Banking and Financial Services* 443, in *NTIA Telecom 2000* (1988), [hereinafter *NTIA*].

6. This discussion assumes that it makes little or no difference for analytical purpose whether a nation regulates a private system or operates a public system; the policy goals and options remain the same. The only significant difference between the two situations is that a governmentally owned entity, such as a PTT, obviously can implement decisions more easily than a privately regulated firm, such as a local exchange carrier.

7. Although the two need not be inconsistent, they often are. For example, creating a high-capacity fiber optic link for a business district may make 'universal service' to the poor economically infeasible.

8. *Id.* at 12-13.

manufacturers – to locate facilities within their borders;<sup>9</sup> this may involve a range of tax incentives, wage rate adjustments, and outright grants.

Second, and more commonly, government agencies offer sophisticated telecommunications services in order to attract large amounts of transactional activities – again, such as banking and stock trading. With the advent of international networks and stock trading, the world seems to be moving towards a 24-hour per day financial market. One small but significant part of this phenomenon has been low-visibility competition among major trading capitals – *e.g.*, New York, London, Tokyo – to attract dominant financial firms.<sup>10</sup> The struggle to offer attractive packages of sophisticated telecommunications services to the financial infrastructure thus has taken on talismanic qualities in measuring a country's competitiveness. For example, a nation's eagerness in implementing ISDN often is taken as a measure of its competitiveness in the world market.<sup>11</sup>

In evaluating U.S. competitiveness policy, it may be useful to begin by defining the U.S. 'telecommunications industry.' The industry at issue here comprises a large number of separate firms, ranging from equipment manufacturers to transmission services to software developers. These industries not only compete with each other, but also collaborate in providing services to non-telecommunications entities.

Defining the parameters of the telecommunications industry is difficult. An example is the concept of 'common carriers' such as telephone local exchange companies (LECs) and long distance interexchange (IX) service providers. These firms constitute a very significant part of the U.S. telecommunications industry. Although the Federal Communications Commission (FCC) has been regulating interstate common carriers for more than fifty years, neither it nor the courts have adequately defined common carriage.<sup>12</sup> Part of the problem is that the FCC's organic law is both circular and vague. The Communications Act of 1934 defines a common carrier as 'any person engaged as a common carriage for hire' – obviously not a highly useful explanation.<sup>13</sup>

On the service as opposed to manufacturing side, the telecommunications industry provides transmission capacity on a point-to-point basis. The material transmitted might be video, voice, data or a combination thereof. To be sure, the line between telecommunications and communications is fuzzy at times in the U.S. For example, some large corporations use electronic mail to send price changes, inventory availability and the like to thousands of retail stores. Although this type of system may have a larger audience than a small radio station, it falls on the telecommunications side of the line under U.S. law, since its transmissions are not available to the general public. Similarly, some policymakers seem to be concerned

9. In some cases, of course, a government may be more concerned with preventing a domestic manufacturer from *moving* its facilities to another venue, in order to service potential clients there. As noted later, a number of European and other companies have established significant presences in the U.S. for precisely this reason.

10. See Fernandez, *supra* note 5, at 446-447.

11. NTIA, *supra* note 5.

12. See, *e.g.*, National Association of Regulatory Util. Comm'rs v. FCC, 525 F.2d 630, 640-42 (D.C. Cir.), cert. denied, 425 U.S. 992 (1976).

13. 47 U.S.C. para. 153(h) (1982).

primarily with dominance in any electronic industry – e.g., HDTV – even if it has little or no connection to either telecommunications or industrial policy.

## 1. Historical Background: The AT&T Divestiture

The U.S. telecommunications industry was a simple affair for a long time. There was one telephone company, the American Telephone and Telegraph Company (AT&T). This was a structure of stability, in which companies carefully were excluded from each other's markets. Instead of promoting competition, federal and state regulation kept each company – particularly AT&T – from exploiting its market power. Over the past two decades, however, this traditional arrangement has exploded in a mutually reinforcing process of competitive entry and government liberalization.

AT&T operated from 1956 to 1982 pursuant to a '*Consent Decree*' which terminated an antitrust suit brought by the Justice Department against AT&T in 1949.<sup>14</sup> The pre-divestiture AT&T was substantially different than today's often confusing mixture of entities. AT&T was perhaps the most vertically integrated telecommunications corporation in the world, since it provided everything from switching equipment to local service. More than anything else, it thus resembled a traditional PTT.

AT&T's breakup evolved in a relatively complicated procedural fashion. In 1982, AT&T settled a 1974 antitrust case under a '*Modification of Final Judgment*' (*MFJ*).<sup>15</sup> This technically was an amendment to the 1956 *Consent Decree*. The *MFJ* required AT&T to divest its twenty-two Bell Operating Companies (BOCs), which now are owned by seven Regional Bell Operating Companies (RBOCs, also sometimes known as 'Regional Holding Companies' or RHCs). AT&T kept several key entities such as Bell Labs, Western Electric, Long Lines Division and AT&T Information Services (which eventually was merged into AT&T Communications).

In the *MFJ*'s wake, questions have arisen as to the ability of a broad range of former AT&T and totally new entities to compete effectively in the world market and to support the economic infrastructure – again, fundamental issues of industrial, rather than telecommunications policy. It thus may be useful to examine briefly how foreign firms have fared in the U.S., and, *vice versa*, U.S. firms' performance abroad.

## 2. Foreign Competition in the US

According to FCC Chairperson Alfred C. Sikes, the AT&T divestiture has hurt the already weak U.S. trade deficit. Many observers would hotly dispute this proposition, noting U.S. companies' high wage rates, costly taxes, and delay in producing digital equipment. Since the divestiture, the U.S. has confronted a growing trade imbalance in telecommunications equipment sales. Before the AT&T divestiture, the

14. *United States v. Western Elec. Co.*, No. 17-49 (D.C.N.J. filed Jan. 14, 1949).

15. *United States v. AT&T*, 552 F. Supp. 131 (D.D.C. 1982).

U.S. was a net exporter of such equipment. According to Sikes, in 1986 the U.S. exported \$2 billion worth of telecommunications equipment, but imported \$4 billion.<sup>16</sup>

Shipments by the U.S. telecommunications equipment industry increased steadily from 1972 to 1983 at an annual growth rate of five percent, adjusted for inflation. Foreign-based telecommunications firms which manufacture in the U.S., chiefly Northern Telecom, have a significant share of the U.S. market. In 1985, Northern Telecom had twenty-five percent of the digital lines placed in service worldwide. Northern Telecom and AT&T are the principal suppliers of all categories of switching equipment to the Bell companies today.

Today, East Asian suppliers, particularly in Japan, Taiwan, Korea, and Hong Kong, are the major providers of consumers premises equipment (CPE), as distinguished from switches and network control equipment. For example, NEC Corporation, an \$8 billion a year Japan-based electronics firm, currently sells an estimated \$1 billion worth of equipment in the U.S. annually. Meanwhile, AT&T, GTE, ITT, Rolm and other U.S. CPE suppliers have lost significant market shares to Canadian, Western European and Asian suppliers.<sup>17</sup>

According to projections by Arthur Andersen and Co., foreign competition will be a significant factor in the U.S. telephone market. Nonetheless, ATT-Tech (previously Western Electric) will continue to have the largest part of the PBX manufacturing market. Although Motorola will continue to dominate the mobile communications equipment market, its share has decreased; while it had more than half of the market in cellular chips several years ago, today it has barely 40 percent.

Several years ago, former FCC Chairman Mark Fowler wrote a letter to the seven RBOCs and to GTE, asking them 'how much money the companies have spent and plan to spend buying telephone switching gear from Siemens.'<sup>18</sup> In his letter, Fowler expressed 'an increasing concern about fair and reciprocal treatment of U.S. telecommunications equipment manufacturers and service providers.' The letter followed reports that AT&T was 'negotiating what it called a "significant equipment sales deal"' in France, but that the West German government wanted the business to go to a German company.

The FCC stated that it would analyze other countries' activities as to four objectives: open entry; nondiscrimination; technological innovation; and international comity. The FCC asked parties to comment on the nature and extent of entry barriers and discriminatory treatment in international telecommunications, as well as measures to promote open entry, nondiscrimination and technological innovation. The FCC acknowledged that the U.S. government was increasingly concerned that U.S. telecommunications service providers and equipment manufacturers did not have a fair opportunity to compete in many foreign markets.<sup>19</sup> Little or nothing has come of the FCC's inquiry.

16. Speech by Hon. Alfred C. Sikes, at USTIA, in Washington, D.C.

17. E.g. R. Noll, *Telecommunications Regulation in the 1990s* 32 et. seq., in *Telecommunications Policy* (P. Newberg ed. 1989), [hereinafter *Telecom Policy*].

18. *The Washington Post*, Oct. 22, 1986, at G-1.

19. See, FCC Proposes International Telecommunications Model in CC Docket 86-494, DC-721 (released Dec. 23, 1986).



## 2.1 RESEARCH & DEVELOPMENT AND MARKET SIZE

Research and development (R&D) is important to a nation's long term economic interests. It reduces production costs, increases productivity, induces demand for new products or services, and generally promotes economic growth. R&D plays a critical role in shaping the structure and performance of domestic and international markets, especially those that are subject to rapid technological change.

Peter Drucker has noted that '[a]n established company which in an age demanding innovation is not capable of innovating is doomed to decline and extinction.'<sup>20</sup> Telecommunications and information service firms are no exceptions. Moreover, private R&D is particularly important in the U.S., since the level of non-military government support is so low; indeed, increased federal support for R&D may be another means of promoting competitiveness.<sup>21</sup> As a result of the AT&T divestiture, Bell Labs faces the most radical change in its history and its mission. It is hardly coincidental that one of AT&T's first organizational changes after divestiture was to put Bell Labs into the same organizational group as Western Electric (ATT-Tech) and to subordinate it to the same management.

Nevertheless, Bell Labs suffered little decrease in funding after the divestiture. Its budgets for 1984 and 1985 were only a few percent below those for 1982 and 1983.<sup>22</sup> Moreover, the slack may have been made up by Bellcore – the RBOCs' R&D center – whose budget was almost half that of Bell Labs in 1984 and 1985. Perhaps most significantly, Bell Labs was issued more patents and its researchers published almost as many papers in 1984 and 1985 as before.

The *MFJ*'s restrictions on the BOCs' providing information services and manufacturing equipment may make it difficult for an RBOC to develop commercial innovations in telecommunications equipment or information services. The RBOCs have only limited incentives to conduct R&D in these areas, because they have no realistic opportunity of recovering R&D costs.

AT&T and IBM, the BOCs' two principal competitors, spend nearly twelve percent of the total U.S. industrial R&D. By comparison the RBOCs collectively commit about \$1 billion to R&D – about 2 percent – mostly for jointly funded projects conducted through Bellcore. These differences exist in spite of the fact that AT&T's and IBM's total combined sales and after tax income are not substantially greater than the BOCs'.

There is a direct relationship between R&D expenditures and the size of the markets needed in order to justify these expenditures. Today's central office switches are powerful digital computers. They not only cost less to operate, but also have valuable new capabilities. They cost \$1 billion to develop and several hundred million dollars annually to update. This is at least part of some countries' justification for protected national monopolies, which back development of individual systems for each country or alternatively joint development among manufacturers.

20. See P. Drucker, *Management: Tasks and Responsibilities*, Practices 786 (1974).

21. Congressional Budget Office, *Using R&D Consortia for Commercial Innovation: SEMATECH, X-Ray Lithography, and High-Resolution Systems* (1990).

22. M. Noll, *Bell System R&D Activities: The Impact of Divestiture*, Telecommunications Policy 161, 169 (June 1987).

## 2.2 TELECOMMUNICATIONS SERVICE PROVIDERS

So far, there are relatively few foreign competitors in the U.S. domestic telecommunications service industry. This segment of the industry is still dominated by AT&T, with about 70 percent of the long-distance market, and by the seven RBOCs in local exchange services.

Most competitors have focused on the long-distance market. Despite the encouragement of competition in the long-distance field, the market is still dominated by AT&T.<sup>23</sup> Local exchange service is dominated by the RBOCs, with independent telephone companies serving some regions of the country.

## 3. US Competition Abroad

With the movement towards upgrading telecommunications services through digital switching and transmission, there naturally has been a worldwide increase in the demand for hardware and associated software. At the same time, only small portions of these markets are open to U.S. manufacturers. There is only a small international market in services, aside from transmission services. Enhanced services do not travel well, because of technological protocols, language and culture.

The relevant equipment product market comprises relatively high-end network and terminal equipment, such as central office switches, network control equipment and business terminals. Labour rates in other countries make U.S. manufacturers non-competitive for consumer markets such as handsets. Indeed, there presently are only two U.S.-based handset manufacturers and both serve high-end business users. Even recent currency fluctuations probably will not radically change this imbalance.

In most countries aside from the United States, the United Kingdom, and Canada, virtually all telecommunication services are provided by governmentally-owned PTT authorities. Since these are services, they are not subject to GATT's anti-discrimination clauses.<sup>24</sup> PTTs thus are perfectly free to, and commonly do exclude foreign products.<sup>25</sup> Only in recent years have U.S. companies – primarily AT&T – been able to increase significantly their equipment sales abroad.<sup>26</sup>

To be sure, U.S. hardware manufacturers occasionally have penetrated foreign markets to a small extent. Most sales have been relatively small and often have occurred through U.S. subsidiaries abroad. As one observer has noted:

‘I think the cost of penetration is going to be high; it already has been high for Europeans and Japanese coming here. The cost of penetration going abroad for North American companies is going to be high. In the end, if the world is gro-

23. AT&T consistently has increased its international services revenues over the past few years. J. Gross, *Telecommunications Services* 24-26 (1991).

24. U.S. Department of Commerce, International Trade Administration, *U.S. Digital Central Office Switch Industry* 45 (1987).

25. P. Cowhey, *Telecommunications and Foreign Economic Policy* 192 *et seq.*, in *II New Directions in Telecommunications Policy* (R. Newberg ed. 1989).

26. *Id.* at 27-28.

wing at two percent, how in that kind of overall growth is anyone going to gain a greater market share by playing these games, is very much an unanswered question. I would think, most likely, all it's going to do in the end is that everyone is going to compete around the world and they probably will earn less money and the market will be less than they otherwise would have been.'<sup>27</sup>

At the same time, however, foreign firms have found it difficult to penetrate the U.S. market for high-end equipment – most commonly, central office switches and network control equipment. There thus is a kind of standoff between U.S. and foreign telecommunications equipment manufacturers. (This is not true for Northern Telecom, which virtually has become a U.S. firm by locating a large part of its manufacturing capacity in the U.S.)

Precisely because of all manufacturers' difficulties in penetrating high-end foreign markets, an increasingly common trend is for local and foreign manufacturers to form joint ventures to market foreign goods locally. U.S. manufacturers have taken this approach in Europe, and both European and Asian companies more recently have pursued the same tack in the United States.

This trend has given rise to fears that the BOCs would form alliances with foreign equipment vendors, if the *MFJ* were modified to allow them to enter manufacturing – which Judge Greene seems to have no inclination to do.<sup>28</sup> Hence Congress may be inclined to grant relief by legislation which the courts have denied.<sup>29</sup> BOCs might be natural partners for foreign manufacturers, since the BOCs not only control their own very large equipment needs, but also lack the substantial R&D necessary to enter the high-end equipment market.<sup>30</sup> Indeed, Judge Greene endorsed this assessment and indicated that this scenario would be contrary to the public interest. He noted that:

'Among its many other undesirable consequences, such a development would further reduce competition in this country, if only because the combination of foreign capital and the Regional Company monopoly position with a captive market amounting to some seventy percent of the total market will prove fatal to whatever independent or smaller producers still survived. Another likely consequence would be a strong detrimental effect on the international competitiveness of the American telecommunications industry and the employment opportunities of American workers.'<sup>31</sup>

Judge Greene's reasoning may be somewhat questionable, since most high-end equipment manufacturing must take place relatively close to customers, thus resulting in little or no impact on employment. Multinational cooperative ventures appear to be increasingly effective in new, high-technology fields.<sup>32</sup>

27. Communications Week, July 27, 1987, at C14.

28. *United States v. Western Elec. Co.*, 673 F. Supp. 525 (D.D.C. 1987.).

29. *The New York Times*, March 30, 1991, at A-18.

30. P. Huber, *supra* note 3, at 14.15-14.17.

31. *United States v. Western Elec. Co.*, 673 F. Supp. 525, 562 (D.D.C. 1987) (footnote omitted).

32. L. Johnson, *Development of High Definition Television: A Study in U.S. – Japan Trade Relations* – 49 *et seq.* (1990).

As with the foreign penetration of the U.S. market, the overall picture is highly mixed. In terms of high-end products, U.S. companies have achieved only very limited sales abroad. To a certain extent, this is due to the same marketing limitations which foreign companies face in United States.

Only in the last few years has the Congress begun to deal with the exclusion of U.S. manufacturers from foreign markets. Legislation now requires the United States Trade Representative (USTR) to identify countries which discriminate against U.S. telecommunications equipment manufacturers in terms not just of outright trade barriers, but also of actual patterns of trade. If the USTR finds evidence of discrimination, it must notify Congress, which could adopt trade sanctions. So far, little action has been taken.

The effect of the legislation is somewhat difficult to gauge. Many U.S. observers view it as being too little and too late, particularly because of its delays in implementation. The legislation seems unlikely to bring a quick legal fix for U.S. telecommunications equipment manufacturers.

#### 4. Effect of Telecommunications Industry's Development on U.S. Economy

As the above discussion indicates, a wide variety of diverse and often unrelated considerations impact upon the competitiveness of the U.S. telecommunications industry. With these factors in mind, it may be useful to consider the effect of telecommunications upon the economy and job market. The results of this analysis may inform any decision as to what, if any, actions the U.S. should pursue in its treatment of the telecommunications industry. This discussion deals with the state as well as the federal level, since in a deregulatory era local decisions take on increasing importance.<sup>33</sup> For purposes of data availability as well as its large financial services sector, New York will serve as an example of state-level actions.

##### 4.1 COST AND AVAILABILITY OF SERVICES

The U.S. has a wide variety of telecommunications services. Significant policy questions arise as to these services' availability in terms of both cost and geographic location. The cost of basic telecommunications equipment varies tremendously. Handsets range in price from a few dollars for consumer units to thousands of dollars for office computer terminals. Naturally enough, large business users have access to the most sophisticated equipment as well as services.

In the abstract, this is nothing more than healthy capitalism and poses no problem. To the extent that high costs prevent some people from having even basic telephone service, issues of 'universal service' arise. Although never articulated as a legal requirement, both regulators and LECs generally have assumed that all citi-

---

33. Aspen Institute, *State Telecommunications Regulation: Toward Policy for an Intelligent Telecommunications Infrastructure 5 et. seq.* (R. Entman ed. 1989).

zens have a vaguely defined 'entitlement' to basic telephone service on inexpensive terms.<sup>34</sup> Traditionally, this has not been a major problem, since local exchange service has been relatively inexpensive. 95 percent of U.S. households has telephones. But the last few years have witnessed a substantial increase in the cost of basic telephone service for two reasons: (1) the capital cost of conversion to digital service despite long-run savings; and (2) the redistributive effect of the FCC's access charges.<sup>35</sup>

As a result, for the first time an increasing number of households lack telephone service. For example, in New York State, 65,000 households presently have no service, and the number is expected to double or triple in the future. It may be necessary to adopt new measures ranging from taxes to 'universal service funds' to provide universal service. It has been estimated that a guarantee of universal service currently might cost no more than \$7 to \$10 million per year in New York State. The State PSC's decision to make low-cost service available to recipients of public relief is a first step towards guaranteeing universal service.

Some services simply will not be available because of customers' locations. Running a fiber optic network through a dense business district makes eminently good sense, despite the high fixed cost. Providing high bandwidth transmission to sparsely populated areas, however, obviously makes no economic sense and would require precisely the type of cross-subsidy which federal and state regulators have attempted to eliminate for the last decade. As a result, governmental authorities face difficult decisions as to requiring LECs and other service providers to extend high-end service outside of dense urban areas. A 'pay as you go' approach for consumers may make sense in many situations, but is not likely to be politically popular. Thus, the U.S. position stands in stark contrast to the Japanese Government's commitment to provide ISDN service to all subscribers.<sup>36</sup>

For both cost and location reasons, some residential and business telephone customers will receive better service than others. On the cost front, the dichotomy naturally is in terms of economic status. On the geographic front, however, it often represents an urban/rural split. For example, in New York State an upstate/downstate dichotomy traditionally has characterized State politics. Neither dichotomy will be easy for legislators or regulators to resolve.

- 
34. M. Nadel, *The Changing Mission of Telecommunications Regulators at the State Level* 5-8 (1986). For an excellent survey of 'lifeline' programs, see L. Johnson, *Telephone Assistance Programs for Low-Income Households, A Preliminary Assessment* (1988).
  35. Simon, *After Divestiture* (1986). The Commission has partially redistributed payment for long haul carriers' use of LECs from the carriers to subscribers. This has resulted in a \$3.50 per month 'access charge' for a residential user's line. R. Crandall, *Fragmentation of the Telephone Network* 53-55, in *Telecom Policy*, *supra* note 17.
  36. M. Borrus, *Creating Advantage in Telecommunications: The Impact of U.S. and Japanese Regulatory and Trade Policies on U.S. Competitiveness* 10-11 (1987).

#### 4.2 POTENTIAL IMPACT OF INCREASED TELECOMMUNICATIONS REVENUES: A NEW YORK STATE STUDY

It is difficult to predict whether the State will experience substantial entry of new firms or expansion of existing firms. For a variety of reasons, growth probably will come on the service rather than the hardware side. New York's relatively high wages and taxes have not attracted telecommunications hardware manufacturers. On the other hand, the State still is an 'information hub' or a 'gateway' because of its many financial services or related firms; to preserve this status will require an ever-increasing amount of telecommunications service providers.

The State's economy naturally would benefit directly from increased telecommunications service revenues. In addition, new revenues always have a 'multiplier' or 'trickle-down' effect on other industries. The availability of high-capacity data transmission may encourage non-telecommunications firms to locate in the State, thus creating yet more new jobs.

Any estimate of the multiplier effect naturally is extremely speculative, but some type of effect exists. Two relatively recent studies of this are worth looking at. Wharton Econometric Forecasting Associates, Inc. ('WEFA') prepared a study on New York State in early 1987 on behalf of the New York Telephone Company.<sup>37</sup>

WEFA estimates a multiplier effect of 1.9.<sup>38</sup> This leads WEFA to conclude that a ten percent decrease in telecommunications rates would result in increased in-state direct revenues of \$10.3 billion and increased indirect revenues of \$9.1 billion.<sup>39</sup>

There naturally are substantial quibbles with WEFA's results as well as methodology. For example, telecommunications services have become increasingly automated. This creates a possibility that the actual number of jobs may stay relatively constant despite an increase in the dollar volume of telecommunications services.<sup>40</sup> For example, AT&T steadily has reduced the size of its workforce. From 1989 to 1990 alone, its number of employees declined from 283,800 to 272,700.<sup>41</sup>

A second study was prepared internally by the New York Telephone Company (NYTEL) in early 1987, and reached somewhat similar results. The NYTEL study found that a five percent increase in high tech industries' output would create an income multiplier of 1.56, and an output multiplier of 1.54.<sup>42</sup>

This type of econometric modeling does not lend itself to precision. Whether the proper multiplier is 1.54 or 1.90, an increase in telecommunications service revenues clearly would have a substantial impact upon the State's economy and job market.

37. Wharton Econometric Forecasting Associates, Inc., *Deregulating Telecommunications: Economic Impacts on New York State* (1987). Although the study is highly professional, its purpose was to support NYTEL's argument that deregulation of subscriber rates would benefit the State and its citizens by increasing both revenues and jobs. The study is presumably less than totally disinterested.

38. *Id.* at 14.

39. *Id.* at 29.

40. Stowsky, *The Domestic Employment Effects of International Trade and Telecommunications Equipment 27* in *Trading for Jobs: The Employment Effects of International Trade* (1987).

41. Gross, *supra* n. 23 at 31.

42. New York Telephone Company, *Regional Forecasting System* (1987).

A caveat is in order as to other states. Since New York City is the largest financial services hub in the U.S., telecommunications services presumably have a greater multiplier effect in New York State than in virtually any other state. On the other hand, 'back offices' for financial institutions, catalogue sales firms, airlines, and similar entities increasingly locate in low-wage, low-tax states. A sophisticated telecommunications system thus may have a significant multiplier effect in unlikely areas such as Oklahoma or Nebraska.

The internal NYTEL study also estimated the amount of telecommunications services used by each of 104 Standard Industrial Classification (SIC) 'industry sectors' within the State, as a percentage of their total expenses.<sup>43</sup> As indicated in *Table I*, the leading five industries in terms of telecommunications budgets were business services (6.4 percent), transportation services (3.0 percent), finance (2.6 percent), hotels (2.3 percent), and communications (1.9 percent).

*Table I*  
SELECTED INDUSTRIES' TELECOMMUNICATIONS USE

<i>Industry Sector Telecommunications</i>	<i>Percentage of Budget Spent</i>
Business Services	6.469
Transportation Services	3.082
Finance	2.646
Hotels and Other Lodging Places	2.326
Communication	1.998
Wholesale Trade	1.886
Education & Nonprofit	1.740
Insurance	1.494
Printing & Publishing	1.340
Lumber. Hardware. Farm Equipment	1.292
General Merchandise Stores	1.292
Food Stores	1.292
Automotive Dealers	1.292
Gasoline Service Stations	1.292
Apparel & Accessory Stores	1.292
Furniture Stores	1.292
Miscellaneous Retail Stores	1.292
Automotive Repairs	1.219
Medical Services	1.070
Amusement & Recreation	1.052
Air Transportation	1.049
Real Estate	0.224

*Source:* New York Telephone Company

As would be expected with any study using the very broad SIC definitions, the data did not pinpoint particular industries. Nevertheless, the fact that several financial

---

43. *Id.*

services sectors such as banks, brokers and investors were among the most intensive users of telecommunications services confirms intuitive expectations that the State's financial service firms make the heaviest use of telecommunications services. The high usage by 'business services' is also interesting, since that category comprises pure service firms such as lawyers, doctors and accountants. If these firms continue to expand, they will need increasingly large amounts and sophisticated types of telecommunications services to them will have both a direct and multiplier effect upon the State's economy and job market.

A chicken-and-egg situation thus exists with New York State's telecommunications service providers and users. The financial services sectors will make escalating demands for telecommunications services. Telecommunications service providers presumably will market larger amounts and more sophisticated types of services.

The key question here is whether demand and supply will increase in concert. The current U.S. *laissez-faire* telecommunications policy would contemplate a hands-off approach, on the theory that the market place will respond to new needs. An industrial policy approach, however, would dictate governmental supervision or at least encouragement of telecommunications service providers, to ensure that they are capable of serving financial services firms. The State presumably could spur the development of telecommunications services and the location of service providers within the State in a number of ways.

#### 4.3 LABOUR ISSUES

With the increasing amount of automation on both the hardware and services sides, such as the use of computers for switching and network functions, the total number of employees necessary for the telecommunications industry has declined steadily. This decrease is most dramatic on the hardware side for several reasons.

First, the number of employees necessary to produce most types of telecommunications equipment has declined. For example, an old-fashioned crossbar switch required 3,250 employees to produce, a more modern analog switch 1,250, and a state-of-the-art digital switch 120. This is reflected in the fact that total telecommunications equipment manufacturing employment increased ten per cent between 1984 and 1985, but that more than half of the 53,000-job increase involved engineers and technicians.<sup>44</sup> Total telecommunications industry employment therefore may stay relatively stable or even increase somewhat, but probably at the cost of traditional blue collar jobs. Another reason for this result simply is the higher level of wages in the U.S. and most of Europe, as compared to a number of Asian countries.

The combination of automation, wage levels, and other factors makes it virtually impossible for U.S. manufacturers to compete with foreign firms in the production of low-end equipment, such as telephone handsets.<sup>45</sup> As noted above and in *Table II*, AT&T's workforce continues to shrink at a steady rate.

44. Stowsky, *supra* note 40 at 27.

45. *Id.* at 45.



*Table II*  
AT&T EMPLOYMENT LEVELS

	<i>31/12/90</i>	<i>31/12/89</i>
Communications Services	93,500	93,500
Communications Products	46,400	51,900
Computer/Federal Systems	12,100	14,900
Network Systems	53,300	56,200
Microelectronics	15,700	16,000
Bell Labs	22,300	22,500
Financial Services	3,800	1,200
All Others	26,600	28,300
TOTAL AT&T	273,700	283,800

*Source:* Donaldson, Lufkin & Jenrette

The picture is somewhat different on the high-end equipment side such as fiber optics, central office switches, network control equipment, key telephone systems and business telephone terminals. As indicated above, fewer and fewer employees are required to manufacture sophisticated equipment. Increasing amounts of sophisticated equipment – primarily fiber optics, central office switches and network control equipment – are necessary as the United States converts to digital telecommunications. The U.S. market for central office switches and other sophisticated equipment seems to have become relatively static in the last few years, with growth on the order of only one or two percent annually.

In terms of high-end equipment, there has been a move towards custom production, tailored to a buyer's particular needs.<sup>46</sup> This type of production requires more managers and engineers than in the past, but fewer skilled production workers,<sup>47</sup> which again cuts into the traditional role of blue collar workers. There is a declining demand for workers with skills to build or maintain traditional switches, and an increasing need for engineers and managers.

Much less data exist on the service side of the industry than on the hardware side. On the one hand, the demand for additional lines presumably generates employment in terms of both installation and maintenance. The demand for maintenance depends upon the number of consumers who elect to lease rather than buy and service their CPE. The trends are not yet clear, particularly with regard to business users. Modern telecommunications equipment, however, requires less day-to-day supervision than older equipment. An old-fashioned crossbar switch required thirty to forty people to maintain it, while a computerized digital switch may need only two or three.

---

46. *Id.* at 6.

47. *Id.* at 27.

## 5. Conclusion

Many factors impact upon the nation's telecommunications industry. Having identified some relevant considerations, the final question is whether and to what extent government can control the industry's future development. In defining the government's role vis-a-vis the industry, it is important to note that government generally has two major planning goals. The government's objective has been to implement telecommunications policy, primarily through the FCC and the courts. This task generally has centered upon insuring reasonable rates and adequate service.

On the other hand, the government also might play a new and affirmative role in terms of industrial policy. Namely, it could shape the industry to improve the nation's economic infrastructure. There are at least two possible industrial policy goals. First, government might attempt to encourage telecommunications firms to locate within the country, to increase overall revenues and employment. Telecommunications firms not only affect the economy directly, but also have a 'multiplier' effect in terms of both income and jobs. To this extent, a telecommunications firm is no different from any other type of business.<sup>48</sup>

Also, the government might try to develop the telecommunications industry in order to benefit the nation's economic infrastructure. For example, sophisticated transmission networks encourage information-intensive firms, such as in the financial services sector, to locate facilities within the U.S. This approach has a far greater multiplier effect than just attracting another factory. It also is much more challenging, however, and requires government to take more affirmative steps than under traditional industrial development policies.

In considering this second leg of industrial policy, it is important to keep in mind that manufacturing and transmission firms respond to different incentives. Telecommunications manufacturers – including enhanced service providers (ESPs) for purposes of this analysis – are concerned primarily with bottom-line questions of taxes, wages, and the like. Transmission networks have somewhat captive customers, but they may not make long-term investments necessary to serve the U.S.'s economic infrastructure without the promise of long-term profits. It thus is useful to consider the manufacturing and transmission segments of the industry separately.

Some observers believe that an economic system must have both manufacturing and transmission firms in order to be viable.<sup>49</sup> This proposition is less than self-evident, as long as transmission networks have access to a competitive equipment market with reasonably priced equipment. Since the high-end market in the United States is intensely and increasingly competitive, it may be more important to attract transmission networks than equipment manufacturers – at least from the government's point of view. Once again, the multiplier effect from transmission services seems to be much higher than that from manufacturing.

Unlike transmission networks, equipment manufacturers need not co-locate with their customers. One method of improving the general competitive posture of U.S. manufacturers would be to open up the world market. So far, however, the U.S.

48. Cowhey, *supra* note 25 at 222-230.

49. M. Borrus, *supra* note 36.

has shown little inclination to put pressure on foreign governments. Congressional attempts to move this process along have seen little success.

The chief domestic restraint on new entry into manufacturing has been the *MFJ* prohibition on manufacturing by the seven RBOCs. Allowing the RBOCs to manufacture equipment naturally would increase the total number of manufacturing firms, but it might not increase the total size of the equipment pie. Another strategy might be urging Judge Greene to ease the ban on manufacturing, at the upcoming triennial review.

Two obvious caveats are in order. First, repeal of the manufacturing prohibition would not guarantee that a company would set up shops in any particular country or state. Second, an RBOC might go into the manufacturing business by means of a joint venture with a foreign firm. The RBOC itself would be a guaranteed market – almost the size of the French or German national market. In turn, the foreign firm could provide the multi-billion dollar R&D work necessary to design high-end telecommunications equipment. As noted, Judge Greene found this type of partnership inevitable, and viewed it as a reason for retaining the manufacturing ban.<sup>50</sup> It is somewhat less than self-evident that an RBOC-foreign firm joint venture would harm the public interest. Although some of its profits obviously would flow abroad, a partnership presumably would keep employment and related benefits in the United States. In this respect, it merely would follow the pattern of the U.S. automotive industry. Moreover, it would seem preferable to off-shore manufacturing by U.S. companies, such as AT&T's shift of handset manufacturing to Singapore.

Since enhanced service providers also do not need to operate close to their customers, similar considerations apply to their location decision. In this context, the *MFJ*'s ban on RBOCs' offering enhanced services is relevant. Judge Greene was slightly more sympathetic to the RBOCs in this respect, by allowing them to provide at least 'gateway' services for videotext offerings. Since the RBOCs are natural entrants to the enhanced service market, one strategy might be to repeal the ESP restrictions. This approach naturally requires an initial determination that an RBOC is more likely than new ESP entrants to develop this market, and thus to create revenues as well as jobs. This conclusion is by no means clear at present. Unlike the situation with equipment manufacturing, there would be little prospect of RBOC-foreign joint ventures. Due to differences in technology, language, and culture, few foreign firms have had any success in selling enhanced services in the United States. And as noted above, the danger of RBOC-foreign partnerships seems overblown.

An important government policy is to encourage LECs to provide the sophisticated, high-capacity networks necessary to promote the economy's growth – particularly in the financial services sector. The FCC is attempting to force the RBOCs to implement high-capacity networks, through its requirement of 'open network architecture' (ONA), which enables an LEC to accommodate virtually any type of enhanced service.<sup>51</sup>

At present, the RBOCs are less than delighted with the advent of ONA and sophisticated networks. From the RBOCs' point of view, these developments repre-

50. See *supra* note 28 and accompanying text.

51. R. Noll, *supra* note 17 at 43-46.

sent huge current costs, whose future profits are unclear. Therefore, the BOCs have attempted to delay implementation of ONA.

The government's concerns in developing the industry's manufacturing and transmission segments are quite different. On the manufacturing side, industrial policy is presumably the same as in developing any other business – namely, the creation of revenues and jobs. On the transmission side, however, the paramount consideration is the networks' ability to encourage the growth of a state's economy.

As in other countries, government in the U.S. can play a substantial role in shaping the telecommunications industry to support the economic system – particularly the increasingly important financial services sector. To date, however, neither federal nor state government institutions took any significant action in this regard. The time thus may have come for US institutions to move beyond telecommunications policy to industrial policy.



# Broadcasting and Telecommunications in Transition: The Wind of Change in Eastern Europe

*Wolfgang Kleinwächter*

The 21st century will be the century of information. The computerization of national societies and international relations will influence fundamentally all processes, be it political, economic, social or cultural, and will affect legal systems, nationally as well as internationally. Marshall McLuhans 'global village' has meanwhile become a reality. The combination of satellites, cables and teleports with TV screens, telephones and computers has created a situation in which the ancient frontiers of time and space that determined world wide communications are disappearing. Information is becoming not only a resource that is more valuable than oil, but also a productive force which stimulates development in all spheres of life. Today, the telecommunications and the related industries represent a global market of \$600 billion annually, and they are, with the perspectives of digital HDTV and mobile communication, still increasing.<sup>1</sup>

## 1. The End of the East-West Conflict

The end of the East-West conflict is a good example of the power of information. The divided continent Europe overcame its division when new communication technologies paved the way for more and better communications across the borders. The unification of Germany was already a reality before 1989 when East and West Germans met every evening in front of the TV screens watching the news of ARD en ZDF. Via radio and television, people in the East more precisely discovered the deficiencies of their own societies and realized that the centralist and bureaucratic so-called socialist system is unable to manage the jump from the Industrial Age into the Information Age.

Via mass media, people in the East discovered not only the striking contradiction between the noble but utopian aims of socialist theory and the frustrating practice of 'socialist' reality, they also discovered the broadening of the gap between Eastern and Western Europe in all aspects of life. The flow of information has played a crucial, maybe even a decisive, role in the radical reforms and the velvet revolutions which shook Eastern Europe in the last five years.

Now, the East-West conflict is over and the Iron Curtain has disappeared. But

---

1. See, K. Lindhorst, *New Telecommunication Trends and International Relations*, in: H. Mowlana/N. Levinson, *An East-West-Perspective, International Program of the School of International Service*, The American University, Washington 1991.

Europe is not yet reunited and the economic, social and cultural gaps between the two parts of the 'European village' are still wide. Undoubtedly, media will play an enormous role reducing the existing gaps and developing a common European consciousness.

## 2. Differences in the Legal Systems

The differences between Eastern and Western Europe are also visible in the legal sphere and in particular in the field of media law. While Western European countries have a historically grown system of legal, political and ethical standards regulating the media, Eastern European countries in the past had no real media laws. While the West is now on the way to harmonize its national media laws within the EEC and/or the Council of Europe in order to meet the challenges of the new communication technologies, Eastern European countries are still asking the basic questions: How to guarantee by means of the law freedom of expression and freedom for the media? How to organize a public broadcasting system? How to license private broadcasters?

And additionally, these questions are being asked against a very different historical background. Poland, Hungary and Czechoslovakia had some historical experiences with democracy in the 1920s, but this was not the case in Rumania and Bulgaria. And in the Soviet Union as a separate entity has been destroyed. The search for historical traditions by the many new republics seems to lead directly to tsarism. Only the former German Democratic Republic found quick answers. It adopted the legal system for broadcasting and telecommunications of its West German brothers and sisters.

And while satellites, covering the whole 'European village', are creating new realities which go beyond national approaches, the new Eastern European countries are rediscovering their national identity and are trying to regulate in narrow national terms their own national media system. Although it is of fundamental importance for the Eastern European countries to establish a regulatory framework on a national level and to develop, step by step, an own legal system, from the technological point of view this will only have a limited effect. On the eve of the 21st century, national legislation in a highly technology determined domain has to be discussed in a broader European context.

## 3. Historical Lessons

During more than 40 years, the East-West conflict has made it impossible to create a regulatory framework for all-European communication. After the failure of the UN Conference on Freedom of the Press and Freedom of Information in 1948,<sup>2</sup> which produced three Draft Conventions for Freedom of Information, News gathering and the Right of Correction (never adopted with the exclusion of the Right of Correction

---

2. See, W. Kleinwächter, the Birth of Article 19 – A Twin Concept of the United Nations, in: *The Journal of Media Law and Practice*, London, Vol. 10, no. 3, September 1989, 93 ff.

Convention in 1952), the different ideological approaches made it impossible to agree on universal legal norms in the sphere of information and communications, even on a continental level. The European Convention on Human Rights of 1950 with its Article 10, which guarantees the right of freedom of expression, covered only the western part of the continent.

East-West communications on media issues were blocked by a fundamental dissent on this right of freedom of expression. Eastern countries considered in the call of the Western countries for the free flow of information a danger for their hierarchically organized societies which were based on state control of the mass media. Western countries did not see anything but a vehicle for censorship in the call of the Eastern countries for legislation (along the lines of Article 10, para. 2 of the European Human Rights Convention). It turned out to be impossible to negotiate compromises. International efforts to bridge this gap, like the elaboration of UNESCO's Mass Media Declaration in 1978, produced nothing but a consent on the dissent, contradictionary instruments which were legally not binding. States agreed to disagree with fundamental questions, nothing more.

Now, after the revolutions in the East, the dissent has disappeared. The Copenhagen CSCE Document of June 1990 demonstrated in a very clear language that all CSCE members without any reservation recognize the fundamental rights and freedoms in the sphere of information and communications. Furthermore, the Moscow CSCE meeting on the Human Dimension in October 1991 stated that violations of basic principles, belonging to the human dimension, can no longer be seen as an internal affair of a given country but call for collective actions of the CSCE family. Step by step, Eastern European countries also join the Council of Europe Convention on Human Rights from 1950. Does such a fundamental consent produce a new approach concerning the constitution of a regulatory framework for communication in the whole of Europe from the Atlantic to the Ural?

#### 4. From Deregulation to Re- or Self-regulation?

New communications technologies have been calling for the change of the old regulatory framework ever since the first communications satellite was launched in the early 1960s. One reaction to the challenges of the new communications technology was the birth of the deregulation philosophy. Legal standards developed in the 'Industrial Age' were regarded as not being flexible enough to deal with the new technologies of the 'Information Age'. The elimination of the old legal systems opened new opportunities for global communication and produced benefits for the main players in the world communication order.

But there also were some negative effects: the more powerful players in the game got more profit from deregulation than weaker countries. The developing countries in particular were again the losers. This was not surprising. 15 years ago the French philosopher Jean Baptiste Lacordaire has already discovered that freedom has different effects for the strong and the weak. That is why he tried to combine the concept of freedom with the concept of law by defining the rule of a 'fair play' on the basis of freedom. Between the strong and the weak, he stated, it is freedom which surpasses the law and it is the law which liberates freedom.



At the end of the 1980s, there were some signs that regarding information and communications the era of deregulation would be followed by a new era of reregulation. The EEC has started to adopt a series of 'TV Directives'. The Council of Europe has adopted its Convention on Transfrontier Television. The GATT is negotiating a regulatory framework for Trade in Services, including an Annex for Telecommunication Services. The ITU is even intensifying its regulatory activities concerning standard setting, frequency allocation and the use of the geostationary orbit. Electronic highways need rules of the road, stressed James Grant, President of the Bank of Canada, already years ago.<sup>3</sup>

At the same time, the concept of 'media law' itself is also in a process of change. The digitalization has 'undermined' the possibility of defining information and communications in clear terms. What are the differences between a telephone call, a software package and a TV show if they are reduced to 'ones' and 'zeros'? The classical definitions of press law, broadcasting law, telecommunications law etc. have to be redrafted. When we move towards a global and universal Services Digital Network, do we not at the same time need an integrated legal approach for global communication?

Dommering sees today the integration of 'Media Law' into a broader concept of 'Information Law'.<sup>4</sup> Dommering's 'new approach' takes 'information and the communication process as its starting point, regardless of the information technology'. Dommering argues as follows:

'The law regulates social and economic functions, but not technical phenomena. Why does media law begin with the press and data protection law with the computer? Why does copyright law begin with the copyright on a spoken text and computer law with the copyright on software? No conclusive arguments can be found for this, except that an understanding of information technology serves as an instrument for posing the right juridical questions'.

And he adds:

'Because information law studies the legal aspect of the entire communication process as such is necessary to obtain a clear picture of this process. So information law starts with an analysis of the subject in non-legal terms. Such an analysis is made with the aid of knowledge gathered from communication sciences, informatics, media economics, and telecommunication sciences. The emphasis is not, however, on the information technology but on the communication process.'

But concepts of reregulation are also challenged. Especially the private media and advertising companies, which are affected by EEC, GATT and ITU rules, are deny-

3. Quoted by, G. Russell Pipe, TDF Priorities: Building Infrastructures and Cooperation, in *Transnational Data and Communication Report*, Springfield, Vol. VII, No. 5/6, 1984, 255.

4. E. Dommering, An Introduction to Information Law, Works of Fact at the Crossroads of Freedom and Protection, in E.J. Dommering & P.B. Hugenholtz (eds.), *Protecting works of Fact*, Amsterdam 1991, 11.

ing the right of governments to regulate anything in the sphere of information. They call for self-regulation instead of reregulation.

Nevertheless, new legal standards for the use of the new communication technologies in the new information age are in the course of development now. Regulatory frameworks, which guarantee the rights and the freedoms in the sphere of information and which try to balance the different interests of the actors in different fields of communication, become visible on the European horizon.

## 5. An All-European Approach is Needed

One heritage of the East-West conflict is the number of European institutions that reflect also in the field of information and communication the 40 years of division.

Firstly, we have the Europe of the 12 members of the EEC. For many years, it was questionable whether the EEC had the competence to act in the field of broadcasting. The Rome Treaty regulated only the free movement of goods and services and did not mention culture. But after broadcasting was defined as a service in the sense of Article 59 of the EEC Treaty, the EEC moved via its Greenpaper 'Television without frontiers' to the TV Directive of October 3, 1989. And it moves forward by drafting directives on standards for satellite TV transmission, copyright etc. A basic contradiction within this approach is that these directives on 'television without frontiers' create legislation for 'television within the frontiers of the EEC'.

Secondly, there is the Council of Europe. The Council of Europe, with more than 10 Member States, has always dealt with questions concerning the media. Its conventions in this field are becoming legally binding after ratification by the parliaments of its national Member States. But although some Eastern European countries have meanwhile joined the Council of Europe and ratified its conventions, other Eastern European countries are still outside it and it seems questionable whether all the republics of the former Soviet Union will have a legal possibility or a political chance to join the Council and its Convention on Transfrontier Television of 5 May 1989. Insofar, even in the future, this Convention will not cover Europe from the Atlantic to the Ural, a region which can, on the other side, be covered by one single satellite.

The first CSCE Information Forum, which took place in London in April/May 1989, produced a broad set of proposals for improvements of communications in Europe.<sup>5</sup> The proposals will be passed at the next CSCE summit meeting, which will be passed in Helsinki in March 1992. Many of the proposals are meanwhile outdated because the East-West conflict has disappeared. But what remains are the communication gaps between the East and the West, the underdevelopment of the telecommunications infrastructure in the East, the limited scope of legal instruments covering information and communication problems, and the need to develop an all-European communication area. To overcome the deficiencies of the all-European communication order, Europe has to communicate with Europe. Maybe a second CSCE Information Forum, after the next CSCE summit, could be helpful in this respect.

5. See, CSCE-Doc., *LIF. 57 and 59*, London, 8 May 1989.

This is not the place to discuss the relationship between the EEC, the Council of Europe and the CSCE and to analyze on which points the three institutions could be complementary, where they could cooperate or join their efforts regardless of the differences between the harmonized regulatory framework for an all-European communication area.

## 6. Underdevelopment as a Burden of the Past

To overcome underdevelopment is not an easy task because the problems differ from country to country. It is not enough for the Eastern countries to copy the Western broadcasting laws only. They have to take into consideration their specific national situation. And they are confronted with the backwardness of the telecommunications infrastructure as well as with the very limited financial, material and personal resources.

When a Task Force of the International Communication and Information Policy of the US Department of State analyzed the situation in Eastern Europe in 1990, it came to the disillusioning conclusion:

'In each country the telephone system is extremely out of date and inadequate. None of the countries has cellular mobile telephone. There is an expressed need in each country for management training in a market economy. After years of mismanagement, the state broadcasters are poor, ill trained, dramatically overstaffed, badly organized, ill equipped and uninformed'.<sup>6</sup>

Against this background the challenges for the unification of communications in Europe become a little bit clearer. Peter Havlik of the Vienna Institute for Comparative Economic Studies stressed in March 1991 on a OECD Symposium on East-West Communication Issues that overcoming these deficiencies does not only require the mobilization of all available resources, but also radical changes in the traditional development policies of government and, last but not least, in behavioural patterns of the population. There is no doubt that the transition of Central and Eastern Europe requires support from the West as well.<sup>7</sup> Massive investment will be needed to bring the telecommunications and broadcasting infrastructures up to the levels of developed countries. The Report of the US Task Force estimates a sum of '400 to 800 million US dollars in telecommunications and an initial 20-30 million US dollars in radio and TV per country'.<sup>8</sup>

In a hearing in the Georgetown Center for Strategic and International Studies in Washington, held in March 1991, the Polish Minister of Communication Affairs Slezak estimated a sum of 12 to 20 billion US dollar investments in a ten year period

- 
6. Eastern Europe, Please stand by, Report on the Task Force on Telecommunication and Broadcasting in Eastern Europe, Washington 1990, 13.
  7. P. Havlik, Information Technologies in the East, Past, Present and Future Prospects, in *Policy Dialogue on Information Technology Development*, OECD Committee on Information, Computer and Communication Policy, Vienna 1991, 17.
  8. Eastern Europe, Please stand by, *supra* note 6.

for the development of the telecommunications infrastructure in Poland only.<sup>9</sup> Similar figures were raised in a TIDE 2000 Club Symposium on '*Eastern Europe: Information and Telecommunication Technology Challenges*' in Budapest, November 1990, by speakers from Hungary, Czechoslovakia, Bulgaria, Rumania and Albania.<sup>10</sup> And a look into the republics of the former Soviet Union shows that the level of telecommunications infrastructure in this region is as low as the level of a least developed country.

If no help will come, Havlik expects a 'brain drain' from East to West which would cement East Europe as well as an underdeveloped area in Europe for a long period. Klaus Grewlich from the German TELEKOM sees the situation also as a very complicated one:

'Most experts indicate that economically the situation in East European countries may get worse before it gets better. Some decision makers advocate therefore a wait-and-see attitude until the light at the end of the tunnel is visible and the situation has stabilized and even resulted in an economic boom. On the other hand, there are people who want to go beyond a wait-and-see attitude. They understand how vital it is to support the modernization of the telecom infrastructures in the neighbouring Eastern European countries'.<sup>11</sup>

And Grewlich concluded:

'The challenges are so important that even the biggest operators have difficulty in meeting them. Cooperative communication strategies are needed'.

## 7. The German Example

One source of inspiration how common effort and common practical experience can work and of practical experiences, could be the German unification. The former German Democratic Republic was more or less – as far as broadcasting and telecommunications were concerned – in a position similar to the other Eastern European countries. After the unification, changes in these two interrelated fields took place very rapidly.

According to the German constitution, sovereignty on radio and television belongs to the *Länder*. That is why the old centralist broadcasting system could no longer exist and had to be transformed in accordance with Article 36 of the Unifica-

- 
9. C. Johnson, An update on Polish Telecom, Center for Strategic and International Studies, Georgetown University Washington, 1991, 4, see also, C. Johnson/N. Stevens, The Bulgarian Connection, *Ibid.*
  10. See, G. Russell Pipe (ed.), *Eastern Europe: Information and Communication Technology Challenges*, TIDE 2000, Amsterdam 1991, 107 ff.
  11. K. Grewlich, Eastern Europe Cooperative Communication Strategies, in G. Russell Pipe, Eastern Europe, *supra* note 10, 274.

tion Treaty into a federal system.<sup>12</sup> As a result, within 15 months – Article 36 had set the 31st of December of 1991 as the latest day for the dissolution of the former GDR TV and radio – the old system was completely destroyed and new public broadcasting stations were to be established. The three new *Länder* in the South of the former GDR, Saxonia, Thuringia and Saxonia-Anhalt, agreed in a State Treaty on the establishment of a new ‘Mitteldeutscher Rundfunk’ (MDR). The MDR will join the ARD and contribute to the ARD 1 evening program, produce a daily regional program of two hours for ARD 1 and a full so-called ‘third program’ (MDR 3). Mecklenburg-Vorpommern has agreed with the Berlin based SFB. At the same time, the five new *Länder* also adopted laws on private broadcasting in order to introduce the ‘dual system’ in the Eastern part of Germany.

In the field of telecommunications, the Deutsche Bundespost TELEKOM very quickly developed a special program TELEKOM 2000. On the basis of the TELEKOM 2000 program, about 70 billion DM will be invested into the telecommunication infrastructure in the new *Länder* till 1997. One considers the state of underdevelopment in the new *Länder* is seen also as a chance for a unique economic ‘leapfrogging’ and it is the hope, that after such an investment the Eastern part of Germany will have one of the most modern telecommunications infrastructures in the whole of Europe.<sup>13</sup>

Nevertheless, the unification process produced both good and bad experiences. In East Germany, it was positive that West Germany made available democratic procedures, legal standards and established institutions as well as financial, material and personal resources. Without the strong efforts of the old *Länder* of the FRG, the painful period of crisis in the new *Länder* would have lasted much longer than it did now.

It was negative that East Germany’s own concepts, which had been developed in the period of change before and after 1989, had no chance of surviving in a unification process with a strong and well-organized partner. While after the revolution in 1989 in particular the citizens and the journalists had the feeling that they were the winners, after the unification they got the feeling that they were being colonized. All the decision making processes in the government, in the administration and in the new companies were overtaken by the advisers from the West. To give only one example. The new Mitteldeutscher Rundfunk (MDR) has nominated eight directors. Seven came from the West, one from the East. New East German legal standards, which had been established after the revolution in spring 1990, like access to information sources, right of reply, self-determination of journalists etc., were to a certain degree reduced again and replaced by the traditional norms of the West German legal system. The hope that the unification will also challenge some outdated norms and structures in the west proved to be unrealistic. The flow of ideas, experiences, rules and knowledge became a one-way flow from West to East.

12. See, W. Kleinwächter, (Re) Unification and Media Change, The Case of Germany, *Mediaforum* 1991/2 and 1991/3, 100 ff. See also, W. Kleinwächter, Broadcast stations approved for the three new *Länder*, *World Broadcast News*, New York, September 1991, 16.

13. See, W. Kleinwächter/A. Kolb, German Unification and its Consequences for Telecommunication, in Russell Pipe, *supra* note 10, 153 ff.

## 8. A Complicated Situation in Eastern Europe and the Soviet Union

The German example is obviously a special one. On the one hand, East European countries have a similar burden as the former GDR. On the other hand, they do now have a 'big brother'. Nevertheless, some experiences of the German unification are certainly useful for the Eastern part of Europe. The organizational structure of the broadcasting system is a special case. How can it be transformed from a state owned and party controlled system into a public-private dual system in a democratic society. This is difficult for the former Soviet Union in particular.

During the first World Communication Summit in Crans Montana, October 1991, the Deputy Director General of the Soviet Television Edvard Sagalayev reported about the chaotic and anarchic situation in Soviet broadcasting.<sup>14</sup> Nobody knows how Soviet television will be organized in the future. Will it be a public service like the BBC? Or a joint venture, based on the broadcasting sovereignty of the republics, like the ARD? Or a private organized system like in the USA?

The Soviet 'Act of the Press and other Mass Information Media', which was adopted by the Soviet Parliament on June 12, 1990, gives no clear answer to the status of radio and television. In Article 7 of this Act, it is stated that 'the right to establish a mass information medium (according to Article 2, para. 2 of this Act this includes also television and broadcasting programs – W.K.) is endorsed to the Soviets of the People's Deputies and other state bodies, to political parties, to social organizations, to mass movements, to artistic unions, cooperations, religious and other associations of citizens established by law, to working collectives as well as to the citizens of the USSR who have reached the age of 18 years'.<sup>15</sup> And para. 2 states: 'The monopolization of mass information media of any kind (press, broadcasting, television and other) is not admitted.'

It follows from the foregoing that the provisions of the law are very broad and do not give a clear structure for the organization of radio and television. The Russian Media Act, which came under discussion after the failed coup in August 1991, is also very complex and unclear as far as broadcasting is concerned. Because of the lacking democratic experiences with independent news media, many observers see the danger that the government will put efforts into the use of particular broadcasting as a direct instrument of state power. That is why Jassen Sassursky, in his reply to the failed coup in *Izvestiya* of September 5, 1991, called for a very simple and short media legislation along the line of the first Amendment of the US constitution.<sup>16</sup>

Similar difficulties can be observed in the other Eastern European countries. Hungary has a new Media Act, but it is in a permanent process of change. In Czechoslovakia, matters are uncertain since the Czechs and Slovaks decided to create two separate countries. In Poland, conflicts between the state and the church have arisen over a couple of issues, including censorship. In Bulgaria and Rumania, the state tries to keep its hands over broadcasting. Unclear is how national TV broad-

14. E. Sagalayev, The Media in the Soviet Union, Paper delivered at the World Communication Summit 1991, Crans Montana, October, 6-10, 1991.

15. The Act of the Press and other Information Media, Moscow, 12 June 1991.

16. *Izvestiya*, 5 September 1991, No. 212.

casting companies, state owned or public, will be financed in the future. Some groups propose to open the national market for foreign broadcasters. If this is the case it may lead to joint ventures of national broadcasters and global channels (like CNN or Euronews) offering a mix of global programming and 'national windows'.

Unclear is also how private broadcasters, calling for frequencies, are able to finance their programs. Unclear is how private foreign broadcasters will get access to national markets. In Czechoslovakia, a third channel has been opened for foreign broadcasters but in the form of a license for the use of a frequency. In Hungary, some new joint ventures in private broadcasting are emerging. In the Commonwealth of Independent States, according to Sagalayev, there is a new company, called 'Independent TV' which is owned for 51 per cent by private shareholders, but nobody knows how this 'ITV' will work.

Another problem is frequency allocation. One burden of the past is the fact that in Eastern Europe the managing of existing civilian frequencies is neither efficient nor transparent. Even officials of State broadcast entities have little knowledge of their country's overall allocation of frequencies. In a planned society, radiofrequencies were strictly controlled. In a market society, frequencies may become one of the most important and profitable economic resources. How to deal with frequencies in a developing but unexperienced market society? How to open a national frequency spectrum for foreign capital? How to protect national entrepreneurs? Who will decide on the allocation of frequencies? The PTT? Parliament? An independent body?

Similar questions can be asked concerning advertising. In the former socialist countries, there was hardly any advertising on radio and television (because the needed goods and services were hardly available) and no regulation was needed. This situation has changed. Advertising has become a normal phenomenon on Eastern European TV. The French IP for instance has concluded an agreement with CS Television on advertisement acquisition. But are there already legal rules? The regulation for advertisement in the EEC Directive and the Council of Europe Convention include certain restrictions concerning tobacco, alcohol, medicine etc. What has to be done in order to prevent these rules from being undermined by 'pirate advertisements' via satellites or cable from and to non-EEC and non-Council of Europe members?

Very unclear is the situation in the field of copyright and intellectual property rights. In the Soviet Union, property rights were not protected. They were, on the contrary, always collectivized. The Commonwealth of Independent States is now preparing drafts for a copyright act and will join the Berne Convention. But it remains a question whether the central authorities or the republics will finally carry out the legislation, when it comes to real practice.

Piracy is also a major problem. In Poland, it is now a criminal offense to trade in counterfeited video, but this legislation is not being enforced yet. In other Eastern European countries there is not even legislation against piracy. And again, it is always the question of the financial and material resources available. Brian Fix in an analysis on the Eastern European situation told the first World Communication Summit in Crans Montana in October 1991:

'Independent Producers in Eastern Europe are looking for hookups with Columbia, 20th Century Fox and people like that and there is a lot of room for joint ventures. But how are the western partners going to get paid? I predict that barter-type deals will be the rule rather than the exception, with western companies for example allowing themselves to be paid in blocked eastern currencies and then using the money inside the country for production purposes later'.<sup>17</sup>

## 9. Conclusion

The wind of change has shaken Eastern Europe and the republics of the former Soviet Union. The velvet revolutions have paved the way for a free and democratic information and communication system but the problems to overcome on this way all the material and non-material barriers are tremendous. A substantial all-European effort is needed to promote in these countries the development of information and communications and to integrate half of the continent into the common European Village, both in material and non-material terms, and taking into account the cultural identities as well as the national idiosyncrasies of the people.

---

17. B. Fix, The Communication Explosion in Central Europe and the USSR, Paper delivered at the World Communication Summit 1991, *supra* note 14.





# African Nations and Access to Telecommunications

*Jacques Habib Sy*

Despite the United Nations General Assembly's resolution declaring the period 1978-1987 the '*Transport and Communications Decade in Africa*' the performances of African telecommunications networks remain among the poor, if not the poorest, in the world. The 1980 *Yearbook of Common Carrier Telecommunications Statistics* published by the International Telecommunications Union (ITU) indicated that, as of January 1979, on a world total of 279,528,000 telephone main lines (ML), Africa had only 0.9 percent (2,515,725) the North American continent having 39.1 percent (109,297,000). Africa also has the lowest telephone density (0.66 per 100 inhabitants in North America, and 14.6 ML in Europe). But general statistics vary from one source to another. The ITU suggests 0.4 telephones per 100 inhabitants in Africa,<sup>1</sup> thus, contradicting data (0.6 per 100 inhabitants) published by the above mentioned yearbook. Further, key determinants like 'rural areas' and 'urban areas' are not defined at all. This does not help policy-makers to have a fair judgment on the magnitude of the imbalances between cities and villages regarding the rate of telephone fluctuation in Africa.

Statistics are even more negative for about one quarter of African countries which have a telephone density equal to or below 0.1 percent per 100 persons.<sup>2</sup> The ITU study on *Appropriate Modern Telecommunications Technology for Integrated Rural Development in Africa* suggested the following statistics for 8 Black African countries: the number of direct exchange lines (DEL) per 100 inhabitants was as low as 0.06 in Chad, Mali, and Rwanda. The number of DEL in Nigeria and Burkina Faso stagnated (0.07), while in Zaire, Niger and the Central African Republic (0.10), Guinea-Bissau (0.13) and Benin (0.17) statistics were very alarming.

According to the same source a comparative exercise on telephone penetration in the urban and rural areas of 26 sub-Saharan African countries indicated that on a total population of around 266 million people including an overwhelming majority of rural population (more than 219 million people) there was a global number of around 1 million telephone sets. On this grand total, rural areas have only approximately 139,000 telephone sets which corresponded to a level inferior to 14 percent. But in several countries this average ratio was much lower: 1 percent in Ivory Coast,

1. 'Transport and Communications Decade in Africa', *Telecommunications Journal* 47 (XII), 1980, 687.
2. *Ibid.*, at 719-721.

2.5 percent in Senegal, 3 percent in Upper Volta, 6 percent in Congo and Ethiopia, 7 percent in Zambia and 8 percent in Tanzania.

Measured in terms of telephone density per 100 rural population for the 1978-1980 period the statistics were much more unfavourable: Zambia 0.06, Angola 0.08, Burundi 0.04, Cameroon 0.07, Ethiopia 0.02, Ivory Coast 0.14, Mali 0.017, Nigeria 0.02, Senegal 0.03, Sudan and Tanzania 0.04. However, it should be noted that an important factor is ignored by these statistics. They do not take into account the concentration of telephone networks in and around the major cities in rural areas.<sup>3</sup>

From 1969 to 1979, the African stock of equipments grew only by 1,082,500 ML (0.8 percent) and 2,024,800 stations of all kinds (SAK) (1 percent).

During the same period, the stock of equipment in North America grew by 20.5 percent (27,109,000 ML). In 1977, an ITU survey indicated that more than half of fifty African countries had less than 20,000 telephones and that only eight among those countries had a total number of telephones exceeding 100,000 (with the exception of Namibia and South Africa). As a result, penetration of telephones in twelve Black African countries is lower or equal to 0.1 per cent. Key countries – in terms of their economic potential, national resources, and demographic weight – like Zaire, Nigeria, and Mozambique, belong to this group.<sup>4</sup> The recently published UNESCO *Report on World Communication* definitely places African statistics as the lowest in the world.<sup>5</sup>

## 1. In Search for an Integrated Telecommunications Network on a Pan-African Scale: Historical Background

It was in an uncertain context that twenty-six African states represented by 115 delegates and six overseas observers met in Dakar, Senegal, in 1962 under the auspices of the International Telecommunications Union. An African Plan Subcommittee created two years earlier by the Plenary Assembly of the International Telegraph and Telephone Consultative Committee (CCITT) and the International Radio Consultative Committee (CCIR) outlined, with the participation of the African Postal and Telecommunications Administrations, the first international plan for the development of an African telecommunications network.<sup>6</sup>

The plan established in Dakar was an ambitious one. It included the establishment of direct links between the African countries without passing through centers outside Africa, and the gradual replacement of numerous high frequency radio links by overhead wire carrier links, underground or submarine cables and radio-relay links. The delegates also reviewed the technical, operational and tariff prob-

3. International Telecommunications Union. *Transport and Communications Decade in Africa, ITU Preliminary Proposals for the Telecommunications Sector*. Geneva, March 1979, 10.

4. *Telecommunications Journal* 47 (XII), 1980, 719. The main weakness of ITU's statistical procedures lies in its choice of arbitrary parameters like, in this case, the ratio population size/total number of direct exchange lines (DEL).

5. UNESCO. *Rapport sur la communication dans le monde*. Paris: UNESCO, 1991.

6. Owusu, Rex. 'Spotlight on Telecommunications, The Pan-African Telecommunications Network'. *Africa* 56, April 1976, 86.

lems of interest to the countries in the region and adopted resolutions on the technical assistance desired by African countries.

In 1967, a second meeting of the African Sub-Committee, subsequently called African Plan Committee, was organized in Addis Ababa, Ethiopia. In June 1968, two consultant teams began a preliminary study covering 38 African countries representing 87 percent of the population and 85 percent of the area. Completed in October 1969, the study forecast traffic growth through 1990, selected reliable trunk routes,<sup>7</sup> and reviewed the state of numbering and transmission plans, the signalling systems in use or planned,<sup>8</sup> routing plans and existing tariff structures.

1969 was a pivotal year for Africa in her effort to initiate progress in telecommunications planning. Indeed, major credits totalling 2,057,500 U.S. dollars were granted by the UNDP at the request of the ITU and 30 African countries for detailed technical, economic and financial studies of the transmission arteries (20,000 kilometers) and 18 international switching centers to be installed. The pre-investment study following the ITU pre-feasibility study completed in October 1969, included all possible transmission media (metallic line arteries, coaxial cables, submarine cables, radio relay systems and a regional satellite system). The agenda also included the selection of a single common regional signalling system, the adoption of tariffs and methods for forecasting benefits on a regional level, and the establishment of very close working relationships between African administrations in national and international telecommunications matters. UNDP agreed that the ITU should hire experts supervised by a Project Manager and benefitting from the technical and administrative services of the International Consultative Committee and the Group of Engineers set up by the Plenipotentiary Conference (Montreux, Switzerland, 1965) within the UNDP's Technical Cooperation Department.<sup>9</sup>

The survey carried out by Norconsult of Oslo (Norway), Preece, Cordew and Rider Brighton (United Kingdom), Acres Intertel of Toronto (Canada), Sofrecom of Paris (France), and Swedtel of Stockholm (Sweden), concluded that a Pan-African telecommunications network (Panafstel) combining coaxial cables and radio-relay links is the best system to meet African telecommunications needs. It was agreed that Panafstel should not only ensure interconnection between African countries but also serve important national centers.

Conscious of the importance of these conclusions for the implementation of the Panafstel project, the OAU approved them and adopted a resolution stressing the pressing need to accelerate the creation of an integrated Pan-African telecommunications network. A Coordinating Committee was immediately set up to organize more effectively than in the past the investments coming from external sources and desperately needed by the African states. The Committee was headed by the Administrative Secretary-General of the OAU, the Executive Secretary of the ECA, the President of the African Development Bank (ADB), and the Secretary-General of the ITU. The ITU handled the coordination of the technical aspects of the Panafstel project while ADB was responsible for the financial aspects.

7. *Ibid.*, at 91.

8. *Ibid.*, at 93.

9. US-AID Rural Satellite Program, 'Satellites and Telecommunication in Africa: A review of Study, Demonstration and Conferences and Organizations'. Washington, D.C., August, 1981, 4-5.

During these difficult years, and in the absence of a strong Pan-African telecommunications authority, the ITU assumed responsibilities which undoubtedly had an impact beyond the level initially desired by the newly created African states. Furthermore, as the African governments controlled the postal and telecommunications facilities under severe budgetary and administrative constraints, the scope of their action was limited not only nationally but on a Pan-African and an international level as well. The postal and telecommunications administrations shared a common organization generally known as Postal, Telephone and Telegraph office (PTT).

An ITU study pointed out that 'as a result, a host of undesirable features brought about by common organization has stifled the development and growth of 300 telecommunications industries as compared to other public utilities such as transport, water or electricity which are self-contained and operated as an independent organization'. The report also underlined the fact that 'a large scale management planning and development of telecommunication administration and organization' was urgently needed in order to increase performances at the operational level.

### 1.1 DEVELOPMENTS IN THE 1970s

In the early 1970s, another specialized agency of the United Nations, the United Nations Education, Scientific and Cultural Organization (UNESCO) was also involved in the efforts aiming at increasing telecommunications growth in the African continent. In October 1973, an African Regional Seminar on Satellite Broadcasting Systems for Education and Development was held in Addis Ababa, under the auspices of the UNESCO. Participants at the seminar suggested that further studies be undertaken in view of establishing an integrated satellite system which could be used for education, information, training and public telecommunications.

The Anglo-French satellite *Symphonie* was launched and used for demonstrations in several African nations, in particular in Cameroon and Ivory Coast. While Cameroon withdrew very early from the project the Ivory Coast was chosen as the main target country in an attempt to 'sell' the performances and reliability of a European satellite system financially backed by the European Economic Community. This European initiative was perceived by the Americans as a hostile move against their own interests and, in any case, as a threat to the U.S. dominated International Telecommunications Satellite Organization (Intelsat). The same year, the U.S. Agency for International Development, in conjunction with the National Aeronautics and Space Administration (NASA), spent 3 million US dollars to promote the ATS-6 satellite system in several African countries.

In the AESOP-6 project, manufacturers from 13 European countries who manage Eurospace planned to replace the *Symphonie* satellite by a more powerful OTS satellite operating in the 11/14 GHz band and capable of retransmitting from two to twelve television programs. Eurospace claimed that the project was specially designed for developing countries, and Africa in particular, despite evidence to the contrary. Indeed, the project would require a sophisticated terrestrial network equipped with 8 meter transmit/receive antennas and 4 meter receive only antennas.

In 1977, the launching of OTS failed miserably. A European expert, Jacques Dessauzy, reported that the project was sabotaged by the U.S.A. since it was competing with similar American projects.<sup>10</sup>

## 1.2 THE AFRICAN RESPONSE

The African response to this growing competition on the international telecommunications market was, at best, ambiguous. Actually, the African governments were divided by a deep political and ideological crisis. Furthermore, they did not have the opportunity nor perhaps the political wisdom to carefully evaluate the situation of their respective telecommunications sectors and translate into facts without any further delay the goal for unifying their telecommunications policies. A previous unified attempt to cope with telecommunications problems was present through the creation by 14 African countries, mostly 'francophone', of the Union Africaine et Malgache des Postes et Telecommunications (African and Malagasy Union of Posts and Telecommunications) in September 1961 (Antananarivo, Madagascar). After its reconstruction in 1975 and Madagascar's withdrawal, along with two other countries, the Union presently called Union Africaine des Postes et Telecommunications (African Union of Posts and Telecommunications) focused on fostering cooperation between member countries in technical and policy matters and between ITU and the Union.<sup>11</sup>

The omnipresence of Western European and North American consulting firms or multinational organizations will be confirmed later on<sup>12</sup> while the OAU, PATU, URTNA and the UAPT failed to autonomously conduct a coherent telecommunications strategy assessing the present and future needs of the continent, and taking the proper steps to overcome the existing impediments.

Stiff competition opposed the ITU and Intelsat. The strategy of the latter was to accelerate the construction of ground stations in thirty-six countries in Sub-Saharan Africa as of January 1981 while the former favoured the extension to a maximum level of the terrestrial networks and the creation of a regional satellite system for Africa. However, Intelsat's 'lowest cost approach to rural communications for Third World countries' was designed in such a manner that it met the preoccupations of the African countries for the deployment of hybrid telecommunications systems (combining terrestrial and spatial routes).

From 1976 to 1981, five African countries (Nigeria, Sudan, Uganda, Zaire, and Niger) leased transponder facilities for their domestic needs. The Western European countries (mainly France, West Germany, and the United Kingdom) despite their decreasing financial capabilities and the decisive impact of the U.S. multinational firms on their respective economies and telecommunications systems, decided to

- 
10. Two years later, however, OTS 2, a dedicated telecommunications satellite for Europe, was successfully launched.
  11. *AFROSAT: Proposals for an African Domestic Satellite Communications System*, was presented at the International Conference on Satellite Communication Systems Technology. London, April 1975. The authors prepared the report at the University of Essex (U.K.).
  12. Future Systems Incorporated (USA) suggested in 1977 a need for 44 earth antennas in Sub-Saharan Africa (not including South antennas) by 1985 for the same region.

accept Intelsat's challenge, at least on the surface, and in the hope of protecting their African preserves.

The opportunity to evaluate the satellite telecommunications needs and projects of the UAPT member countries was again offered during the Satellite Telecommunications Colloquium held in Abidjan, Ivory Coast (21-24 November 1978) under the sponsorship of the French Ministry of Technical Cooperation, the French Administration of Posts and Telecommunication, the Franco-German Group Symphony and the Centre National d'Etudes Spatiales (the French NASA created in 1962 by the late General de Gaulle, a partisan of French autonomy in spatial matters). During this colloquium, the French participants voiced their concern about Intelsat's monopoly in intercontinental telecommunications by satellite and highlighted the benefits that could be derived by the African states from a regional satellite system under European leadership.

### 1.3 PANAFTEL, AFSAT, AFROSAT

After the creation of the Panaftel network it became necessary to coordinate on a continental level the telecommunications investments undertaken by each member country. At the 31st Session of the OAU Council of Ministers held in Khartoum (July 1978) a Resolution (CM/Res. 654 XXXI) was adopted calling for the inclusion of PATU in the Panaftel Coordination Committee.<sup>13</sup> The year 1979, preceded by the proclamation on 9 March 1978 of the United Nations Transportation and Communications Decade in Africa (UNTACDA) for the period 1978-1988, was a round of tense negotiations and tough decisions for the African countries.

In March, the European Space Agency demonstrated the operation of OTS-2 at the Fifth Ministerial Conference of ECA member countries held in Rabat. A 3 meter mobile antenna received French television programs as well as ESA films.<sup>14</sup> In May, the feasibility of a Regional Telecommunications Network by satellite for Africa was on the agenda of the Conference of African Ministers of Transport, Communications and Planning jointly sponsored by the UN-ECA and the OAU in Addis Ababa. The project was immediately ratified by UNTACDA with PATU and ECA as co-initiators<sup>15</sup> and will be known as AFROSAT.

At the same time, a meeting held in Kigali, Rwanda, under the auspices of the UAPT, decided to commission the feasibility of a regional satellite system for its members and eventually other African countries interested in the project then called AFSAT. The financial support of the European Development Fund was announced during the meeting.<sup>16</sup> Meanwhile, Panaftel which was designed to link the OAU member States began a pre-feasibility study financed by the ITU and the German

13. Address by Mamadou Bobo Camara, Secretary General of the PATU at the Official Opening Ceremony of the *Seminar on the Proposed Regional Telecommunications Network by Satellite for Africa*, Kinshasa, 25 March 1980, at 5.

14. US-AID *Rural Satellite Program*, *supra* note 9, at 7.

15. Camara, Mamadou Bobo (General Secretary of the PATU). Address to the *Second United Nations Conference on the Exploitation and Use of the Outer Space (UNISPACE)*, Vienna, Austria, 12 August 1982, 7.

16. Simpoire, Mamadou. *supra* note 15, at 3.

Society for Technical Cooperation. This study was commissioned at the time when the Panafel Coordinating Committee meeting in Geneva encouraged an agreement between the ITU and the Economic Community of West African States (ECOWAS). The ITU was commissioned to carry out several studies and surveys of microwave links, a satellite earth station and a few telephone switching centers in West Africa.<sup>17</sup>

All these studies, and, more particularly, the AFROSAT and AFSAT projects, were undertaken at a time when international relations were strained by the dominated nations' call for a new world information order and a new international economic order. An unprecedented offensive was launched by the united front of the non-aligned countries during the UNESCO meetings. At the United Nations the same tense atmosphere prevailed. This episode of the international class struggle, whose stake was and still remains a balanced share of the communications resources and technology worldwide, were a rewarding effort for many dominated countries willing to take a political advantage of the situation. Whichever tactical considerations were then on Africa's political agenda, the compromising stand of most African countries and the lack of coordination of their positions in the international fora was an outstanding fact. Black Africa's surprising silence at the 1979 WARC should be traced to a regrettable error of judgment concerning the future implications for a region which lacks a resource as vital as the frequency spectrum.

Routine meetings multiplied in Africa during the year 1980 with the exception of two gatherings: the UNESCO Intergovernmental Conference on Communications Policies in Africa (AFRICOM) held in Yaounde, Cameroon on July 22-31, 1980, and the Second Special Session of the Conference of Chiefs of State and Government (CCSG) held in Lagos (April 1980). The UNESCO Conference, attended by twenty-eight Black African countries (out of 54 African states), adopted the *Yaounde Declaration* calling for more justice in the world economic and communication orders as well as for collective self-reliance, modernization and democratization of African communications policies.

The declaration was worded in such a manner that everyone – 'radical' as well as 'moderate' countries – would be satisfied. Recommendations 18 and 19 of the Declaration placed the ITU and the United Nations agencies in a leading position concerning the implementation of satellite communications projects in Africa. As to the Lagos Plan of Action established by the CCSG, it emphasized the necessity to 'establish a regional satellite communications system as a complement to the Panafel system' (Chapter IV, paragraph 238).<sup>18</sup> In 1981, a Regional Seminar on Remote Sensing Applications and Satellite Communications for Education and Development was held in March 1981 at ECA headquarters in Addis Ababa.

What all this meant was that strategies aiming at increasing levels of technology transfer in the area of satellite remote sensing from a few organizations and countries (Landsat and programs developed by the USA, USSR, India, the European Space Agency, Japan, etc.) to a large number of dominated countries were aggressively promoted and placed on the international agenda at a time when the dominated countries had not yet fully evaluated the benefits and the dangers linked with

17. Mak' Onyango, Otieno. 'African Nations See Continental Cooperation as Means of Enhancing Broadcast Development'. *Television/Radio Age International*, June 1980, A-44.

18. US-AID Rural Satellite Program, *supra* note 9, at 8.



the use of remote sensing technology. In Africa, U.S.-AID promoted the Landsat program throughout the continent, particularly in Kenya while the France-managed SPOT system (Système Probatoire d'Observation de la Terre) which was scheduled to be operational in 1984 was actively tested in Burkina Faso.

The success met by the Americans and the French in launching their remote sensing programs was partly due to the favourable openings displayed by the African countries. Indeed, subsequently to the ECA Council of Ministers' resolution 280 (XII) of February 1975, which called upon the Executive Secretary of the ECA to establish, as a matter of urgency, a remote sensing program for Africa and to take practical steps to establish an earth based regional center for receiving and processing data transmitted by remote sensing satellites, an African Remote Sensing Council (ARSC) was formally established with its headquarters in Bamako, Mali.<sup>19</sup>

### *Other studies*

In a 'Pre-feasibility Study on Appropriate Modern Telecommunications Technology for Integrated Rural Development in Africa'<sup>20</sup> financed by West Germany and carried out by DATACON and INTELPLAN a new version of a hybrid terrestrial and satellite systems approach was suggested. The study proposed the use of a technology that 'must be developed specifically for the African rural environment' and a 'specifically designed dedicated satellite system.'

Another project carried out in 1981 by European consulting firms (Satel-Conseil, ITM and Bureau Yves Houssein) under the auspices of Eurospace closely monitored radio and television broadcasting in 17 target countries (13 'French speaking' UAPT members and 4 neighbouring countries affected by the project). The study, financed by the European Development Fund, the French Aid and Cooperation Fund and the UK Ministry of Industry, concluded that the use of a regional satellite covering the 17 concerned countries may require 400 half-circuits in 1985 and 5,200 in 1994 for the national interurban traffic, and 6,300 half-circuits in 1985 and 49,200 in 1994 for rural traffic. These estimates represent an annual growth rate of 19 percent as compared with the 6.5 percent rate suggested by ITU.

The study known as the AFSAT project was ratified in Lome, Togo, in August 1981 by the UAPT Council and was presented as a basis for future studies. In the following years the UAPT, UPAT, and URTNA requested that Eurospace carry out a study on African countries to determine their needs.

Obviously, the dispersion of efforts and the omnipresence of rival consulting firms in the African regional or sub-regional satellite and telecommunications projects did not play in favour of the fifty-four OAU Member States ready to venture into the satellite business. The Conference of Ministers of Transportation, Communications and Planning which took place in Addis Ababa in March 1981 recognized in Resolution 17 the necessity for unifying the different studies on com-

19. *Ibid.*, at 4.

20. International Telecommunication Union. *Pre-Feasibility Study on Appropriate Modern Telecommunications Technology for Integrated Rural Development in Africa*. Geneva, November 1981.

munications satellites undertaken by African and international organizations. The Conference also laid out the steps that should guide the integration of these studies for designing a unique multifunctional satellite project.<sup>21</sup>

#### 1.4 AFSAT VERSUS AFROSAT

In a desperate effort to unify the wide variety of satellite planning policies adopted by several regional and sub-regional agencies proclaiming their mutual solidarity but nevertheless defending conflicting perspectives, the African countries initiated intense negotiations in 1982. Previous legal dispositions were fertile grounds on which one could rely upon for further efforts to unify positions. In that respect, two legal acts, in particular, were an important step. Resolution 03/T adopted by the Ministerial Council meeting held in Dakar in 1980 suggested that 'the AFSAT study should be a contribution of the UAPT to the continental satellite project supervised by PATU and the OAU.' In 1981, the Lome Council of Ministries of the UAPT members created an AFSAT Coordinating Committee (Comité de Coordination et de Suivi AFSAT-CCS) whose task was to follow up on information search activities undertaken by signatory countries and to present to national telecommunications authorities the technical and economic options foreseeable for orienting their policies.<sup>22</sup> The first CCS meeting held in Brazzaville, Congo (7-8 September 1981) adopted the status of the AFSAT Coordinating Committee and prepared recommendations concerning the feasibility of a continental telecommunications satellite system.

At the beginning of 1982 (12-30 January) the Second Conference of the PATU Plenipotentiaries held in Kinshasa discussed at length the AFROSAT project. Since this option was adopted by the Conference of the OAU Heads of State and Government in March 1978, the AFROSAT studies were not really convincing and did not capture the attention of the African governments. This failure can be traced to several factors and, in particular, to political and organizational problems. Politically, most of the African Heads of State did not believe in the immediate feasibility of a continental satellite system and preferred to direct their efforts towards the finalization of sub-regional projects (like the AFSAT system primarily controlled by the former French colonies). Furthermore the Pan-African Telecommunications Union, the only specialized agency of the OAU, was operating under severe budgetary constraints. The Pan-African organization was almost left with empty headquarters and without the basic software facilities.

On 16-18 March 1982, an Inter-Agencies meeting held in Addis Ababa was co-sponsored by the OAU, ECA, ITU, UAPT, PATU and URTNA. The principle of a multifunctional satellite was then reiterated. This signal as well as the one sent a year before by the Conference of Ministers of Transportation, Communication and Planning (Addis Ababa, March 1981) were directed to the ITU. This meant that the African countries lost confidence in the ability of the ITU to help them in implementing

21. Diallo, Assane Y, *supra* note 20, at 7.

22. *Speech delivered by the UAPT General Secretary at the Third CCS Meeting, Dakar, 5-7 January 1983.*

a satellite system that could properly serve the telecommunications needs of the continent. In addition, the ITU's pre-feasibility study on rural telecommunications in Africa raised the suspicion of most of the African experts involved in the negotiations at the continental level. The delegate from Mali, for example, who was sitting at the Intelsat Council of Signatories as Governor for Group II and who was also Director of Telemali, stated that the ITU did not want to work for Africa. He added that the notion of rural telecommunications advocated by the ITU was vague and that the ITU's study on rural telecommunications satellite was likely to be rejected because the African countries could not afford to pay for a satellite primarily designed for rural areas. The Malian expert also had the feeling that the ITU and West Germany (the funding country for the project) tried to influence African telecommunications policies.<sup>23</sup>

Such suspicions were not the fact of isolated personalities. In fact, following the June 1982 meeting where the OAU, ITU and ECA agreed on the terms of references of the AMTT/IRD feasibility study being undertaken by the ITU and after the First Meeting of the Inter-Institutions Coordination Committee on Appropriate Telecommunications for the Development of Africa under OAU's initiative (Addis Ababa, 25-27 August 1982), it became clear that many African telecommunications organizations did not agree with ITU's prescriptions.

The ITU pre-feasibility study on the application of modern appropriate telecommunications technology to rural and integrated development was completed in 1982. Conclusions of the study were presented at the Meeting of the Intergovernmental Experts (Addis Ababa, 22-26 March 1982). The objectives of the study were to assess the rural telecommunications needs (including radio and television) and to undertake technical and economic surveys for the implementation of a continental satellite system serving the rural and remote areas and subsidiarily the interurban links inside the countries and the intra-African links between OAU member states.<sup>24</sup> The ITU study also insisted on the urgent necessity for carrying out feasibility studies on a country by country basis in order to save time and to avoid the depreciation of the results obtained between the feasibility and the pre-feasibility phases.<sup>25</sup>

The First Meeting of the Inter-Institutional Coordinating Committee on Appropriate Telecommunications for the Development of Africa started in a tense atmosphere. In a message read to the assembly, PATU's General Secretary contested the legality of the meeting. This contestation was rejected by the assembly and the ITU study was discussed. The UAPT representatives looked at the study but they said they were not mandated to approve it. They recalled that UAPT's own Coordinating Committee had a study underway with different terms of references and that, besides, the ITU study should be discussed in a meeting between the different interested agencies. In their turn, the URTNA delegates rejected the ITU suggestions on

- 
23. Interview with Mr. Mamadou Keita Minemba, Washington, D.C., February 1983 and later on with top personalities at Intelsat.
  24. Organisation de l'Unité Africaine. (OUA) *Rapport de la Première Réunion du Comité Inter-Institutions de Coordination sur les Télécommunications Appropriées au Service du Développement de l'Afrique*. Annexe VIII, Addis Ababa, August 1982.
  25. OUA. *Télécommunications Appropriées au développement de l'Afrique*. Annexe VII, Addis Ababa, August 1982.

an exchange of radio-television programs by satellite and the implementation of a data transmission network (PADIS-SAT). The reasons given by the URTNA delegates was that the ITU's propositions on radio-television were already included in the UNTACDA's program and that their inclusion in the satellite project was not cost effective and would ultimately be rejected by the African countries.<sup>26</sup>

### 1.5 AN IMPORTANT TURNING POINT: THE SECOND AND THIRD AFSAT CCS MEETINGS

The Second AFSAT CCS Meeting (Dakar, Senegal, 18-19 May 1982) was an important turning point in the organizational undertakings of the African continent with regard to the implementation of a regional satellite system. For the first time, delegates from Ghana, Kenya, Nigeria and Sierra Leone met with their UAPT colleagues. The results of the survey performed by the British firm GTS for the U.K. Department of Industry in Ghana, Kenya, Nigeria and Sierra Leone were presented to the delegates. In the final communiqué the desire to harmonize the studies undertaken by the 'francophone' and 'anglophone' countries was once again restated. The parties agreed that the African telecommunications organizations would avoid commissioning similar studies in the same countries. Finally, the participants took note of the intention displayed by the French, British and Italian governments to support the AFSAT projects in a coordinated manner.<sup>27</sup>

Translating into facts their will to coordinate their telecommunications undertakings in Africa, the French and British did their best to accelerate the pre-feasibility studies under their responsibility in order to completely undermine the efforts deployed by the ITU/West Germany partnership and the growing influence of Intelsat. While the British presented the results of their survey at the Second AFSAT CCS Meeting, the French consulting agency (Satel-Conseil) made available at the Third AFSAT CCS Meeting (Dakar, 5-7 January 1983) the conclusions of a study entitled: 'African Telecommunications Satellite: Economic Impact of the Main Parameters in the Useful Load'. The study predicted that a high powered satellite is best suited to the African environment. It allows a better use of available frequency resources and it is cost effective with regard to total investments including the cost of the earth and spatial segments.<sup>28</sup>

In subsequent years, the AFSAT project was postponed. There was a long list of failures between the 1960s and the 1980s which culminated in the political difficulties experienced by the African States for implementing the Regional African Satellite Communication System (RASCOS). The last meeting held in Abuja under Nigeria's leadership in February 1991 showed once again serious political differences between so-called 'francophone' and 'anglophone' countries. More than any other country, Nigeria is committed to fulfilling its goals for national unity through the operationalization of a domestic communications satellite system fully integrated into this regional project. Nigeria's territorial size and the magnitude of popu-

26. OUA, Annexe VIII, *supra* note 24, para. 4.5.

27. Ndiaye, Alassane Dialy. *Final Address to the Second AFSAT CCS Meeting*, Dakar, Senegal, 18-19 May 1982, at 4.

28. Satel Conseil. *Système Africain de Télécommunications par Satellites: Impact Economique des Principaux Paramètres de la Charge Utile*. Paris, 1982.

lation pressure on already strained national resources compels her political leaders to find adequate solutions to the country's chaotic internal and external communications links.

## 2. Africa and the ITU

The ITU organized a meeting in Addis-Ababa, Ethiopia (October 20-November 10, 1972) where the results of a pre-investment survey were discussed. At this meeting, despite the fact that the West African region was not yet fully surveyed, arteries of the Panafel network were detailed in a design suggesting the linking of about 20,000 kilometers of international transmission routes across the continent and 18 international switching centers. Most of these links were designed as medium-to-high-capacity microwave relay systems.

The ITU also conducted several studies. One of them, called the ITU Plan of Lagos, was carried out in 1971 and was a general plan for the development of the regional network for the period 1970-1978. Traffic forecasts were provided on telephone, telegraph, and telex.<sup>29</sup> Another ITU survey of the Panafel network predicted traffic forecasts covering the period 1975-1990.<sup>30</sup> Some years later, a telecommunications engineer from Kenya, Mr. Philip Okundi would label these forecasts as inaccurate. He suggested that 'the actual traffic requirements were very much underestimated by as much as 50 percent or more.'<sup>31</sup>

The study carried out by the International Telecommunications Union and approved by the Third African Telecommunications Conference in 1980<sup>32</sup> suggested the following goals: a telephone density of 1.0 per 100 population and one public call office (PCO) per 10,000 rural population so that each inhabitant is within five kilometers of an installation. The ITU study suggested a target supply and demand of 41,260 PCOs by the year 2000 for a rural population totalling 413 million in order to reach a telephone density of 1.0 per 100 persons and one PCO per 10,000 persons 'just to meet general requirements,' i.e., a supply level well below the demands of self-reliant economies using optimal capacities of integrated telecommunications systems.

The determination of basic service needs for the period 1980-2000 has been postulated around three scenarios representing the rudimentary, normal and optimistic growth patterns. Under the Rudimentary Scenario telephone demand would increase by 72,400 additional telephones in 1980 and by 110,700 additional telephones in 2000 while the PCO form of supply would dominate and special user requirements would be met only selectively. Under the Normal Scenario additional telephones number 243,000 for 1980 and 378,540 in 2000. PCOs would represent only 6 percent of all rural telephones with an annual growth rate averaging 2.16 per-

29. ITU, *Plan of Lagos 1971: General Plan for the Development of the Regional Network in Africa 1970-1978*. Geneva, 1971.

30. ITU, *Meeting on Implementation of the Pan-African Telecommunications Network* Addis Ababa, 30 October - 10 November 1972.

31. Okundi, Philip D, *supra* note 30.

32. ITU, *Pre-feasibility Study*, *supra* note 20.

cent. The Optimistic Scenario targets 243,000 additional telephones in 1980 and 1,072,760 in 2000 with an annual growth rate averaging 7.81 percent.

The total amount of traffic which might be presently generated in Sub-Saharan rural Africa was estimated by the ITU study at around 20,000 *Erlangs*, an Erlang being a traffic unit indicating the number of all minutes per busy hours. The estimate was based on a rural population totalling 252 million inhabitants theoretically living in 390,000 villages. Village size would vary from 400 to 10,000 inhabitants. It was assumed that the smallest villages (18 percent of the total population) were located within 5 kilometers of other villages. According to projected estimates of the study the additional number of telephones required under the Normal Scenario would total 270,000.

The objectives determined by the ITU study raised many unresolved questions in the validity of ITU's recommendations. First, the presupposed growth trend (6.53 percent per annum) implied a model of economic growth which does not vary with time or which will not be affected by more than eventual social and political changes. Second, the 'realistic' target supply of one DEL per 100 inhabitants and one PCO per 10,000 rural population was, in fact, a status quo target which undoubtedly would have placed Africa's telecommunication systems in a difficult position, especially when one bears in mind the fact that the ITU's target for the year 2000 did not even match the 1979 telephone density in Latin American (3.5 DEL per 100 inhabitants), or in Europe (14.6 DEL per 100 inhabitants), let alone Japan (31.5) and North America (40.2).<sup>33</sup>

The ITU planned period (1990-95) for the launching of a regional satellite (AFROSAT) which would be owned and operated by foreigners indicated that up to the year 2000 the majority of rural populations would be, as stressed by the 1981 ITU report, 'without any telecommunications even of poor quality'.<sup>34</sup> This final conclusion of the report dispelled the validity of the general recommendations contained in the study. It showed, in any case, the limits of the telecommunications model then foreseen for Africa. That is why ITU's recommendations were rejected by most African countries decided to avoid the dangerous economic and political assumptions ingrained in ITU's report.

## 2.1 AFRICA'S REJECTION OF THE ITU PROJECT

The following points can be stressed to explain Africa's rejection of the project:

1. The project failed to reach the proclaimed objective 'of significantly increasing the supply of rural telephones' since by the year 2000 the 270,000 additional telephones planned for the hypothetical number of 252 million rural population would correspond to only 1.0 per 1,000 rural population (or 0.5 per 500 rural population) as compared to the present average of 1.0 line per 500 inhabitants in the 17 UAPT Member Countries.<sup>35</sup>

33. Luhan, Pierre, *supra* note 20.

34. U.S.-A.I.D. *Africa, Economic Growth Trends*. Washington, D.C., January 1969.

35. *Air et Cosmos* (France), No. 890, January 16, 1982, at 34.

2. The smallest villages with an average population of 200 people were ignored in the ITU estimates. The rationale behind such a decision was questionable because such villages numbered 232,000 in the ITU report and represented 46.5 million rural people, i.e., a workforce three times numerically bigger than that of France.
3. The then proposed number of additional telephones (1 telephone per village with a population of 400 to 1,000 people; 3 telephones per village with 1,000 to 4,000 inhabitants; and 9 telephones per village with 4,000 to 10,000 inhabitants) presupposed a model of economic growth based on the dichotomy between villages and urban centers when the on-going economic model should have been completely reversed if Africa was to avoid being totally recolonized by the year 2000.
4. The assumed average distance of 5 kilometers between the hypothetical number of 390,000 villages was not realistic, at least, in the Sahel where under the combined effects of national and intra-regional migration and recent ecological changes (drought, rainfall patterns, etc.), distances between villages have considerably increased during this past decade. Consequently, the national and international traffic forecasts made in the study were suspected since they did not take into account the continent's constantly changing ecological and geographical map.
5. The determination of basic service needs reflected in the Normal Scenario was based on the preconceived idea that one PCO per 10,000 rural population and 8 telephones per 10,000 special users (probably including individual users and official units like schools, hospitals, etc.) could have met demand in rural areas. Such estimates had nothing to do with objective measurements. They corresponded to a subjective assumption superimposed on seemingly objective measures.

This last recommendation could have left Africa with outdated telecommunications systems by the year 2000 when other nations would be industrializing outer space with powerful solar satellites and industrial units processing raw materials extracted from other planets.<sup>36</sup> Moreover, the use of 27,000 PCOs in 1980 and 41,260 PCOs in 2000 meant that even if a dedicated satellite system was used by the Sub-Saharan countries, national telecommunications systems would still heavily rely on hybrid systems dominated by very expensive microwave links. The limits of such hybrid systems have been revealed by the costly ventures observed in Nigeria, Sierra Leone, Kenya, etc.

In addition to these general observations one should refer to the specific critiques suggested by a Washington corporation – Satellite Systems Engineering, Inc. – in a 'Review of the ITU Study' prepared for Intelsat in March 1982.<sup>37</sup>

36. Bylinski, Gene. 'Space will be the Next Big Construction Site'. *Fortune*, February 26, 1979, at 63.

37. Satellite Systems Engineering, Inc. *Review of the ITU Study, Appropriate Modern Telecommunication Technology for Integrated Rural Development in Africa, Final Report*, SSE-R-82-109, Washington, D.C., March 15, 1982.

## 2.2 AFRICA AND INTELSAT

As a result of the lack of coherent telecommunications planning strategies and a poorly coordinated move into the communications satellite business, the African countries are facing one of the biggest dilemmas of the post-colonial era. Given the strategic importance of the telecommunications sector in their socio-economic development these countries are now obliged, under the pressing necessity to rebuild national networks, to make a drastic choice. They must choose between the uncertainties of domestic systems using Intelsat leased transponders and the prospect of using their own regional communication satellites for domestic and regional purposes.

Raphael Anasiudu detailed statistics showing that most of the African nations communicated via Intelsat more with their former colonial powers than with any other OECD nation. Further, the study suggested that the remaining part of communications taking place followed colonial background (i.e., 'francophone' countries communicating with other French speaking countries, former Portuguese territories clustering with other Portuguese speaking countries in Africa, etc).<sup>38</sup> I have updated some of Anasiudu's basic findings through a compilation and analysis of Intelsat's System Status Report for the early 1980s. *Table I* on page 148/149 indicates that the African countries used the Intelsat network in accordance with neocolonial ties linking them to dominant capitalist powers. While intra-regional traffic is negligible the volume of international telecommunications traffic (for telephone signals, data transfer and television broadcasting services) illustrates the scale of competition between dominant world powers and lesser powers within the African market place. A few exceptions (South Africa, for instance) are explained by the fact that other channels of communications are used by the Intelsat user country. South Africa is linked to the United Kingdom – the dominant imperialist power in the country – by a submarine cable. This explains why the United States accounts for most of the outgoing calls through the Intelsat system.

*Table II* (page 150) based on Intelsat's traffic data shows how the African countries used the Intelsat network from 1983 to 1987. These countries used roughly only 4,000 circuits for intra-African communications i.e., 15 percent of the total number of circuits for domestic and international communications. Using other sources, particularly AT&T figures, one can reach the same conclusions (see *Table III* on page 152). The major conclusions arising from these facts is that Africans do not communicate between themselves. The bulk of their international telecommunications traffic is directed towards former European colonial powers, the United States and Japan.

The African countries' access to political independence in the early 1960s coincided with two important events in the international political arena: the Cold War was still commanding the march of events and the battle for space conquest reached a new height with the duopoly exercised by the two super powers. In August 1971, the Intelsat Agreement and the Operating Agreement replaced the interim arrangements.

---

38. Anasiudu, Raphael. *Intelsat and Africa*. Ph. D. dissertation, USA, at 114-115.



According to Pelton, the involvement of giant multinational corporations such as Hughes Aircraft, Philco-Ford (now Ford Aerospace and Communications Corporation), TRW, Lockheed, General Electric, British Aircraft, Aerospatiale, Thomson CSF, Meyser-schmidt-Bolkow-Blohm (MBB), General Telephone & Electric, ITT, Maconi, Siemens, Nipon Electric, Mitsubishi and many, many others in the satellite and earth stations markets signalled the near disruption of the international market controlled by Intelsat 88. It also meant the proliferation of regional satellite systems controlled by these multinational corporations.

For national security reasons member countries of the Organization for Economic Cooperation and Development (OECD) decided to launch their own systems. Japan and the European countries, in particular, successfully designed their own systems while the construction of the French-German vehicle Ariane largely threatened for the first time the monopoly held by the U.S. National Administration Space Agency in commercial communications satellite business. In the meantime, the Arabs and the Africans were actively planning to develop regional systems while India, perhaps more than any other Third World country, was animated by a powerful will to design and operate her own hybrid communications satellite despite a major presence of Ford Aerospace in its national project.

### 2.3 GO SATELLITE?

Given the desperate situation prevailing in their countries, particularly at the level of their terrestrial telecommunications facilities, the African countries decided to 'go satellite' hoping to solve immediate and short term problems. The advantages gained by the African countries in their commitment to Intelsat's institutional and commercial agreements are of two orders:

1. The leased transponder option and the SPADE system available in the Intelsat system are short term alternatives to Africa's urgent need for increasingly growing domestic and international telecommunications traffic.
2. The immediate financial gains offered by the relatively cheap rate of access to the Intelsat network are an advantage that cannot be matched by the use of conventional terrestrial technology.

In the past decade, the number of African countries using Intelsat services has steadily increased. Such a massive participation in the Intelsat system, however, causes serious problems with regard to Africa's national security and long term telecommunications needs. With an 80 percent increase in 1982 in the number of Intelsat transponders leased for national systems, which accounted for 10 percent of Intelsat's total revenue, Africa paid a high price for its communications by satellite. A rented transponder costs around 800,000 dollars per year in 1984. The total amount of money spent by the African countries on the installation of earth stations, for example, is considerable. With a total number of 39 standard A stations valued at 700 million U.S. dollars, and 25 standard B stations at a unit price of 4 million dollars, the African countries disbursed over the past two decades a total sum close to one billion U.S. dollars. If we add to this expenses necessitated by non-standard domestic earth stations (total number: 110), the maintenance and operation costs of the

national space and ground segments, etc., the total amount of money spent by the African nations is considerable, especially when compared to the total capital (1 billion U.S. dollars) invested in 1978 by 102 countries in the Intelsat network, including satellites, earth stations and installations.<sup>39</sup>

The situation is all the more favourable to the launching of an African satellite system given that the recent development of reusable rocket launchers, such as NASA's Columbia Space Shuttle, could lower the launching and installation costs of a regional satellite system by two-thirds.<sup>40</sup> Further, financially, it would be much more profitable for the African countries to pool their capital resources and to spend it in their own regional hybrid system rather than investing in Intelsat's transponder lease services.

Technological self-reliance cannot be achieved by the African countries in the present framework of Intelsat technology transfer policy. In almost three decades of active participation in the multinational satellite organization the African countries have still not been able to take advantage, even on a modest scale, of the technical and training cooperation scheme made available to all Intelsat signatories. Besides, the lack of direct involvement in designing, operating, and maintaining their own satellite system unfortunately delays the necessary acquisition of scientific and practical experience in this strategic field. The benefit of important side effects generated by autochthonous communications satellite activities in the African countries is also delayed. For instance, the development of communications satellite activities is accompanied by steady advances in computer hardware and software given the central role played by computer assisted programs in any satellite venture.

By controlling their own regional system, the African countries can reach a greater flexibility in the use of the satellite system, gaining more effective coverage of their territories and better adaptability to thin route conditions prevailing in large areas of the continent.

### *The use of the Gorizont system*

It could be advantageous for the African countries opting to receive the services of the geostationary *Gorizont* satellites at a cheaper rate to join in the Soviet-controlled *Intersputnik* system. Many African countries (Libya, Angola, Mozambique and Madagascar) tried to seek membership in the *Intersputnik* system. Other users like Algeria were not members of *Intersputnik* but used *Gorizont* satellites to communicate with *Intersputnik* Member States.<sup>41</sup> It seems that up to the Gorbachev era, the African countries have not used *Intersputnik* services for political reasons coupled with the fact that the Soviet system was not attractive in its early version with the non-geosynchronous and expensive Molniya 2 series of satellites.<sup>42</sup> The African countries will sooner or later be forced to weigh the cost-effectiveness of their participation in the Intelsat system especially with regard to the new conditions created

39. *Ibid.*, at 77.

40. 'From Africa by Satellite', *AED*, September 1983, at 8.

41. Lemasters, John N. 'Earth Station Market. The picture Today. Prospects for the Future', *Satellite Communications* (USA), Nov. 1978, at 30.

42. *AED*, 30 September 1983, at 8.

by the existence of the 'new look' displayed by the Intersputnik system. Three factors will have a decisive importance in their choice.

Due to the fact that Gorizont satellites are more powerful than the Intelsat V satellites, Intersputnik compatible earth terminals can use 12-meter diameter antennas.<sup>43</sup> In addition, Intersputnik services are considerably less expensive than Intelsat's. 1984 estimates suggested that the lease of one Intersputnik voice circuit costs 30,000 gold francs (11,615 U.S. dollars) annually while the same capacity acquired from the Intelsat system costs 50,000 gold francs (19,358 U.S. dollars).<sup>44</sup> Finally, Intersputnik has expanded its services on a global scale (Stations 4 location and Station 5 location are respectively positioned above the Atlantic Ocean and the Indian Ocean).<sup>45</sup> It should be added that with the active experimentation of what is believed to be a prototype of the Soviet space shuttle, the USSR will soon be in a position to significantly challenge the Western world in the race for the control of the international satellite market. A U.S. congressional report has suggested that the Soviets are developing a 10- to 20-ton space vehicle that could grow to a 'heavy lift reusable shuttle able to carry twice the payload' that the U.S. shuttles Columbia and Challenger have taken into orbit.<sup>46</sup>

#### 2.4 NO REGIONAL SATELLITE SYSTEM

Another factor that can be seen as a disadvantage to Black Africa's exclusive participation in the Intelsat system lies in the fact that the African countries are wasting their frequency resources either by not using them or by reprehensible complacency. In any case, the danger of exclusion from the global use of the frequency spectrum resources<sup>47</sup> is a real one, as revealed by the successive World Administration Radio Conferences (WARC), especially WARC 1979. Since the time when the International Telecommunications Union recognized in 1973 that 'radio frequencies and the geostationary satellite orbit are limited natural resources' (Art. 33 of the Malaga-Torremolinos Convention), the battle for world leadership in communications matters has been largely shaped by the technical, legal, financial and military aspects commanding the control of the geostationary arc and the radio frequency spectrum.

The Minister of Information of the Sudan portrayed this conflicting situation very well when he said that the developed countries have 90 percent of the spectrum and 10 percent of the population while the Third World countries have 90 percent of the population and 10 percent of the spectrum.<sup>48</sup> The use of the orbit-spectrum resource should be very high on the telecommunications policy agenda of the African countries. The longer these countries wait before either directly using or protecting their share of the geostationary arc the more likely they will have to negotiate the use of this resource under very unfavourable conditions.

43. Picard, Theo. 'Intersputnik: The Eastern Brother of Intelsat', *Satellite Communications*, August 1982, at 39.

44. *Ibid.*, at 40.

45. *Ibid.*, at 42.

46. *Ibid.*, at 44.

47. O'Toole, Thomas. 'Craft recovered in Black Sea...', *the Washington Post*, Dec. 28, 1983, at A12.

48. *Inter Media*, Vol. 7, n° 5, Sept. 1979.

This situation is aggravated by Africa's absence of involvement in an autonomous regional satellite system and the weakness of her participation in the ITU frequency allocations for satellite communications. The GEOSTATIONARY orbit will soon reach a state of near saturation given the proliferation of domestic, regional and military communications satellites in an arc already showing signs of saturation and/or misutilization of the orbital slot locations.<sup>49</sup> The 4/6 GHz location already shows that saturation of the orbital arc is near capacity while the 11-12/14 GHz band indicates a state of advanced saturation when the projected use of the geostationary allotments will be effective.

Current forecasts show the acceleration of the trend towards saturation of the geostationary arc in the C-Band and the K-Band. This does not leave any doubt as to the present and future overcrowded aspect of the geostationary orbit although recent technological advances do suggest that the advent of giant platforms and new possibilities offered by multifunctional interfacing between several satellite systems will preempt current concerns on the overcrowding of the geostationary orbit.

Even if this scenario became entirely plausible, the African continent could be left with no more than two orbital parking lots planned to be used by Nigeria and two other allotments reserved by the Arab countries including the Northern African countries all participating in the Arabsat system. Thus, with an estimated population of 600 million people, one of the largest emerged landscapes and the richest reservoir of natural resources in the world, Black Africa will have at best at her disposal in the 1990s three orbital slot locations (two locations for the more than hypothetical launching of the Nigerian National Satellite 1 and 2 series and possibly another orbital location for the planned RASCOM system which is already weakened by conflicting African policies) on a theoretical total number of 1,800 orbital 'parking spaces'.<sup>50</sup> According to the U.S. based *Satellite Communications* magazine, the number of commercial, experimental, meteorological and military satellites may have reached by 1990 a grand total of 1,186 vehicles, that is to say, nearly 66 percent of the available geostationary resource.<sup>51</sup> By the end of the century, therefore, the Black African countries' share of the geostationary arc may represent only 0.3 percent of this resource!

## 2.5 THE ATTITUDE OF THE WESTERN WORLD

The Western capitalist world basically perceives its spatial and communications satellite undertakings as a replica of the strategies of telecommunications penetration enforced during the mercantilist and the monopolist periods when terrestrial telegraph and telephone networks and submarine cable lines were used as technological tools meant to powerfully back European military, commercial and political interests in colonized countries. Intelsat was conceived in this line of thinking. It used to be a safe financial venture, particularly at a time when the dominated coun-

49. Smith, Delbert and Welgent, Robert. 'The Saturation Point', *Satellite Communications*, *supra*.

50. Morgan, Walter L. 'Satellite Notebook # 31, Geostationary Satellite Locations' in *Satellite Communications*, December 1983, at 28 *et seq.*

51. Dorcrocq, Albert (ed.) *Telecommunications pour le ciel*. Paris: *Sciences et Avenir/Cosmos Encyclopedia*, Tome 3, 1971, at 327-328.

tries did not have the technological means and did not meet the political conditions for self-reliance in the communications satellite business. From an economic standpoint the Intelsat formula was a powerful incentive to strengthen the commercial activities between the Western world and the dominated countries.

A colonial pact regulates relationships between Africa and the capitalist world. While the French are doing their best to strengthen their political and commercial ties with their former African colonies, the English and Americans are trying to have a say in Nigeria's attempt to launch a dedicated satellite. However, within the European Space Agency the French and English and their West European partners are willing to jointly control the design, operation and maintenance of the planned launching of RASCOM, a regional satellite system conceived as the technological backbone of a European-African entity.

After missing the Canadian opportunity, the Europeans are extremely anxious to keep under control their African preserves.<sup>52</sup> In this regard, the competition between the U.S. Space Shuttle and the French launcher Ariane takes primary importance. The United States, and particularly COMSAT – Intelsat's godfather – does not favour the existence of a regional system in Africa because it could well mean Intelsat's collapse and a hard time for the U.S. telecommunications industry. The Reagan administration's move towards the opening of the international satellite communications market to U.S. private telecommunications firms has generated serious contradictions between Intelsat and corporate America.<sup>53</sup> The conflict has been crystallized around the merciless struggle between Orion Satellite Corporation and Intelsat.<sup>54</sup> In a study prepared for Orion by Dale N. Hatfield Associates of Boulder, Colorado, Orion refuted Intelsat officials' argument that the consortium's averaged rate structure operated as a subsidy to Third World members and that this would be destroyed by approval of Orion's proposal to build and operate its own trans-Atlantic satellite system.

Before the accusation that Intelsat is not subsidizing rates for its poorer members as it claims and that the subsidy may be flowing from Third World countries to the capitalist world, the Comsat and Intelsat officials have taken the following positions:

1. Intelsat planning hinges on the concept of a single global system. Over two and a quarter billion dollars is being invested in future systems, and the viability of this investment ... rests to a large extent on the transatlantic traffic. Fragmenting that market would entail serious financial consequences for Intelsat members and non-member users alike in the form of presumably hefty rate hikes.<sup>55</sup>

52. *Satellite News* Washington, D.C., April 18, 1983, Vol. 6, n° 16, at 5.

53. The vicissitudes of this struggle have been detailed in the following issues of *Satellite News*: 'Intelsat Tells State of Threat Orion Poses; Federal Interagency Group Takes up Issue', April 18, 1983, Vol. 6, N° 16. 'Orion Says Intelsat's Subsidies Don't Benefit Third World Members', September 19, 1983, Vol. 6, n° 37., at 3-4. 'Charyk Raises International Trade, Foreign Policy Concerns Over Orion, I.S.I.', November 7 1983, Vol. 6, n° 44, at 3-4.

54. *Satellite News*, April, 18, 1983, at 5.

55. *Satellite News*, November 7, 1983, at 3.

2. U.S. approval of the private satellite corporations applications to build satellite systems for the North Atlantic would surely damage U.S. international and foreign relations interests with the Soviet Union gaining from the development due to its Louch series of eight satellites intended to provide services comparable if not superior to Intelsat.<sup>56</sup>
3. From a financial and economic standpoint it would be a disaster for the interests of the United States government and its telecommunications industry to open the international satellite market to private competition.

Indeed, before the U.S. Senate Foreign Relations Committee, COMSAT President Joseph V. Charyk pointed out that the United States greatly benefitted from Intelsat's growth. Since 1964, about 939 million U.S. dollars have been spent or allocated for satellite construction and more than 83 percent of that (778 million dollars) has gone to U.S. manufacturers.<sup>57</sup> In addition, NASA has been paid some 700 million dollars to launch these satellites. COMSAT's President added that the United States contributed about one-fourth the capital costs of Intelsat, yet received over 75 percent of the contracts it then awarded. These contracts significantly contributed in placing the United States aerospace industry in a worldwide leadership position. Further, Charyk said, 'there is no question that our involvement in the Intelsat system has benefitted the United States significantly in our balance of trade'.<sup>58</sup> This testimony shows how important Intelsat is to U.S. commercial and strategic interests. It also shows the considerable profits made on the back of Third World countries and particularly the African countries located in the Atlantic region.

### *Why Intelsat?*

In return, the benefits gained by the African countries in the Intelsat venture are rather meager. The Intelsat Governor for Africa (Group II) and also former Chairman of the Malian Telecommunications Office in the early 1980s, suggested that Intelsat is not equipped to cover Africa's domestic communications needs. He further contended that from a national security standpoint the situation could have damaging consequences for the African countries unable to cope with increasing telecommunications needs which are crucial militarily, economically and from an administrative standpoint. The African representative also questioned what he called the 'shameful axes' referring to the telecommunications axes between Paris or London and the major African capital cities.<sup>59</sup> Pushing this reasoning to its logical conclusion, an Ethiopian expert and Intelsat staff member raised the following question: 'If

---

56. *Ibid.*

57. Kelley, Michael, 'Debate Continues Over Future Intelsat Role in Domestic/Regional Satellite Communications,' *Satellite Communications*, September 1979, at 28.

58. More specific details are available in Kelley's paper above cited. *See also*: Anasiudu, R., *supra*, note 38.

59. Author's interview with M. Mamadou Minemba Keita, Washington D.C., 1984.

we cannot design our own spacecraft, communications satellites, etc., are we really independent'?<sup>60</sup>

The question is all the more pertinent that before international appetites the African countries are virtually defenseless and do not have much choice between the 'global domestic satellite system' (Glodom) concept suggested by the ITU and the 'global village' formula advocated by Intelsat. The ITU position is that 'Glodom would use dedicated transponders or satellites to provide thin-route telephony and other services to rural areas of developing countries'. The ITU further contends that Glodom would satisfy a need not only currently addressed 'since at this time Intelsat isn't effective or economical for many domestic service networks required in some Third World countries.' This means that the low Intelsat edge EIRP requires large antennas raising earth station costs up to 2 million U.S. dollars each in 1984.<sup>61</sup>

The central objective of Intelsat is 'to design, build and operate a system of geosynchronous satellites and supporting ground facilities that supplies public telephony, data, and television service to its 109 member nations'. The Intelsat Agreement has established a policy of providing domestic space segment requirements under one of three possible allotment agreements: as a five-year lease for a full 36 MHz transponder, as a one-year, non-preemptible leased service, renewable each year, and on a circuit-by-circuit basis.<sup>62</sup>

Before the threats of regional communication satellite proliferation and the controversial aspect of the famous Article XIV in the Intelsat Agreement,<sup>63</sup> the Intelsat authorities are anxious about the future of the organization.

Almost immediately after being elected Director General of Intelsat, Richard R. Colino warned the international arena that 'it should not come as a surprise that Intelsat is concerned that it might have to raise rates and suffer revenue shortfalls if other systems are permitted to serve the heavy traffic streams, such as the North Atlantic'. The prospect for higher tariff rates in Intelsat delivery services could well mean that in the 1990s the African countries would not be in a position to meet their growing telecommunications needs, especially if the African countries are not able to launch their own regional communications satellite system by the end of the millennium.

A final point may be raised in the review of the disadvantages associated with Intelsat monopoly on the communications satellite traffic needs of the African countries. It relates to Africa's national security demands and the extent to which they are met in the framework of the Intelsat system, especially in the face of attempts by the Pretoria regime in a recent past to monitor or even block telephone calls from

60. Author's interview with Mr. Aemro Araya, Intelsat staff member, Washington, D.C., January 12, 1982.

61. Martinez, Larry F. 'Butler Ushers ITU into the Eighties'. *Satellite Communications*, March 1983, p. 63.

62. Article XIV (d) of the Intelsat Agreement stipulates that:  
'To the extent that any Party ... intends individually or jointly to establish, acquire or utilize space segment facilities separate from the Intelsat space segment facilities to meet its international public telecommunications service requirements, each party ... shall consult with the Assembly of parties ... to avoid significant economic harm to the global system of Intelsat'.

The concept of 'significant economic harm' to the Intelsat is extremely vague and leaves the door open to all kinds of interpretations (see the February 1979 issues of *Satellite Communications*).  
63. 'Intelsat and the Future', *Satellite Communications*, October 1983, at 45.

Burundi whose communications signals were routed via earth stations located in the country of apartheid. It has also been suggested that the U.S. National Security Agency has placed receiving antennas in virtually all the 'hot points' where the international calls routed in the United States through the Intelsat earth stations are received. In this manner, the NSA monitors all the outgoing and incoming communications signals presenting a definite significance for U.S. 'national interest', a notion including spying activities from an economic, military and political standpoint.<sup>64</sup>

## 2.6 AFRICA'S POSITION IN THE BATTLE FOR WORLD LEADERSHIP

Where does Africa stand in the battle for world leadership through the control of scientific research in communications matters? One would hardly find elements of answers to these questions in the ongoing African telecommunications policies. It would be a serious mistake to separate discussions on national security from any present or future telecommunications venture in the African continent. Africa's massive participation in the Intelsat system must, therefore, be evaluated with regard to the protection of the African countries' national security interests. This all too often forgotten truth appeared clearly in the 1970s when Nigeria, with the support of Libya, firmly envisaged to require a West African satellite for use with its domestic earth terminals and for lease of satellite transponders to other West African countries. The project fell short, however, because Nigeria was faced with the consequences of oil recession on its cash reserves and also because the international banking community was reluctant to finance a venture that would have been a threat to the interests of Intelsat and the multinational corporations controlling the African telecommunications market.

The confusion presently surrounding Africa's venture in the satellite business is aggravated by the fact that until very recently the AFROSAT and AFSAT projects were a political dividing line between 'francophone' and 'anglophone' African countries despite official proclamations on African unity. It is unlikely, according to the best estimates that the RASCOM system will be operational before the year 2000 at the earliest. By 1985 the African countries had already leased a total of at least 36 transponders which represented the largest part of leased capacities in the Intelsat system. The implication of such a development was a new stage towards Intelsat's increasing influence on African telecommunications systems and policies. The European nations have already come to the conclusion that their full participation in the Intelsat system is harmful to their economic development and national security requirements. Consequently, they are actively programming, or have already completed launching of their own regional and domestic communications satellite systems. Through the RASCOM project, the African countries are somewhat ingraining their action in the international trend commanding the evolution of satellite communications ownership and control.

---

64. More details in Bamford, James. *The Puzzle Palace*, Boston: H. Nifflin, 1982.



### 3. Panaftel: A Poisoned Heritage

Total investments required to finance the proposed Panaftel network, which would entail the establishment of 20 international switching centers and 33 international telex switching centers supported by around 30,000 km transmission routes consisting of high frequency, microwaves and coaxial cable systems, were estimated at a cost of 100 million U.S. dollars (1972). More recent figures suggest that such a network would cost at least twice as much as the initial estimate. If one includes the project of the 5,000 km submarine cables linking Casablanca to Dakar, Abidjan and Lagos, and the investments required by the 38 Intelsat earth stations equipped with A or B size antennas as of 1982, as well as a growing number of African countries planning to lease Intelsat transponders for domestic use, the cost of an integrated telecommunications network could cost to the African countries several billion dollars at the turn of the century. For the time being, the project is progressing slower than predicted, in the face of the reluctance of bilateral lending institutions to finance ventures with a supposedly low internal rate of return and the handicap represented by the fact that the countries negotiate separately the construction of Panaftel's different sections.

By the end of 1981, it was expected that the Panaftel network would have 40,000 km of microwave systems in operation which would have corresponded to an increase of more than 12 percent in a decade.<sup>65</sup> In order to evaluate the meaning of these figures one must refer to the historical circumstances under which the Panaftel network was created, and more specifically to the terms of the negotiations which took place between the African countries and the other interested parties. Before the unwillingness of the world's major lending sources to finance the construction of the Panaftel network on a multilateral basis and under reasonable financial terms, the African countries accepted to negotiate the Panaftel project on the basis of bilateral agreements. This implied costly risks of conflicting decisions in the design of the network and the promotion of intra-African communications on a sub-regional scale. Besides, the division of Africa into zones of influences persisted with the project while regions already well provided with telecommunications services received all the benefits to the detriment of the more disabled countries and areas.<sup>66</sup>

Another major shortcoming of the Panaftel project was the absence of serious concern for the incompatibility of new techniques with existing systems<sup>67</sup> and the absence of manufacturing capabilities even for some types of peripheral equipment and some basic plant like poles, cable ducts, insulators, etc. The impossibility to build from a locally generated technology internal and external structures (towers, air conditioning ducts, earthing accessories, etc.), cables (open wire, underground cables, power cables, open and insulated) and several other engineering tools needed in telecommunications installation and maintenance, or essential equipments like switching devices, were as many sources of weakness and confusion.<sup>68</sup>

65. ITU. *Meeting on the Implementation of the Pan-African Telecommunications Network*. Addis-Ababa (30 October-10 November 1972), 728.

66. *Ibid.*, at 80.

67. ITU, Booklet N° 13, *Panaftel - The Pan-African Telecommunications Network*, Geneva: 1979, at 15.

68. *Ibid.*, at. 15-16.

But such requirements did not receive much attention during the implementation phase of the Panaftel network. Instead, very unrealistic targets were set for the network during the United Nations Communication Decade in Africa.<sup>69</sup>

A major issue of concern in the Panaftel project and the Transport and Telecommunications Decade was the improvement, or more exactly the creation of a rural network in Africa. A report analyzing the Decade of Transportation and Communications in Africa has suggested that telephone has made a negligible impact on areas with a low population.<sup>70</sup> The report pointed out the fact that 'over 300 million people, or 80 percent of the population, live in rural areas, but the network has been concentrated in major cities and towns.' Consequently, one of the main objectives of the African countries is the extension of public telecommunications service to the rural areas as well as urban centers.

The International Telecommunications Union has proposed the provision of one public call box for every 10,000 people in the rural areas if the telecommunications sector can expand at a rate of 14 percent per year for Black African countries. Despite the modesty of such a projection, the probability of a significant expansion of African telecommunications is low (the projected rate is around 10.4 percent for the whole of Africa according to the United Nations Economic Commission for Africa).

Before these uncertainties one question remains unanswered: if national economies are not improved, how will it be possible to build a Pan-African network in the rural areas and where will one find the required funds? If these funds are provided by external sources, will the goal of 1 public telephone box for 10,000 people significantly improve the telecommunications demand in the rural areas, and in this case, will it be realistic to expect an expansion of telecommunications demand in the same areas? One may add that the PANAFTEL project as it is presently known leaves very large areas in Northern Mauritania, Mali, Niger, Chad, the Central and Southern Sudan, the Central African Basin, Central and Northern Zaire, the entire Far Eastern part of the Horn of Africa without any basic terrestrial telecommunications facilities. Furthermore, the project ratifies the *de facto* partition of the continent into two areas: the Maghreb countries (plus Egypt, the western Sahara, the Sudan and possibly Libya) more inclined toward the ARABSAT project, and the so-called Sub-Saharan Africa where the PANAFTEL system operates.

Finally, one can be assured that if all the hypothetical funds to implement the project were ever received, the debt incurred by the African countries would not have been repaid beyond the year 2020. The PANAFTEL project may seriously aggravate the external debt of Africa and, consequently, block the investment capacities of these countries in other vital sectors.

### 3.1 THE FUTURE OF THE PANAFTEL NETWORK

It is difficult, after having identified the facts commanding Panaftel's evolution, to be enthusiastic about the future of the network. Beyond the constraints listed above,

69. In *Telecommunications Journal*, 47: XII, 1980, at 722.

70. *Inteletrade*, November 1979.

there are many fundamental questions determining the lives of millions of Africans and the future of several generations to come which are not addressed by the Panaf-tel project as it is presently conceived. These questions are the following ones:

- Who will provide the hundreds of million dollars needed to complete the project and where will the resources come from?

It is clear that the already huge external debt of the African countries, the blocked character of their economies and, before all, the state of extreme material and moral poverty in which evolves the overwhelming majority of the African peoples do not plead in favour of an economic recovery in a visible future. The African telecommunications authorities know it and the African governments are aware better than anybody else of the economic abyss into which the continent is plunged. But senseless hopes and carelessly conducted telecommunications policies fed by external pressures coming both from multinational corporations, financial lending centers of the capitalist world and from the dominant spheres of the African societies have led to the belief that the widely practiced neocolonial policies and the outward-oriented looking communications networks of the African countries could give birth to a significant development of telecommunications systems and national economies.

While this golden dream is literally falling apart before our eyes, capital hunting in the international lending circles is still in practice and is even perceived as a panacea by planning authorities more anxious to fulfill a mythical vision – the construction at all costs of a Pan-African network emptied from any meaningful dimension – than to courageously weigh the unfavourable terms and certainly the devastating effects of a network that would not meet the needs of the rural masses. Such a network would indeed not be of much utility in improving low illiteracy rates, pressing long distance telephone needs and television demand in countries where this medium could be of a tremendous help in the educational, political, social and cultural spheres.

The supreme failure for the African rural world would be to finance the Panaf-tel network without the farmers, fishers and herders being able to benefit from increased telecommunications services (more PCOs per locality, less expensive telephone and telegraph rates, increased level of intra-rural telecommunications, fast delivery of meteorological data to improve agricultural practices, health delivery units backed by an efficient telecommunications system, etc., etc.). The present state of impoverishment of the rural masses and the aggravating disparities between the rural areas and the cities may not allow the African rural world to be in a position to accept the considerable efforts required by Panaf-tel's completion.

Consequently, the only available source of financing remains the traditional channels provided by the World Bank, the European Economic Community, private businesses, the multinational corporations and countries interested in telecommunications investments in Africa. But as we all know, the economic recession prevailing in the capitalist world coupled with recent turmoils in international relations will not make possible the advent of spectacular investments in the African telecommunications market. Then, to know where the money will come from to finance the Panaf-tel project will truly remain a jigsaw puzzle as long as one locks oneself in the false dialectics of the unrestrained recourse to foreign 'help.'

- In what ways should the Panaftel project contribute to the economic development of the region?

It is difficult from now to speculate on Panaftel's future impact on the African economies in the XXIst century. However, one certitude remains: if the network's present conceptual framework is maintained, at the beginning of the next century the African telecommunications network would not have any function but to link capital cities built *à la Brésilienne* or at the image of Abidjan and Nairobi while the rural areas would suffer from isolation and extremely poor telecommunications services.

But more importantly, we would have failed to build a network in conformity with the objectives of economic self-reliance because the Pan-African telecommunications network would be the extension of the old colonial routes confined in the coastal areas and the 'useful' agricultural and mining areas. Moreover, the Panaftel network would be nothing but a kind of a Trojan Horse whose function would be to link the African networks to the 'Wired World' or the 'Global Village'. Such links would assure to world capitalism the control of Africa's military space and the accelerated pillage of the local raw materials and agricultural products.

- What do we need the Panaftel network for?

Depending on which side of the telecommunications spectrum one is speaking from and who takes position on the issue several options are available.

From the users standpoint the network should speed up the level of communications within the rural world. The Senegalese farmers may need to know more about the agricultural conditions of the Pongwe people in Gabon and vice versa. The Niominka fishermen living in the Salum Islands may be anxious to have a better knowledge about the fishing traditions, the level of production and the price markets in the Madagascar Islands. The Erythrean shoemaker would be surely happy to use the network in order to be approvisioned with good quality skins at competitive prices by one of his Yoruba colleagues in Nigeria. Instead of walking or at best riding a donkey to reach in emergency the closest medical center located several dozen miles away the African woman living in the Sahelian area would surely appreciate being able to quickly reach a doctor either by telephone or through a radio link.

These down-to-earth preoccupations are those of the majority of the potential users living in the rural areas. Consequently, the cornerstone of any planning strategy aiming at launching the Panaftel project should be the satisfaction of the basic telecommunications needs of the African masses. The ultimate objective of such a project should be to alleviate the sufferings of all orders suffocating the African rural world by increasing the level and speed of communications, the level of productive forces and contributing in the transformation of the global mode of production.

In order to reach such goals, the telecommunications planning efforts of the next decade should not be concentrated on the rural areas alone. The African countries cannot afford to operate a satellite system for the rural world alone for all the reasons raised earlier. A hybrid satellite system doubled with microwave, high frequency and submarine cable systems should certainly be more appropriate to the African conditions. But microwave systems should not be implemented in different arteries just because external pressures would have imposed their presence in the

network. Microwave systems are expensive and they must preferably be launched in areas where a high level of traffic density would allow their competitive existence.

– *Who will operate the Panaftel system?*

One of the important externalities that one is rightfully inclined to expect from the Panaftel system is the qualitative and quantitative improvement of the personnel operating the network. The tragic lack of qualified manpower, particularly highly trained engineers, pleads in favour of a more aggressive and skillful planning of professional education in telecommunications studies. The rare workshops animated by the ITU for the training of mid-level engineers cannot solve this delicate problem nor can the educational programs intended to give a practical training to African students attending the few telecommunications schools existing in the continent. It is indeed urgent that the narrow-minded approaches confining technical studies to the management and operation of the existing high frequency circuits dominating the network be reoriented in response to the pressing necessity for redesigning the content and purpose of applied research and professional training in the African telecommunications schools.

There is no royal way to reach technological and economic wealth but to be off the beaten track and to be committed to knowledge acquisition and apprenticeship. Apprenticeship is ultimately linked with the pitfalls of learning during probationary times. But errors educate for life. They impress on collective memory the indispensable character of technological innovation and the imperatives of nation building. The untimely recourse to Western ‘assistance’ for repairing the slightest breakdown in national networks or manufacturing an electrical wire or a switching system castrates peoples’ confidence in their intrinsic capacities. The perpetuation of this situation makes them vulnerable to foreign invasion and control. The safest way to avoid technological underdevelopment is to do for oneself what others have done for themselves: to learn from one’s mistakes, to avoid being inhibited by small details or daily preoccupations and to project oneself towards the remotest future. For it is wiser to master the future today than to wait until tomorrow when it will be too late to understand its complexity.

## 4. Prospective Avenues for Telecommunications Liberation in Africa

### 4.1 CONDITIONS FOR SUCCESS

It is not unreasonable to think that with all her tremendous potential in natural resources, and with the decisive and radical changes that could be generated by a united Africa within an economic federation or a United States of Africa, the continent could in a relatively short period successfully develop a truly modern telecommunications system in the vanguard of technological achievements.

Three conditions will determine the success of such goals:

1. the unification of the continent and its economic integration at the Pan-African level;

2. the achievement of economic and technological self-reliance; and
3. telecommunications strategies primarily based on the total development of rural areas through the decentralization of the economic life from the present cities to the rural areas.

These objectives are attainable if we keep faith in the necessity to unite Africa. Those submitting that without foreign help Africa cannot be developed forget to evaluate the geostrategic and economic weight of this continent. One should bear in mind that Africa is three times larger than Europe or the United States. It covers 30 million square kilometers and accounts for between one-quarter and one-third of the world's land surface. In 1980, the population was around 470 million, MMI.e., one-fifth of the world population. It should reach 813 million by the year 2000. Despite drought, desert creep, threatened plant species, and endemic human and animal diseases, the continent is known to possess considerable agricultural, mineral, energy, forest, fish and wildlife resources.

A colonial explorer wrote a century ago that Africa was a 'geological scandal'. Africa's share in the world's mining sector (excluding the Soviet Union) is indeed impressive: 99 per cent of industrial diamonds; 86 per cent of palm kernels; 82 per cent of cobalt; 81 per cent of gold; 72 per cent of cocoa; 62 per cent of chromite; 49 per cent of manganese; 30 per cent of phosphate rock and copper, etc.... Nigeria was until recently the world's fifth largest oil exporter. It produces 85 per cent of the world's niobium deposits. Ghana is the world's second largest manganese producer.

There is some danger in subjectively assuming in the analysis of African telecommunications needs the ideological presupposition that Africa is naturally poor and that the living conditions of the African masses cannot be improved. This view is part and parcel of the colonial and neo-colonial strategies developed by the European and North American countries.

Telecommunications strategies developed without regard to regionally and continentally integrated economies and the subsequent growth, in real terms, of the African telecommunications market, are doomed to bankruptcy. The all too often forgotten demands required from a nation seeking to reach a level of technological self-reliance in telecommunications matters must be restated here.

A nation whose communications flow is conditioned by trading patterns with a former colonial power is not a free nation. A nation seeking to build a technological base through the language of a former colonial power is not a free nation. A nation unable to manufacture its own communications technologies is not a free nation.

Therefore, the immediate goal of such a nation is to destroy the bundle of unfavourable factors making it a dependent nation.

#### 4.2 CONCLUSIONS

The conclusions to draw from this overview of African telecommunications history are manifold:

- the economic development of the continent is inconceivable without considerable financial investments in the telecommunications sector;
- the present model of development based on the pre-eminence of the urban cent-

- ers over rural areas must be completely reversed if an integrated Pan-African telecommunications system is ever to be built;
- it is unrealistic to expect the emergence of self-centered and balanced economic systems from a rural telecommunications sector based on the current dichotomies plaguing national economies (capitals vs. secondary cities vs. villages, or agricultural vs. import substitution);
  - taken individually, none of the African countries can develop their telecommunications systems at the required level. Consequently, the only way to transcend the present constraints is to build an integrated Pan-African telecommunications network with priority given to a balanced and vigorous development of rural areas where the overwhelming majority of the proletarianized African masses live;
  - the financial constraints would no longer be a problem if the continent itself exploited its natural resources from an Afrocentric perspective;
  - the required trained manpower to operate and design the telecommunications systems could be available if a Pan-African School of Telecommunications, taking into account the sub-regional constraints and the situation particular to each area, is created;
  - the lease of transponder capacities in international commercial satellites organizations is a temporary solution and could aggravate in the long run Africa's technological dependency;
  - the only reasonable way to overcome such a technological constraint is to envisage the construction of a spacecraft designed, operated and owned by Africans. Judicious South-South cooperation coupled with balanced North-South technical cooperation and an accelerated trend of scientific education can realistically help Africa build its own satellite system before the year 2010;
  - the use of such a continental satellite system would not, however, solve all the problems. The success of the African telecommunications network will finally depend on the level of efficiency of the terrestrial network coupled with the continent's economic integration and self-reliant development.

The sufficient condition for the existence of an African satellite system is the willingness of the African countries to open their telecommunications markets to an unprecedented level of foreign capital expansion and to place themselves in a position of total dependence *vis-à-vis* external decision centers to operate, maintain and expand the system.

But the necessary condition for Africa's self-reliance and economic development through the utilization of a regional satellite system is twofold. First, major parts of the domestic communications satellite in question must be manufactured in Africa, thus enabling the Africans to build their own satellite system from a science and technology policy rooted in the African cultural genius. Second, success in this area depends on the fundamental necessity to promote economic self-reliance, political liberation and cultural development on the basis of African unity. Such a unity would be based on the unity of African peoples and certainly not on a social alliance of African and international bourgeoisies.

What should be done to meet according to the best terms the conditions for the emergence of a self-reliant telecommunications system in Africa? Relying exclu-

sively on foreign help has proven in practice that it can only lead to bankruptcy. It should be excluded from any serious attempt to rebuild the African telecommunications systems.

Another way to negotiate advantageously in the framework of the present international telecommunications order, would be: 1) to let one single Pan-African organization negotiate all the agreements, the equipment contracts and the design of the future RASCOM system; 2) to change the present unfavourable technological position of the African countries by promoting a South-South cooperation enabling them to exchange telecommunications hardware and software; 3) to promote a vigorous effort for the training of high level engineers through the creation of a Pan-African school of telecommunications dealing with the operational, maintenance, design and planning aspects of new communications technologies.

## 5. Final Remarks

The question emerging from the facts discussed here is whether Africa has better chances today to win a significant place in the nations' march towards socio-technical progress. The answer is yes if she is able to develop in a single Pan-African audacious and yet realistic self-sustainable and self-reliant communications systems before the beginning of the next millennium. There must be no other way to envision the future, especially when one bears in mind the fact that if present economic policies were pursued it would take close to one century to the 20 poorer countries of Africa to double their present *per capita* income.

Africa's involvement in the telecommunications industry is quite marginal. Most of the countries are still unable to manufacture simple cables, microwave technology, microprocessors, switching devices, satellite dishes, fiber optics systems, etc. In addition, there are severe training problems associated with a lack of coordination of policies and prospective needs.

All of this is happening at a time when predictions on communications advances are being challenged by the imminent industrialization of the outerspace, the operationalization of megaton satellites, fiber optics networks carrying at light speed thousands of signals at the same time, etc. Man has landed on the moon and is trying now to exploit its mineral resources. Mankind is faced with a new need. Advances in astronomy and spatial communications have forced us to correctly pose and solve the equation of our relationship with the numerous galaxies of a universe in full expansion.

It is time that by pooling their resources, the African countries create a Pan-African Centre for Spatial Studies backed by African university resources and know how. Such a centre would have as a main target to make possible the mastering of satellite communications technology and developing new technologies for optimal utilization of the most needed frequency bands.

In accordance with this objective, the African countries should immediately launch actions at the appropriate levels of the International Telecommunications Union and the United Nations system in order to get space slots in the geostationary orbit and allocations in the frequency spectrum resources matching the legitimate spatial ambitions of a respected Africa.



*Table 1: Black Africa's Intelsat Traffic Pattern Regionally and Internationally in the Atlantic Ocean and Indian Ocean Regions As of 30 June 1982<sup>1</sup>*

Calling Country	First Country Most Frequently Called (in units of service)	Second Country Most Freq. Called (in units of service)	Third Country Most Freq. Called (in units of service)	Fourth Country Most Freq. Called (in units of service)	Fifth Country Most Freq. Called (in units of service)	Total Traffic to all destinations <sup>2</sup>
Angola	Portugal(36) <sup>2</sup>	Italy(7)	Mozambique(2)	Cuba(2)	-	27
Botswana*	UK(10)	US(2)	Kenya(1)	S.A.(2)	-	14
Cameroon	France(101)	US(14)	UK(12)	Ivory Coast(7)	Italy(5)	148
Congo	France(22)	Gabon(3)	-	-	-	28
Djibouti*	France(23)	Iv. Coast(3)	-	-	-	23
Ethiopia	UK(15)	Italy(13)	US(11)	France(7)	Germany(3)	54
Gabon	France(83)	Ivory Coast(9)	US(8)	Senegal(7)	Belgium(4)	134
Gambia	UK(9)	France(1)	-	-	UK(4)	10
Ghana	US(7)	UK(6)	Germany(3)	France(2)	-	20
Guinea	France(11)	Iv. Coast(5)	Senegal(2)	Italy(2)	-	19
Ivory Coast	France(94)	US(19)	UK(13)	Malit(1)	Gabon(9)	212
Kenya**	UK(80)	US(31)	Italy(14)	Niger(10)	Austr.(9)	227
Liberia	US(24)	Italy(9)	France(5)	UK(4)	Canada(9)	68
Malawi	South Africa(26)	UK(23)	US(5)	Zimbabwe(4)	Germany(8)	58
Mali	France(25)	Iv. Coast(6)	Senegal(5)	Algeria(2)	-	41
Niger**	France(34)	Ivory Coast(10)	Algeria(3)	Canada(2)	Guinea(1)	52
Nigeria**	UK(156)	US(73)	Senegal(2)	Germany(12)	Italy(1)	332
Senegal	France(33)	US(20)	Italy(24)	Italy(5)	Spain(8)	92
Somalia*	Italy(16)	Saudi Arabia(5)	Gabon(7)	Mali(5)	Cameroon(3)	
South Africa**	US(179)	UK(149)	Ivory Coast(7)	-	Canada(3)	
			Germany(35)	Australia(27)	Spain(3)	682
					France(26)	
					Malawi(26)	

Calling Country	First Country Most Frequently Called (in units of service)	Second Country Most Freq. Called (in units of service)	Third Country Most Freq. Called (in units of service)	Fourth Country Most Freq. Called (in units of service)	Fifth Country Most Freq. Called (in units of service)	Total Traffic to all destinations <sup>3</sup>
Sudan	Egypt(3) Italy(3) UK(3)	Switzerland(2)	France(1) US(1)	-	-	13
Tanzania**	UK(39)	US(7)	Italy(6)	Canada(4)	Japan(3)	72
Togo	France(30)	Ivory Coast(7)	Gabon(3)	US(2)	Germany(1)	43
Uganda	UK(16)	France(4)	Italy(3)	Switzerland(2)	-	29
Zambia*	UK(26)	Germany(4)	Kenya(4)	Italy(-)	India(2)	60
Zaire	Belgium(17)	South Africa(16)	Italy(5)	US(4)	-	39
Zimbabwe	UK(12)	France(11)	US(5)	UK(1)	Kenya(3)	36

1. This table is based on a compilation of data published in the *Intelsat System Status Report* for June 1982 (Addendum no. 1 to BG-52-LE W/9/82, pp. 25-45). It summarizes detailed information on satellite utilization. It shows full-time half-circuits in service by user, for the Atlantic Ocean where around 40 percent of the Intelsat traffic is channelled. The data do not include adjustments in numbers of units, accounting for special arrangements such as uni directional circuits. Also leased transponders are excluded.

2. The numbers between parantheses represent units of service. Anasindu R. (*supra* note 38) suggests that 'a unit of service (approximately a half-circuit) is a two-way communications link between an earth station and an Intelsat Satellite. A country with say 23 units of service means the country has 23 two-way communications paths between its earth station and an Intelsat Satellite.'

3. The total traffic to all destinations includes the main satellites referred to as 'Primary' in the Intelsat System Status Report, where the high density traffic for telephone signals and data transfer is routed, and Major Path 1 (MP 1) and Major Path 2 (MP 2) representing the two other back-up Intelsat satellites handling television signals, in particular. With the exception of South Africa, MP 1 and MP 2 are usually not utilized by the African countries.

\* countries using only the Intelsat satellite covering the Indian Ocean region.

\*\* countries using both satellites covering the Indian Ocean and the Atlantic Ocean regions.

Source: Compiled from *Intelsat System Status Report for June 1982*. Addendum nr. 1 to BG-52-LE, August 1982.

Table II: Black African Countries' Traffic Data Base in the Intelsat System Including the Atlantic Ocean and Indian Ocean Regions for the Period 1983 - 1987<sup>1</sup>

User Name	Atlantic Ocean Region				Indian Ocean Region			Atlantic Ocean Indian Ocean Regions		
	FDM/FM 6 TDMA/DEI - Half-Circuits		Single Channel Per Carrier Half Circuits		FDM/FM 6/ TDMA/ DSI 1/2 Circuits Pri- mary	Single Channel Per Carrier 1/2 Circuits Pri- mary	Companded FDM/FM Half-Circuits	Total of Circuits used by Country	Intra-African Communications	
	Pri- mary	MP 1	MP 2	MP 1	MP 2				# Circuits used by Country	% on total # of Cir- cuits used by Country
Angola	783			57		18		858	59	6.87
Benin	423	12				24		459	9	1.96
Botswana				140				140	0	0.00
Burundi						186		186	11	5.91
Cameroon	1,485	292						1,777	117	6.58
C Verde				137					34	24.81
C. African Republic									35	22.87
Congo	558			153				153	426	75.26
Ethiopia	425			8		19		566	13	2.92
Gabon	1,337			144				444	341	23.02
Gambia				106				1,481	0	0.00
Ghana	621							106	61	9.82
Guinea				314				621	127	40.44
I. Coast	884	591		201		12		314	620	36.72
Lesotho							142	1,688		0.00
Liberia				265				142	17	4.04
Kenya	1,200			15		1,147	220	420	141	5.46
Malawi							115	2,582	494	8.05
Mali				63		446		561	285	54.59
Madagascar						387		522	0	

Atlantic Ocean Region				Indian Ocean Region			Atlantic Ocean Indian Ocean Regions				
User Name	FDM/FM 6 TDMA/DEI-Half-Circuits		Single Channel Per Carrier Half Circuits		FDM/FM 6 TDMA/DSI 1/2 Circuits	Single Channel Per Carrier 1/2 Circuits	Companded FDM/FM Half-Circuits	Total of Circuits used by Country	Intra-African Communications		
	Pri- mary	MP 1	MP 2	Primary	MP 1	MP 2	Pri- mary	Pri- primary	# Circuits used by Country	% on total # of Cir- cuits used by Country	
Mauritania	151			21			115	244	172	6	3.48
Mauritius	250								359	60	16.71
Mozambiq.	30	488					93		250	33	0.13
Niger	1,637	636	112	1	83		1,315		694	219	31.55
Nigeria									3,701	83	2.24
Rwanda	737	36		42	120		96		96	14	14.58
Senegal									935	428	45.77
Seychelles									163	31	10.01
S. Leone					176				176	0	0.00
Somalia									217	0	0.00
Sudan	404					134			404	85	21.03
Swaziland									134	0	0.00
Tanzania	442			22			311		775	10	0.12
Togo	657	30		10					697	202	28.98
Uganda	426								426	0	0.00
U.Volta	42				245				287	49	17.07
Zaire	584	95							584	0	0.00
Zambia	785	186		13					922	259	28.09
Zimbabwe									1,036	100	9.65
	13,861	2,521	112	381	2,414	722	3,951	244	24,554	4,369	17.09

1 This table is a compilation of Intelsat's Integrated Traffic Data Base for the period 1983-1997.

Table III: Reported Telephone Conversations (Most Frequently Called Country) As of January 1, 1981.

Calling Area	First	Second	Third	Fourth	Fifth	Sixth	Seventh
World Zone 2							
Cape Verde	Portugal	United States	Italy	Netherlands	Angola	Brazil	France
Ethiopia	Italy	Djibouti	United States	France	U Kingdom	Kenya	Greece
Gabon	France	Cameroon	Ivory Coast	Senegal	Morocco	Belgium	U Kingdom
Kenya	U Kingdom	US/Canada	Italy	Germ. F.R.	Switzerland	France	Netherlands
Malawi	U Kingdom	South Africa	United States	Zimbabwe	Kenya	Germ.F.R.	Italy
Namibia	South Africa	W. Germany	U Kingdom	United States	n.r.	n.r.	n.r.
Reunion	France	Mauritius	Madagascar	n.r.	n.r.	n.r.	n.r.
Seychelles	U Kingdom	United States	Europe	Bahrain	n.r.	n.r.	Canada
South Africa	U Kingdom	United States	W Germany	Greece	S.E. Asia/Afr.	Australia	France
Sudan	United States	U Kingdom	-	-	Italy	-	-
Swasiland	Saudi Arabia	U Kingdom	Egypt	United States	France	Greece	Italy
Tanzania	South Africa	U Kingdom	United States	Portugal	Italy	Germany	Kenya
Togo	U Kingdom	United States	Canada	Germ.F.R.	India	Italy	Japan
	France	Ivory Coast	Germany	U Kingdom	Gabon	-	-
			Fed. Rep.				

Source: AT&T Long Lines, *The World's Telephones, a Statistical Compilation as of January, 1981*, New Jersey, USA, 1981.

# Communications in the Third World: The Challenge of Civil Society

*Cees J. Hamelink*

This paper addresses the persistent problem of 'information famine', the inadequacy of current international regulatory instruments, communication structures between states and markets, and the need of civil initiative. The basic argument is: the persistent problem of insufficient 'information capacity' hampers democratic developments in the Third World. The 'information famine', which was first analyzed by Unesco in 1957, has not diminished in spite of considerable technical assistance for over three decades. Current international information law does not contribute to the resolution of the 'information famine' plight, it rather reinforces the existing international imbalances in information capacity. To overcome information famine, information structures and processes need to be democratized.

By and large, the production and distribution of information and culture is controlled by states and markets. As a result, most current debates on mediapolicy focus on the question of government control versus market control. States and markets have been unable to provide reliable and diversified information that can contribute to processes of democratic development. The dominant modes of information provision completely ignore citizens and consumers: the very forces that constitute civil society. A new paradigm that resolves information famine and facilitates democratic development cannot be state-centric or market-centric. It has to be guided by civil democracy. Civil society does not only entail rights for its members, but also social duties. The social duty to revolt against the Orwellian and Huxleyan forms of information control is critical to the democratic process.

## 1. The Persistent Problem of 'Information Famine'

Already in 1957, a Unesco report demanded the attention of the United Nations General Assembly for the problem of global information famine. This exposed for the first time in a public multilateral forum the problem of disparities in information capacities between the North and the South. The report concluded to vital disparities in both hardware and software and pointed to the obstacles that inadequate information capacity poses to independent development processes.

In response, the General Assembly requested the Economic and Social Council in 1958 to formulate a program for the development of communication and information media in the developing countries. The specialized UN agencies were invited to contribute to the design of this program. This resulted for Unesco in a technical as-

sistance program that in 1962 was officially assigned a place within the efforts of the First UN Development Decade.

Throughout the 1960s, the program was implemented, but the problem of information famine would not go away. On balance, it had to be established in the early 1970s that technical assistance had mainly increased the disparities and dependencies. The observation that technical assistance was a highly inadequate instrument to deal with information famine was brought to the fore in a complex and emotional debate that focussed on demand for a new international information order. This debate ended in 1980 with the establishment of yet another program for technical assistance. Again, also this program could not resolve the persistent problem of information famine.

Some recent data (most for 1989/1990) demonstrate that the North-South information disparity is a stark reality. This is true both for information hardware and software.

### 1.1 ACCESS TO THE HARDWARE OF THE WORLD'S INFORMATION

Most of the world's information processors and carriers are installed in the core countries. Also the technology that is basic to their manufacturing and upgrading is designed, developed, and controlled in the core. In the international trading of information hardware, the United States and Western Europe are by far the largest exporters and importers, although they are now powerfully challenged by Japan and other Asian producers.

A few figures can vividly show the differentiated distribution of information hardware around the world. Together, the countries of the South own only 4 per cent of the world's computers hardware. Of the world's 700 million telephone sets, 75 per cent can be found in the 9 richest countries. The poor countries possess less than 10 per cent, and in most rural areas there is less than one telephone for 1,000 people. There are more telephones in Japan alone (with a 1988 population of 121 million) than in the 50 nations of Africa combined (with a 1988 population four times that of Japan and a land mass more than 80 times greater). In 39 developing countries there are no newspapers at all, while in 30 others there is only one. By contrast, Japan has 125 daily newspaper and the United States 1,687. The average for European countries is 39 newspapers and the African average is less than 3 newspapers per country.

In the United States, a daily newspaper enjoys a circulation of 268 copies per 1,000 people; in Japan the comparable figure is 562. The European average is 288 and the African average is 16.5 copies per 1,000. In many countries, an important carrier of information is the book. In the production of book titles there is an enormous imbalance in the world. For example, the European countries produce annually an average of over 12,000 titles and the African countries produce less than 350 titles. Of obvious importance are the physical places where information carriers, such as books can be consulted freely or against a nominal fee: public libraries. European countries have on average over 1,400 public libraries per country, whereas African countries count on average 18 public libraries.

The distribution of radio and TV sets tells us something about information capacity too. The world average for radio sets is 330 per 1,000 people. In the rich

countries the average is 911 per 1,000 and in the poor countries 142 per 1,000. In 34 developing countries there are no TV sets at all. While the world average for television set ownership is 137 per 1,000, the gap between the rich countries and poor countries is wide: 447 per 1,000 for the former and 36 per 1,000 for the latter.

There is, however, an increasing interest in the developing countries to improve and expand their manufacturing capacity to produce information hardware themselves. Many poor countries see information processors and carriers as instruments ideally suited to promote economic and social development. They consider computers and satellites as undisputed factors of progress. African leaders in 1985 issued the Yamoussoukro (Ivory Coast) declaration, which states:

‘that one of the main keys to solving Africa’s development problems lies in mastering the rational management of information in all its forms. This is therefore not only a positive factor for regional and continental integration but also an essential condition for the survival of Africa within the community of nations in the 21st century.’

There is already a considerable spread of capacity in information hardware manufacturing in a number of countries, including Brazil, India, South Korea, and Malaysia. India has achieved a significant growth in the domestic manufacturing of information hardware, estimating in its 1985-1990 technology development plan that the growth of computer demand would reach US \$ 862.5 million. India aims to export advanced computer technology as well as to improve its telecommunication capacity.

The South is also gaining importance as an import market for information hardware, with Brazil, Mexico, Venezuela, Argentina, the People’s Republic of China, Saudi Arabia, Hong Kong, and Thailand among the largest importers. But this importation is not without problems, since the international market for information hardware is tightly controlled by a very small number of suppliers upon which the importing countries are dependent. The importing countries usually lack the expertise for assessment and integration of the equipment they acquire. As a result they are often sold obsolete products.

## 1.2 ACCESS TO THE SOFTWARE OF THE WORLD’S INFORMATION

Access to information software can be measured by the volume and direction of information flows and the possibility to generate, distribute or access relevant information. Information flows across the globe are imbalanced. This means that most of the world’s information flows among the Northern countries, somewhat less information flows among the North and the South, and very little information flows among the countries of the South. If we take all telephone, telex and telegraph traffic between the regions of the world, we find that less than 10 per cent of this traffic takes place between the developing countries.

Flows between the North and the South tend to be one-way. Estimates suggest that the flow of news events from North to South is 100 times more than the flow in the opposite direction. Thus in the mid-1980s in international broadcasting, Europe



broadcasts some 855 hours annually to Africa, while Africa broadcasts only 70 hours to Europe. Imbalances are evident in television importation also, so that Western European countries import an average of 33 per cent of their programs, while the African countries import 55 per cent of their total TV programs.

If we look at different kinds of information contents, we find other hidden kinds of imbalances. In the field of scientific and technical information, for example, a considerable disparity exists. Only 3 per cent of the world's efforts in research and development takes place in the South. Only 1 per cent of the world's patent grants are held by nationals of the poor countries and in many of these countries 60 per cent to 90 per cent of all technology patents are owned by a limited number of foreign transnational corporations. Most of the world's scientific and technical information is produced and owned by individuals and companies in the rich countries.

Full access to financial and trading information is the privileged property of a few private enterprises in the North. The poor countries are seriously handicapped in accessing information about the complex and swiftly changing dimensions of the international finance system. They know insufficiently early and unreliably about rates of exchange or rates of interest. They have no access to the international financial information brokerage circuit and the vast and expensive systems for the processing and distributing of this information.

Resource information is another area where the rich countries have immense advantages over the South, mainly through the collection of data about global natural resources through remote sensing via satellites. Remote resource sensing (a technology that uses infra red sensors on board of satellites in the polar orbit) has developed since the early 1970s and offers today a vast amount of very useful images. Remote sensing is currently applied to crop monitoring, forestry, hydrology, oceanography and mineral exploitation. The user-community of remotely sensed data is growing, but hardly in the South.

The technological advantage of access to the means to collect and process such data can be illustrated by the usefulness of early information about mineral deposits or crop diseases. Through satellite technology coffee traders in New York know more about the imminent Brazilian coffee harvest than the Brazilian coffee producers. The same technology creates an information imbalance between large international fishing companies and local fishermen off the shores of the African West coast with regard to the whereabouts of shoals of tunafish.

Also for information about current affairs, the poor countries are dependent upon foreign, mainly Western sources. Four leading world agencies largely control the flow of printed information, AP (Associated Press), UPI (United Press International), AFP (Agence France Presse) and Reuter's. For visual information the dominant sources are CNN, Visnews and CBS News. The average daily news production of the world agencies is for AP: 17 million words for UPI: 14 million words, for Reuter's: 1.5 million words, and for AFP 1 million words. By way of comparison: the only world agency with a special interest in developments in the poor countries, Inter Press Service, produces daily an average of 100,000 words.

World news is almost exclusively about events in the North. If the Third World is reported at all, this is usually because there is a threat to Northern interests, a sensational drama, a historical relation, or some exotic dimension. Thus, much of the time the South is invisible, or is presented in a distorted form.

## 2. The Inadequacy of Current International Regulatory Instruments

An intriguing question is how the body of multilateral regulation in the international information field contributes to the information famine issue. My conclusion is that by and large current international regulatory instruments and trends in their development do not substantially contribute to the resolution of the disparity and even reinforce the existing disparities. Some selected cases may illustrate the point:

- a. The Third World efforts to achieve a binding multilateral instrument in Unesco to address information inequalities have totally failed. The coalition of Western diplomacy, industrial lobbies, and media campaigns was very successful in depoliticising this debate, avoiding any binding agreements, adopting a rather insignificant and weak declaration on the mass media (1978), and establishing a technical assistance program (the International Program for the Development of Communication, IPDC) without adequate funding.
- b. Since 1975 negotiations within Unctad take place on the adoption of a code of conduct for the transfer of technology. The drafted code would improve the access to technology for developing countries and create fairer conditions for transfer. The code has still not been adopted and meets on essential points strong resistance from industrial lobbies.
- c. There are no satisfactory arrangements for Third World access to remotely sensed and computer-processed resource data.
- d. There is no sign of an international instrument that could begin to address the issue of today's increasing mega-media-concentration that takes global proportions and contributes to the cultural erosion of the South.
- e. The results in recent major conferences held by the International Telecommunications Union (such as the WATTC and the ITU Plenipotentiary) serve the large transnational telecommunication users much better than the Third World countries.
- f. The current GATT negotiations on traded services and intellectual property rights are clearly moving in directions contrary to Third World demands and interests. The adoption of principles such as 'market access' can hardly be seen as contributory to autonomous cultural and informational development.
- g. The pressures for stricter norms for the protection of intellectual property serve the large cultural industries much better than the Third World countries.

## 3. Communication Structures between States and Markets

The resolution of the information famine issue is also hindered by internal forces: the control of information production and distribution by states and markets. Debates on information policy in the Third World (and for that matter, almost everywhere else) are restricted to the question of state control versus market control.

This is regrettable as the state and the market are the two most important powers that hinder the development of adequate information structures. Throughout the world one finds states that are extremely reluctant to allow their citizens to take independent decisions. To put it crudely: *basically states hate their citizens*. In most

societies states lead their own administrative lives with interests that most citizens cannot identify with.

Modern states spend considerable energies on spying on their own clients, gathering and storing massive amounts of information through which they keep their citizens under 'around-the-clock' surveillance in good Orwellian fashion. Equally, *markets hate their consumers*. Independent, demanding customers with individual preferences are troublesome for global entrepreneurs. Modern markets tend to keep their clients under control by inundating them with avalanches of non-stop distractions which suggest, as Aldous Huxley phrased it in *Brave New World* 'everybody is happy now'.

States and markets have been unable to provide reliable and diversified information that contributes to the process of democratic and independent development. The dominant modes of social communication inflict harm and injustice upon their audiences by misinforming them, by invading their privacies, distorting their realities, refusing to listen to them, and denying any liability.

The recent Gulf War has provided ample and dramatic proof of this. Most media allowed themselves to be used for state-controlled disinformation. If any manufacturer had put on the market a product as defective and unreliable as the CNN newscasts there would have been a vast consumer uproar. It is remarkable that the global sales of televised lies, appears to cause little public concern.

#### 4. The Need of Civil Initiative

As the state in recent times has increasingly proven to be unable to meet its citizen's claims for peace, security, equity, and unpolluted environments, civil movements have emerged to defend society against the state. These movements have also begun to realize the inability of markets to meet basic individual and collective values and aspirations.

The phrase 'civil society' refers to all social transactions in the public and private sphere that are not interfered with by the state. The concept implies a defence of society against the state and it emphasizes the need of a relative autonomy for social life. In most countries civil society is legally rooted in sets of civil rights embodied in constitutions and other forms of legislation.

However, it is not sufficient, in my view, to stress the bi-polarity of state and society. Civil society also needs protection against those corporate legal entities that control large parts of national and international economies and global cultural production. There is now a tendency to include these corporations in civil society, which reflects how successful their lobbying has been to have themselves considered as private citizens. Recent trends in U.S. and West-European jurisdiction granting corporate entities the status of private citizen, imply that the protection of free speech has been extended to cover commercial speech.

Thus, as the corporations take over more means and places of public expression (in the performing arts, the museums, the mass media, and the shopping malls) public space needs to be defended against not only the state, but also these commercial raiders.

Civil society needs information and communication networks that enable its

citizens to exercise their right to citizenship. This means that these networks should provide the vital prerequisites of citizenship: freedom of expression and access to information. To do this the networks have to meet such minimal conditions as: affordable universal services; public access to government information; protection against unfair media-treatment; protection of privacy; diversity of information sources; reliability of information provision; and rules for liability in case of defective information.

In current discussions on civil society, the concept remains closely tied to the nation-state system. In view of the impotence of individual states to cope with global problems, we need to extend civil society beyond the national borders. It is not enough for society to establish its proper space against domestic state and market forces. As the future of world society is at stake, it should be recognized that the also international arena needs the active defence of civil concerns.

A new paradigm for communication that facilitates empowerment cannot be state-centric or market-centric. It has to be inspired by civil democracy. Communication channels need to be designed for that genuinely represent civil society. It has become time for the emerging new social movements to also engage themselves with the issue of the production and distribution of information and culture. If communication is to support independent development, it needs to be democratized. This will only become possible if people themselves begin to question whether what is delivered to them is what they had been promised.

Civil society does not only entail rights for its citizens, it also implies duties. The duty to revolt against the worlds of Orwell and Huxley is essential to the democratic process. As citizens can not any longer trust states and markets to accommodate their needs, they will have to take responsibility themselves. They cannot any longer be complacent about the existing communication structures if they want to be relieved from lies and distractions. Only the revolt of civil society can democratize communications. This is a tall order indeed as the forces hampering empowerment are still formidable and show little sign of weakening.

*In conclusion:* the persistent information disparity between the North and the South ('information famine') is an obstacle in processes of democratization. Only the revolt of civil society can change this. The production of information and culture is too important to be delegated to states and markets.



## Chapter III

# Public and Private Relationships

**The Public's Right to Information**

**The Commercial Use of Government  
Controlled Information**

**Protection of Informational Privacy**

**Advertising and Sponsoring in the Media**



# Public and Private Relationships: Introduction

*Jan J.C. Kabel*

This chapter deals at first sight with subjects of an embarrassing variety, presented under a common title: public and private relationships in information law. What indeed do the four main subjects have in common? A political right of control, the untransparent situation concerning the trade by Government in its own data, the very personal right to be let alone and the common plaything of business: advertising and sponsoring? And apart from the possible corresponding features of the subjects, what is the sense of bringing together all these birds of a different feather?

A closer look shows us clarifying and fertile connections between these birds which may be of some help in the solution of legal problems, created by the developing information technology.

Of course, advertising is the beloved plaything of commerce. But nowadays, advertising is also dressed up in the attire of free speech. At the same time, however, in its attempts to reach the consumer behind the listener, viewer or reader by surreptitious advertising or sponsoring, it deals a fierce blow both in the face of freedom of information and in the face of the pillar of the institutional freedom of the press and of broadcasting: the revenues of regular advertising.

The different options of Van Manen and Henning-Bodewig lighten up the paradox which troubles governmental measures: the necessary protection of the independence of program makers by the regulation of surreptitious advertising and sponsoring can only be realized at the expense of the same independence.

The new forms of commercial approach of the consumer demand new legislative techniques if government wants to keep responsibility for a public broadcasting system. In my own opinion the interest of independent broadcasting requires self-regulating techniques, while on the other hand the nature of the problem, which is to be found mainly in financial backgrounds, requires strict law, directed to the creation of transparency in financial relations between producers, public broadcasting organizations and business.

The right not to be confronted with advertising messages, in other words the right to be let alone, becomes less important. Viewers and listeners have to be informed about the interests which are at stake in the process of informing and amusing them. Control of information prevails, suppression of information in the affluent information society becomes of lesser importance. Indeed, control of information requires more information in the same way as exclusion of information requires information about the persons who like to be excluded.

The right to be let alone – the classic 19th century definition of the right to privacy – has likewise been transformed into the right to keep control on personal



information. *Rodotà* stresses this point which may be considered as a new development in privacy law: from exclusion to control. Although this may look like a diminishment of protection, *Rodotà* also draws our attention to the object of protection, personal life, being defined in such a way as to give the subject of the right to privacy almost complete power to draw the borderlines to his own personal views. Even data which have to be qualified as public data (membership of political parties, of trade organizations) and whose public character is necessary for the functioning of democracy, are subject to the right of control.

*Bing* explains the fundamental need to control one's personal data in a society like ours, which is based on the autonomy of the individual. This autonomy and self respect are safeguarded only if one can trust others in the way they handle one's personal information. Other options disturb this autonomy which is at the same time the necessary foundation of our democratic society.

These thoughts may be the start of a new debate on the privacy concept which is adapted to the social and cultural needs of an information society and in which the needs of a democratic society are implied. One must keep in mind that the use of database technology may even offer protection against invasion of the privacy of the home and serve other more traditional concepts of privacy. The growth of risk-prone activities in the field of environment, social security and the like, requires that we know more about the activities of individuals. The new debate on the concept of privacy at the same time leads to new concepts of law as a social instrument. In the field of privacy, law sometimes is used as a threat to unite parties in systems of self-regulation. *Rodotà* speaks of *Lego Laws* and *Sunset Laws*. Just as in advertising, new information technologies require new legal instruments to safeguard traditional values like the freedom of expression and the personal freedom of the individual.

The right to control the use of one's personal data, includes a right to be informed about the processing of one's data. Thus, the right of privacy is at the same time a right to be informed. The right of privacy may be used to gain access to government controlled personal information. The *Gaskin Case*, mentioned by *Beers*, is a clear example.

We accept the right to privacy as a fundamental right. The right of access to government controlled information, which is not restricted to personal information, lacks such character. *Beers* rightly devotes much attention to a thorough analysis of the fundamental character of the right of access to government controlled information. This right, directly related as it is in most cases to a fundamental end (freedom of the press, disclosure of laws, democracy, clarity of judicial procedure), in my opinion apparently seems not an end in itself and therefore problems with its being a fundamental right will always remain.

Moreover, the development of technology itself causes problems with the disclosure of governmental information: delivery of information according to the wishes of sophisticated consumers may confront the government with an unreasonable burden. *Beers's* analysis draws practical borderlines.

The taxpaid gathering of information by government and the possible commercialization of that information leads to questions in the case of personal data. But there exists a traditional right of privacy that likewise may offer solutions in the execution of the right of access to government controlled information. Outside this area, however, one really must break fresh ground. The subject of commerciali-

zation of government controlled information can as yet only lead to questions or to the construction of frameworks in which questions systematically may be posed.

*De Ru* stoutly tries to conciliate government in the sunshine regulations with the necessity of developing commercially interesting governmental databases. His approach is a legal one: a concise definition of public sector information and a research for corresponding procedural guarantees which he expects from legislation and independent judiciary control. The old legal technics must be able to cope with new technology. *Burkert's* legal room is one with a broad view. He designs a framework in which questions of policy, because of the newness of the subject, mingle freely with questions of law. His proposal for a code on public information law shows the features of new information law: a post-modern emphasis on procedure and not on content, together with an accent on selfregulation and on alternative methods of conflict control.

*Mackaay* sets the tone to all these challenges to law and to those who practice it. A bit cynical maybe, but at the same time very appropriate because he refers to the historical backgrounds of information rights in Europe which only could have prospered given the fact of a divided Europe in which citizens could vote with their feet and in that way could counter-balance governmental power. *Mackaay's* approach is also economical, in that he reminds us of the scarcity of rights and of the truth that one may not with impunity create new rights if it is not absolutely necessary. Information technology may be a new concept but law contains traditional instruments which may serve us in the implementation of new information technology in law.



# The Public's Right to Information

*Ejan Mackaay*

## 1. Rights

In current discourse, the term *right* is used to give legitimacy to almost any aspiration or any claim to have a perceived injustice corrected. Children are said to have a right to a happy childhood. The unborn child is said to have rights, which are opposed to those of the mother to her own body. Closed shop legislation is said to give effect to the workers' right to unionize, overriding the rights of those who do not wish to be members of a union or to contribute forcibly to their existence.

The proliferation of rights gives rise to conflicts amongst them and undermines their credibility, much as inflation debases the currency.<sup>1</sup> This is true of the public's right to information or the public's right to know as well. Does the public have the right to know the personal life of the victim of a despicable crime? Or of a candidate to high office, such as the supreme court of a country? Does it have that right with respect to the process by which politicians in Canada painfully attempt to negotiate their way to a new constitution? Or to the existence of Israel's nuclear weapons?

In each of these cases, conflicting positions have been formulated. Such conflicts cannot be resolved by merely labelling one or both of the opposing positions 'rights'. We must decide which of these rights should prevail. It will be helpful to examine what kinds of rights are recognized in modern legal systems. There are rights on objects, property rights in a broad sense, amongst which I would also count the rights to one's life and privacy. Then there are fundamental freedoms, rights granted to every citizen, whose purpose it is to place certain spheres of life out of bounds for the State and to give control over the exercise of State powers. Finally there are social welfare rights.

I have not included so-called 'collective rights' claimed for collectivities of individuals (I mean to exclude here collectivities such as business firms or trades unions, which act as individuals). In Canada, such rights are claimed for linguistic groups. It is argued that they should override individual rights,<sup>2</sup> such as freedom of

- 
1. Sumner gives a whole list of such contradictory rights. Sumner, L.W., *The Moral Foundation of Rights*, Clarendon Press, Oxford, 1987, 1-3. See also Lomasky, Loren E., *Persons, Rights, and the Moral Community*, New York, Oxford U.P., 1987, Chap. 1. Kratochwil, Friedrich V., *Rules, norms, and decisions – On the conditions of practical and legal reasoning in international relations and domestic affairs*, Cambridge, Cambridge U.P., 1989, Chap. 6, at 155.
  2. *Contra*: Jean Rivero, *Les libertés publiques*, Paris, P.U.F., 1987 (5th ed.), Vol. 1, p. 115: 'En cas de conflit entre droits de groupe et droits de l'individu, ceux-ci l'emportent.'

expression, in order, for instance, to justify a rule declaring that only French may be used in advertising on the streets of Montreal. I am not persuaded that these are rights in a sense related to that of the three just mentioned sorts. No individual can exercise them on his or her own behalf, nor is it clear how he or she could exercise them on behalf of the collectivity they are presumed to protect. If only the government can exercise them, then we have an entirely different problem: the provision of a 'public good'<sup>3</sup> or a good of interest to a particular group in society at the expense of other groups.

In some of the examples I have given before, the term 'the public's right to information' is used as if it were designating such a collective right. I believe that this is an unnecessary detour and that we can discover all we need to know about it by discussing the issue in terms of the three kinds of rights set out above.

The rest of this article will be divided in two parts: rights against the State and rights against private citizens. The reason for this distinction is that, unlike private citizens, the State can force citizens' hands, cannot go bankrupt and can legitimate actions it wishes to undertake by means of laws. Admittedly, some private interests succeed in bending State action so as to obtain some of these advantages. Where they do, considerations of Part II carry over to Part III.

## 2. Information Rights Against the State

The public's right to information held by the State must be understood as part of a broader set of rights of citizens, aimed at giving them control of state power and of shielding them from the arbitrary use of it. These rights have been framed over the course of the last four centuries, mostly in the Western world. To see how exceptional and yet fundamental these rights are, one must understand something about the dynamics of their emergence.<sup>4</sup>

'Anarchy, if historical precedent is to be taken as conclusive, does not survive'.<sup>5</sup> Communities not organized as States to defend themselves will be taken over by those that are or that will set up the structures necessary to fend off such a possibility. Power breeds power. Military chieftains, originally given limited powers for defence, tend to use them for other purposes: wider military ventures; consolidating their position and making it hereditary; enriching themselves at the expense of those

- 
3. Public goods, in economic parlance, are those that, once produced for one person, are available at no additional cost to other persons, who, moreover, cannot be excluded from their use. The impossibility to exclude 'free riders' appears to make it impossible for such goods to be produced privately. Hence one of the legitimate tasks for the government was thought to be the provision of public goods. Economists are coming more and more to the conclusion that the range of goods held to be public is widely exaggerated, indeed that there exist virtually no true public goods and that goods tend to be come public by the very fact that the government provides them. See Cowen, Tyler (ed.), *The theory of market failure*, Fairfax, VA, George Mason University Press, 1988; Mackaay, Ejan, 'Economic incentives in markets for information and innovation', (1990) 13 *Harvard Journal of Law and Public Policy* 867-909, at 880 ff.
  4. What follows has been developed at greater length in Mackaay, Ejan, 'Le droit sasi par le jeu', (1991) *Droit et Société* (Nos. 17-18) 57-81, 66f.
  5. De Jasay, Anthony, *Social Contract, Free Ride – A Study of the Public Goods Problem*, Oxford, Clarendon Press, 1989, at 217.

now called their subjects. Their interest is to snuff out developments that might upset their position and to prevent their subjects from leaving. Historically, this process led, in most regions, to vast empires with a regional monopoly of state power: Imperial China, the Mogul and Ottoman empires, the Tokugawa empire in Japan as well as the Inca and Aztec empires on the American continent. These empires were generally hostile to innovation and not given to openness about the conduct of power.

Remarkably, this process has never come to its conclusion in Western Europe.<sup>6</sup> There, power has always remained fragmented. Indeed, the only cogent explanation of the seemingly arbitrary policies pursued by rulers in Europe appears to be their overriding concern to stop any one amongst them from acquiring hegemony.<sup>7</sup>

Many historians have drawn a link between the – historically contingent – fragmentation of power and the economic revolution in Western Europe. These two phenomena are joined through the respect shown by the authorities for property rights and certain freedoms of citizens.<sup>8</sup>

The respect for life, liberty and property is generally associated with the intellectual tradition of the West. Whatever may be of its intellectual origin, it must be appreciated just how remarkable a political development it is. Rulers would surely not eagerly grant to each citizen rights restricting their own powers. Such rights would not come about without a fight or the threat of one. Moreover, what group would find it worth its while to seek not privileges for its own members, but rights for all citizens alike? Only a broad based coalition of citizens would seem to have such interest. But this poses yet another problem: that of *collective action*.<sup>9</sup>

It is difficult to mobilize such a broad coalition; most potential members would prefer others to take the lead and to incur the ruler's wrath. For this threshold to be overcome, one must expect to find *widely perceived* abuse of power. Furthermore, for the coalition to succeed, the powers that be must not be strong enough to crush an attempt at protest; the possibility for subjects, at tolerable personal cost, to flee abroad and to help the rebellion thence will be a catalyst.

The fragmentation of Europe into small warring realms, a curse for ordinary citizens throughout the ages, was yet to be the source of the discovery of fundamental rights. Warring rulers constantly needed money to conduct their wars, even in

- 
6. See Baechler, Jean, *Les origines du capitalisme*, Paris, Gallimard, 1971, (Coll. idées); Elias, Norbert, *Power and civility*, New York, Pantheon Books, 1982; Hall, John A., *Powers & Liberties – The causes and consequences of the rise of the West*, London, Penguin Books, 1985; Hall, John A. and G. John Ikenberry, *The State*, Minneapolis, University of Minnesota Press, 1989, (Concepts in Social Thought); Jones, E.L., *The European miracle*, Cambridge, Cambridge University Press, 1987, (2nd ed.); North, Douglass C., *The Rise of the Western World – A New Economic History*, Cambridge, Cambridge University Press, 1973.
  7. Kennedy, Paul, *The rise and fall of great powers*, London, Unwin Hyman, 1988.
  8. North, Douglass C. and Robert Paul Thomas, *The Rise of the Western World – A New Economic History*, Cambridge, Cambridge University Press, 1973; North, Douglass C., *Structure and Change in Economic History*, New York, W.W. Norton & Cy, 1981; *idem.* C., *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press, 1990, (Political Economy of Institutions and Decisions).
  9. Olson, Mancur, *The logic of collective action – Public Goods and the Theory of Groups*, Cambridge, MA, Harvard University Press, 1965; Hardin, Russell, *Collective action*, Baltimore, MD, The Johns Hopkins University Press, 1982.

defence. They had to tax their subjects for it. All too abusive tax practices could be countered by citizens 'voting with their feet' to realms where they were offered better terms, or by rebellions, possibly with foreign help.

Where such rebellions succeed, the subjects will want to put in place institutions aimed at preventing a repetition of what they went through. The removal of the ruler is one solution, but only a temporary one, since power will, in due course, equally corrupt the new ruler.<sup>10</sup>

A more durable solution would be to invent institutions circumscribing the use of power, in particular taxing power. What these institutions should be was not immediately obvious. City charters in the late Middle-Ages contained specific exemptions from feudal obligations and restrictions. But from these to rights actionable by all citizens alike, there was yet another non obvious step. It was not taken in the Treaty of Utrecht of 1579, serving as the constitution for the rebelling United Provinces against the king of Spain.<sup>11</sup> In this document only freedom of religion was guaranteed. It fell to the English, in piecemeal fashion, to articulate for the first time individual freedoms as a rampart against abuse of power.

If the freedoms are granted under pressure of a broad based coalition reacting to perceived abuses of power, what would their content be? A first group of rights would safeguard individual life, liberty and property; a second group would set up rights to participate in the political process and to be informed about government actions; a third group would create rights reducing the cost of mobilizing a broad coalition: freedom of opinion and expression, right of assembly. Moreover, since the coalition, by its nature, would not last, these rights should be actionable by individuals before independent courts. They should not be modifiable by ordinary legislation and hence be in that sense fundamental.

Here lies, I submit, the origin of the public's right to information. It is born out of struggle against the abuse of government power, of which secrecy is one element. It may have been articulated imperfectly and be in need of refinement, as new technologies throw up new possibilities for abuse of power. It may be exercised by individuals, but 'the public' here is a potential broad coalition of citizens objecting to abuse of power, not some sectarian interest. The exercise of the right to information is in the public interest, properly understood.

The right to information is meant to override government secret and should be exercisable by individuals as well as commercial enterprises. The profit they are seeking should not stand in the way of exercising that right. Markets are very effective distributors of services. Nor should it count against the right to information that only the juiciest stories will be revealed. Revelation is likely to discourage others from keeping things secret.

Certain activities of government are best conducted in confidence: defence, national security, justice and criminal prosecution, and the like. Constitutional negotiations – as Canada is realizing once more – do not proceed smoothly in front of television cameras. Members of a broad coalition of citizens articulating the right to

10. North observes: 'whether constituents bargain with a ruler over property rights or gain some control over the rule making process, the result may be the same [...]. 'North, *Structure and Change*, *supra* note 8 at 30, nt. 14.

11. Secretan, Catherine, *Les privilèges – berceau de la liberté*, Paris, Vrin, 1990.

information would agree to such restrictions. But those restrictions should be exceptional and cannot cover the embarrassment of bureaucrats found bungling. They should be reviewable by independent courts rather than be accepted on the word of an official.

The public's right to information may conflict with an individual's wish to keep certain information confidential. Should the public see the film showing police brutalizing an individual wrongly suspected – as it turns out later – of some crime, over that person's objections? Should a rape victim's picture and life story be published, over her objections stemming from a desire to remain anonymous? My preference would be to give the individual's choice priority. There is, of course, no question that the government must not reveal, without permission of the individuals concerned, personal information it has forced them to give to it in the first place.

### 3. Information Rights against Private Citizens

Information rights against private citizens, persons or corporations are not the same as those against the State. This is so because no citizen has an automatic right to information, personal or other, in the hands of another. No citizen is obliged to give information to another, although he or she may contract to do so.<sup>12</sup> Secrets may be kept in our society, barring special circumstances.<sup>13</sup> Citizens may use information to their own competitive advantage and bear the consequences, even bankruptcy, of using it unwisely.

#### 3.1 PERSONAL INFORMATION

With respect to personal – frequently, computerized – information, we have the unusual situation of a double right on the same information. The databank holder has a right in the information for having generated or bought it; the persons concerned have a right of supervision because the information touches upon their public image. The right of supervision gives some form of access, but is limited to the individual concerned, and hence scarcely a *public* right to information. Conversely, a person providing information to his bank, credit agency or other contract partner may consent to have this information circulate beyond the person who received it, but surely not to the public at large. Contractual practice (or statute law) will have to provide acceptable standard terms for how far the consent is supposed to stretch, barring explicit derogation.

- 
12. Courts can order the communication of information and the appearance of witnesses as part of a trial. But courts exercise the powers of the State, even in civil trials.
  13. The question has been considered in Canada in the well-known *Stewart*-case. A company refused to hand over the list of its employees to a union wishing to unionize them. The question was whether the union's attempt to get the information by corrupting a guard could be considered attempted theft of information. The question was answered in the negative, but the Supreme Court of Canada admitted that information may well be protected and kept secret in private law. *R. v. Stewart*, [1983] 5 C.C.C. (3rd) 481, (1983) 42 O.R. (2nd) 225, 149 D.L.R. (3rd) 583, 74 C.P.R. (2nd) 1, 35 C.R. (3rd) 105.



A person may, of course, choose to sell his or her public *persona* to the media and make money with it. The public may then come to expect further revelations, but it would be misguided to speak of the public's *right* to that information, rather than of a mere expectation or a perverse curiosity.

### 3.2 INFORMATION ABOUT CRIMINALS

There is a public right to information on criminals and criminal activity. One must have this information to stave off the risk of falling victim to them. But surely this right does not extend to the criminal's family. And as regards the criminal him or herself, the public's right to information overrides the right to his or her privacy. But the public's right is limited in time and must be balanced against the opportunity for the individual to mend his or her ways and begin a 'new life'.

### 3.3 INFORMATION ABOUT HAZARDOUS PRODUCTS AND CATASTROPHIC RISKS

Does this right extend to hazardous products, catastrophic risks? Has the public, for instance, a right to know the report produced for Ford, showing that its Pinto had a design flaw likely to cause a slightly higher than usual number of deaths and injuries?<sup>14</sup> The answer would seem to be negative: the disclosure of criminal information is an exception, to be interpreted restrictively. But it should be realized that by not revealing the report and having it exposed during the subsequent trials - where one can be enjoined to reveal it - the company suffered a substantial *competitive* loss. It contributed furthermore to the jurisprudence defining expansively what are defective (and non-defective) designs, and what information a manufacturer must supply to customers to shield himself from liability for hazardous products. Liability rules and competitive pressure in practice give the public access to much information, even without a formal right to it. These pressures also exist with respect to labeling of products, which in most countries is regulated.

Has the public a *right* to know that huge piles of used tires are stacked and constitute an environmental hazard? One's first reaction would be to answer in the negative: no right to know beyond what can be gleaned from direct observation and voluntarily provided information. This presupposes that the person stockpiling those tires can effectively be held liable in cases where a fire occurs and hundreds of neighbours have to be evacuated. Frequently, however, the stockpiler is insufficiently solvent for that threat to be effective. If so, the only solution for potential neighbours would be not to live nearby: house prices near the stockpile of tires will be depressed. For those already there when the hazard becomes known, the option is to take their case to the public, organize a green campaign or a boycott, and to induce government to step in and to regulate the business. Government regulation usually entails an obligation to divulge, but rarely to the public at large.

---

14. *Grimshaw v. Ford Motor Co.*, (1981) 119 Cal. App. 3rd 757; 174 Cal. Repr. 348.

### 3.4 INFORMATION ABOUT COMPETITORS

The public's right to information has been used in the United States in particular, under the *Freedom of Information Act*, to gain access to government held information about competitors. The government may come by this information in several ways: as a result of obligations to declare, imposed on corporate citizens or through divulgence as part of a tender for a government contract. It is interesting to note in passing that competition is not merely *price* competition in a market for a uniform good. Much competition has to do with invention and innovation in products and marketing methods. Competitive advantage hinges upon having information denied to one's competitors.

There was a time when economists thought that information advantages allowed one to distort competition by erecting barriers to entry (information lockup). Such a view would favour an obligation to divulge informational advantages or the possibility for the government to do so. After the case against IBM in the United States, thinking on the nature of competition changed.<sup>15</sup> The competitive advantages which earlier were thought to distort competition were now seen as the very inducements necessary to stimulate it. On such a view, forced access, for competitors, to information on a company would tend to weaken competition.

Patents grant limited monopolies, against disclosure of the discovery. It is interesting to note that in many areas of rapid technological development, companies prefer to rely on trade secret, rather than patents, as a means to earn back their investment in R&D.<sup>16</sup> Disclosure would wipe out the competitive head start. Empirically, we know little about the actual incentive effects of intellectual rights, nor about their anti-competitive effects.<sup>17</sup>

Fashion designers appear to manage very well with only secrecy and lead time

- 
15. Hayek, F.A., The Meaning of Competition, in *Individualism and Economic Order*, F.A. Hayek (ed.), Chicago, Henry Regnery Cy, 1946, 92-106; *idem*, 'Free' Enterprise and the Competitive Order, in *Individualism and Economic Order*, *id.* (ed.), Chicago, Henry Regnery Cy, 1947, 107-118; *idem*, Competition as a Discovery Procedure, in *New Studies in Philosophy, Politics, Economics and the History of Ideas*, *id.* (ed.), Chicago, The University of Chicago Press, 1968, 179-190; Demsetz, Harold, *Efficiency, Competition, and Policy*, Oxford, Basil Blackwell, 1989; *idem*, *100 Years of Antitrust: Should We Celebrate? – Brent T. Upson Memorial Lecture*, Arlington, VA, George Mason University School of Law, Law and Economics Center, 1991; Kirzner, Israel, *The Economic Point of View*, Kansas City, Sheed and Ward, 1975; *idem*, *Discovery and the Capitalist Process*, Chicago, The University of Chicago Press, 1985; Brenner, Reuven, *History – The human gamble*, Chicago, The University of Chicago Press, 1983; Brenner, Reuven, *Rivalry – in business, science, among nations*, Cambridge, Cambridge University Press, 1987; *idem*, 'Inventions et innovations dans le monde des affaires et des sciences', (1990) 26 *Études françaises* 51-78; *idem*, Market Power: Innovations and Anti-trust, in *The Law and Economics of Competition Policy*, Frank Mathewson, Michael J. Trebilcock and Michael Walker (eds.), Vancouver, B.C., The Fraser Institute, 1990, 179-216.
  16. To this effect see Lepage, Henri, 'Les brevets dans la stratégie des entreprises: le cas français', (1989) 1 *Journal des économistes et des études humaines* 153-177.
  17. Priest writes: '[...] in the current state of knowledge, economists know almost nothing about the effect on social welfare of the patent system or of other systems of intellectual property.' George L. Priest, What Economists can Tell Lawyers about Intellectual Property, in John Palmer (ed.), *Research in Law and Economics*, Vol. 8: *The Economics of Patents and Copyrights*, JAI Press, 1986, 19-24, at 21.

as their protection. Here is what a well-known economist studying competition has to say on the subject of patents and competition:

‘Shorten the life of patents, or weaken the degree of protection they offer, and price competition between existing goods becomes more intense. This, because persons offering close substitutes or imitations are less susceptible to charges of patent violation. However, if patent protection is weakened in order to increase the intensity of price competition between existing goods, competition between new goods also may be weakened. This, because those who invest in the discovery process become less secure about the exclusivity of their rights should they become valuable. Our knowledge about the degree to which competition to invent must be weakened to obtain a given strengthening of price competition between already invented goods is too poor to narrow disagreements about the preferred mix of these forms of competition’.<sup>18</sup>

If disclosure of patented information is seen as an application of the public’s right to information, then Demsetz’s remarks must be taken to mean that we do not know in a scientific manner how far this right should extend. A stronger patent – longer period of protection, weaker duty to disclose – will make competition more like a ‘winner take all’ contest; a weaker patent will lead to competition more like contests such as tennis tournaments, in which all the runners-up also get substantial prizes. We have no scientific knowledge to decide which of these forms of competition is preferable as regards general welfare.

### 3.5 INFORMATION ON COMPANIES

Company law makes it mandatory to divulge to potential investors all manner of information about the company whose stock is publicly traded or offered to the public. The rationale for such rules is to counteract fraud that would be all too easy with seriously under-informed investors. To what extent the legislation succeeds in its ostensible purpose and whether market pressure and normal carefulness of investors would not suffice in most cases, are open questions. Kronman has justified rules such as these with the argument that the information should be divulged when the holder does not need to be especially encouraged to collect it, because, for instance, he comes by it in the course of activities undertaken for some other purpose.<sup>19</sup>

18. Demsetz, Harold, *100 Years of Antitrust*, *supra* note 15, 5-6.

19. Kronman, Anthony T., ‘Mistake, Disclosure, Information and the Law of Contract’, (1979) 7 *Journal of Legal Studies* 1-34. On secrets generally Scheppele, Kim Lane, *Legal Secrets – Equality and Efficiency in the Common Law*, Chicago, The University of Chicago Press, 1988. The book is rather critical of the law-and-economics approach, but fails to justify that position satisfactorily (Johnston, Jason Scott, ‘Law, Economics, and Post-Realist Explanation’, (1990) 24 *Law and Society Review* 1217-1254, at 1246 f.).

#### 4. Conclusion

Taken together, these considerations lead to the conclusion that there is no general right of the public to information. Against the State, such a right could be said to exist in principle, in furtherance of the openness of government required in a society based on democracy and the rule of law. But this right could be restricted where confidentiality is shown to be indispensable for the performance of government tasks. In practice, many exceptions are found and the best one can hope for is that they be subject to review by the courts. Against citizens, corporate or natural, the public has in principle no right to information, unless it concerns criminal activity. Information may be kept secret. If voluntarily divulged without restriction, it circulates freely. One may, of course, disclose information under contract to selected people only.

The absence of a right for the public to have access to private information does not mean that no information will in fact be forthcoming. On the contrary, competitive pressure, markets generally, will often make it profitable, even imperative, to provide the public with information. Where information is divulged, voluntary or forcibly, there is no good reason to think that it should be *free*, though it often is. Free goods tend to be overconsumed and underproduced. In many cases, information is costly to produce in the same way physical goods are.

The clamour for the public's right to information against institutions other than the State is largely hyperbolic. Rights should not be claimed gratuitously.<sup>20</sup>

---

20. Slagter, W.J., *Schaarse rechten*, Deventer, Kluwer, 1989.



# Public Access to Government Information towards the 21st Century

*Ton A.L. Beers*

Writing a paper in the present *fin de siècle* for a book on 'Information Law towards the 21st Century' seems to be an appropriate occasion for some retrospective as well as prospective considerations about the right of public access to government information. This essay will do so while focusing on two major issues.

First, attention will be paid to the question whether public access to government information may be qualified as a *fundamental right*, and if so what this status means. Although a fundamental right of public access to official records was acknowledged in Sweden as early as 1766, it was not until the last decades of the 20th century that a right of public access to certain government information was deemed inherent in the freedoms of speech and press under the United States Constitution and in the freedom of expression under the European Convention for the Protection of Human Rights and Fundamental Freedoms. According to a French commentator, the public's right to government information constitutes one of the essential elements of a *third generation of human rights*.

Second, the significance of *electronic information technology* for public access will be discussed. Computerization seems to involve certain risks which could lead to an erosion of the right of public access, but it may also be seen as an instrument which can be used to strengthen and further develop the principle of openness. Some American commentators fear the potentially great danger that government agencies will use computerization as a *technology of secrecy*. However, modern information and communication technologies may also serve as a *technology of freedom* in that they are used to enhance freedom of information in general and public access to government information in particular.

Both issues are dealt with in a comparative way. Before doing so, some remarks of a terminological nature have to be made. Especially the terms 'public access' and 'government information' will be defined. In this connection, a distinction is drawn between various modalities of access to government information.

## 1. Terminology

The words 'access' and 'government information' can be used in different senses. It is necessary, therefore, to point out what those terms mean for the purposes of this essay. An operational definition of access, in particular of public access, has to be worked out. Afterwards, the term government information will be explained.

## 1.1 PUBLIC ACCESS

The word access is used here in the specific legal context of a right of access to government information, i.e., an enforceable right to inspect or copy government documents, attend meetings of public authorities, or visit certain government facilities. Well-considered, it is more correct to speak in the plural about *rights* of access. I believe there is good reason to distinguish various modalities of access to government information, more in particular: official access, party access, personal access, and public access. Such a differentiation is justified on several grounds.

The first reason is that each of those modalities designates a different category of *beneficiaries* to the pertinent right of access, determined by the subject's quality or capacity to which the right is attached. Thus, *official access* means that public authorities or officials are entitled to access because of their official status. Examples of this form of access are the right of individual members of parliament or parliamentary committees to executive information, and the power of the courts to demand and examine government information, necessary for the administration of justice.

The modality of *party access* – known in Scandinavian law in particular – primarily denotes the availability to a party, or a third-party, in a judicial or an administrative procedure, of government information relevant to the case in question. This kind of access is called 'discovery' in common-law countries, where it is a part of the law of evidence. Party access also comprises the right of access of persons who have a specific legal interest in information that does not relate to a certain procedure. An example of the latter is the accessibility of a land register for any person with a legitimate interest in the requested information.

Each individual's right of access as a person to his or her own personal information, in the possession or control of public authorities, is qualified as a right of *personal access*. *Public access* then designates the modality in which all the members of the public at large are entitled to government information. In this respect a distinction can be made between a *special* right of public access and a *general* right of public access. The former is based on a special legal norm and has reference to specific information, for instance an electoral register, whereas the latter has a more general legal basis and relates to a general category of information, for example administrative documents.

In some jurisdictions, for example in the German *Länder*,<sup>1</sup> the press is granted a specific right of access to government information. Under the law of other jurisdictions, for instance that of the United States of America, the press has no right of special access to government information which is not available to the public generally.<sup>2</sup> Therefore, only for some jurisdictions it is appropriate to differentiate '*press access*' as a modality distinct from public access.

Secondly, the distinction made is of importance also because of the different *legal basis and purpose* of each of the various rights of access. In general, rights of official access are in the interest of a proper fulfilment of the duties of the public authority which is entitled to access. Party access is intended to secure the rights of

1. In most states of Germany, section 4 of the State Press Act.

2. *Pell v. Procunier*, 417 U.S. 817, 834 (1974); *Branzburg v. Hayes*, 408 U.S. 665, 684 (1972).

the parties in a case or matter and the specific legal interests of other persons. The right of personal access has its own constitutional or statutory foundation and is aimed at protecting the right to privacy, more specifically the right to informational self-determination as an element thereof. The rationale of the public access rights may vary: to further the free interchange of opinions and the enlightenment of the public, to secure against the abuse of power by means of public control, to ensure the availability of information necessary to an informed electorate, to improve the public debate on matters of general interest, to enable a more effective participation of the people in the making and administration of laws and policies, to further a good and democratic administration, as well as more specific purposes as far as special rights of public access are concerned.

Thirdly, in connection with the fact that the legal basis and purpose of the various rights of access differ, the *value and weight* of the rights can vary, which may have an influence upon the scope of each right and the corresponding degree of secrecy. The foregoing can be illustrated with some examples. Pursuant to the United States Freedom of Information Act, a federal district court, on complaint, has jurisdiction to enjoin the agency from withholding agency records and to order the production of any agency records improperly withheld from the complainant.<sup>3</sup> In such a case the court may examine the contents of such agency records *in camera* to determine whether these records or any part thereof shall be withheld under any of the exemptions set forth in the Act. This power of the court implies a right of official access to exempted agency records, or parts thereof, to which the right of public access does not extend.

Under the Dutch Constitution, Cabinet ministers have to give all the information to the Chambers of Parliament that is desired by one or more of its members, unless doing so would be contrary to the interests of the State.<sup>4</sup> The history of this rule shows that the corresponding right of the members of Parliament to executive information has a wider scope than the public's right of access under the Dutch Act on Openness of Administration.<sup>5</sup> It has been stated that the interest of a well-informed Parliament even weighs more heavily than the interest of public access.<sup>6</sup> This means that the grounds on which access is refused have to be more weighty to justify a refusal of information in the relation between the ministers and the members of Parliament. In many cases, information properly withheld from the public can be given, if necessary confidentially, to the Chambers of Parliament or to parliamentary committees.

The Swedish Secrecy Act of 1980<sup>7</sup> mainly consists of rules on the basis of which official information must be kept secret. These secrecy norms prohibit the disclosure of such information by either releasing official documents or divulging

3. 5 U.S.C., section 552 (a)(4)(B).

4. Article 68 of the Constitution (Grondwet), Staatsblad 1983, No. 70.

5. Act of November 9, 1978 (Wet openbaarheid van bestuur), Staatsblad 1978, No. 581, substituted by the Act of October 31, 1991, Staatsblad 1991, No. 703.

6. See Papers of the Second Chamber (Kamerstukken II), 1987-1988, 19 859, No. 6, 12.

7. Sekretesslag, SFS (Svensk författningssamling) 1980: 100, reprinted SFS 1989: 713.



information orally or in any other way.<sup>8</sup> The Act applies to the information relations between public authorities and private persons as well as to the relations between different public authorities. Chapter 14 of the Act contains provisions which allow the communication of information to another authority or to a party in a case to a wider extent than is normally allowed in relation to the public. For instance, information may always be given to Parliament, the *Riksdag*.<sup>9</sup> As a general rule, information to which a secrecy norm applies may be communicated to a public authority if it is evident that the interest of the information being communicated prevails over the interest which secrecy purports to protect.<sup>10</sup> As to party access, the Act provides that secrecy shall not hinder an applicant, a plaintiff, or any other party in a case or other matter pending in a court or other authority, from having access to any document or other material pertaining to the case or the matter.<sup>11</sup> However, no document or other material may be disclosed if and to the extent that, with regard to any public or private interest, it is of the utmost importance that secret information contained therein is not disclosed.<sup>12</sup> In such a case the public authority concerned shall by other means inform the party of the contents of the material, to the extent that is required for him to be in a position to safeguard his rights and that can be done without the interest which secrecy purports to protect being seriously damaged.

Under Dutch law, the exemptions from the right of access which is based on the Act on Openness of Administration are *obligatory* (access *shall* be refused),<sup>13</sup> whereas the exemptions in the Data Protection Act<sup>14</sup> are *permissive* (access *can* be refused).<sup>15</sup> This means that the Dutch legislator apparently attaches greater value and weight to the right of personal access than to the right of public access.

In the following parts the right of public access constitutes the core of the discussion. However, attention will also be paid to other modalities of access whenever this is appropriate.

## 1.2 GOVERNMENT INFORMATION

The term government is used in a wider and a narrower, functional as well as organizational sense. Government in a broad functional meaning signifies all activities of a legislative, executive and judicial nature on the national, regional and local level. As to the broader organizational sense government includes all three branches of government – the legislature, the executive and the judiciary – on the national level as well as the totality of the regional and local public authorities. According to a narrower sense, used in parliamentary systems of government in particular, the notion

8. See for an extensive commentary on the Act Hans Corell, Olof Egerstedt, Marianne Eliason, Sigurd Heuman, Göran Regner, *Sekretesslagen. Kommentar till 1980 års lag med ändringar, tredje upplagan* (Norstedt, Stockholm, 1992).

9. Chapter 14, section 1, Secrecy Act.

10. Chapter 14, section 3, Secrecy Act.

11. Chapter 14, section 5.

12. *Ibid.*

13. Article 1, paragraph 2, and Article 4 of the earlier Act; Article 10 and Article 11, paragraph 1, of the new Act.

14. Act of 28 December 1988 (Wet persoonsregistraties), Staatsblad 1988, No. 665.

15. Article 30.

designates on the one hand the function of steering the country, and on the other hand the whole of prime minister, ministers and under-secretaries of state. In this essay the term government is mostly used in the wider meaning, though limited to functions and authorities on the national level.

Two kinds of government information ought to be distinguished for the purpose of the rights of access: *documentary* information and *non-documentary* information. The former comprises any record or recording containing information, *i.e.* any representation in writing or picture, and any recording that can be read, listened to or otherwise comprehended by means of technical aids. By the latter is meant any information not documented on a record or a recording which can be obtained when one is present at a meeting or a proceeding, as well as by visiting a building or some other facility. Examples are statements which are made during a meeting or a proceeding but are not put on record, unrecorded facial expressions of members of committees, the atmosphere in a courtroom, and the conditions in a prison. The availability of both documentary and non-documentary information can be secured by a right of access to records and recordings as well as to certain meetings and facilities.

Generally, access to government information can be defined as the availability for inspection or copying of both records and recordings, possessed or controlled by a public authority, or the possibility to attend particular kinds of meetings or proceedings of a public authority, or to visit certain government facilities.

## 2. Public Access as a Fundamental Right

In 1981, a French commentator observed that the right of access to one's own personal data and the right to information which is of general interest – both rights being part of a wider 'right to know' – constitute one of the essential elements of '*the third generation of human rights*', after the civil and political rights of the 18th century, and the economic and social rights of the first half of the 20th century.<sup>16</sup> In this connection, reference was made to the promulgation of three statutes in France in 1978 and 1979: the Act on data processing, registers and liberties,<sup>17</sup> the Act on the freedom of access to administrative documents,<sup>18</sup> and the Act on the archives.<sup>19</sup>

The observation on the third generation of human rights gives rise to interesting questions. Does the general right of public access to government information qualify as a fundamental right? What does the status of a fundamental right mean for the right of public access? These questions will be addressed, hereafter, by looking at the law in Sweden, the law in the United States of America, and the European Con-

16. Guy Braibant, 'Droit d'accès et droit à l'information', in *Mélanges Charlier: Service public et libertés* (Editions Emile-Paul, Paris, 1981), 703.

17. Law No. 78-17 of 6 January 1978 (loi relative à l'informatique, aux fichiers et aux libertés), *Journal Officiel*, 7 January 1978, 227, and rectified *Journal Officiel*, January 25, 1978, 491.

18. Law No. 78-753 of 17 July 1978 (loi portant diverses mesures d'amélioration des relations entre l'administration et le public et diverses dispositions d'ordre administratif, social et fiscal, Articles 1 to 13), *Journal Officiel*, 18 July 1978, 2851, as amended by Law No. 79-587 of 11 July 1979, *Journal Officiel*, 12 July 1979, 1711.

19. Law No. 79-18 of 3 January 1979 (loi sur les archives), *Journal Officiel*, 5 January 1979, 43.

vention for the Protection of Human Rights and Fundamental Freedoms. A comparative evaluation is made afterwards.

### 3. The Swedish Constitution

Under Swedish law, public access to government documents has the status of a fundamental right. The rules on the right of public access form part of the Freedom of the Press Act.<sup>20</sup> This Act is one of the four fundamental laws in Sweden. The other ones are the Instrument of Government, the Act of Succession and the Freedom of Expression Act. The right of public access to official documents dates back from 1766, when the first Swedish Freedom of the Press Act was promulgated. The Act contained rules on both the freedom of the press and public access. Thus, in Sweden the right of public access to government documents belongs to the first generation of human rights. Under the Instrument of Government, the public also has a fundamental right of access to court proceedings.<sup>21</sup>

#### 3.1 OFFICIAL DOCUMENTS

The rules on public access to official documents have been included in the Freedom of the Press Act, because of their close connection with the freedom of the press.<sup>22</sup> This connection finds expression in the provision in which it is stated that everyone's freedom of the press comprises, among other rights, the right to publish in print *official documents*. Thus, one of the functions public access is meant to perform is to secure a source of material for printed publications.<sup>23</sup> The close connection between freedom of the press and public access also appears from another, more general, purpose or function of public access. It is said in the Freedom of the Press Act that the purpose of public access is to further the free interchange of opinions and enlightenment of the public.<sup>24</sup> The function of freedom of the press is formulated in exactly the same words.<sup>25</sup> This indicates that public access to official documents forms part of the freedoms of expression and information.<sup>26</sup> Public access to official documents is considered suitable, to a high degree, to enrich the public debate and to broaden the basis for the standpoints of citizens and organizations on various social issues.<sup>27</sup> As such, the right of public access to official documents is regarded as one of the conditions for the free and democratic formation of opinions.<sup>28</sup>

20. Chapter 2, 'On the openness of official documents' (Om allmänna handlingars offentlighet), Freedom of the Press Act (Tryckfrihetsförordningen), SFS 1991: 1500.

21. Chapter 2, section 11, paragraph 2, Instrument of Government (Regeringsformen), SFS 1991: 1503.

22. Proposition 1975/76: 160, at 71. See Alf Bohlin, *Allmänna handlingar* (Juristförlaget, Stockholm, 1988), 25.

23. Bohlin, *supra*, note 22, at 25.

24. Chapter 2, section 1.

25. Chapter 1, section 1, sub 2, Freedom of the Press Act.

26. Bohlin, *supra*, note 22, at 25-26.

27. Proposition 1975/76: 160, 71.

28. *Ibid.*

The constitutional provisions on freedom of expression and freedom of information can be seen as special manifestations of the principle of openness.<sup>29</sup> Every citizen is guaranteed the freedom to communicate information and express ideas, opinions and feelings, either in speech, writing, or picture, or in any other way (freedom of expression), and the freedom to obtain and receive information and otherwise to acquaint himself with the expressions of others (freedom of information).<sup>30</sup> Although the right of public access to official documents can be regarded as forming part of the freedoms of expression and information, the freedom of information *in itself* does not include any right for the public to demand information from the public authorities.<sup>31</sup> The freedom of information guarantees every citizen the freedom to obtain and to receive information from generally accessible sources of information, for example the newspapers and radio or television broadcasts.

The fundamental right of public access to official documents applies to the documents of the government – i.e. prime minister and ministers – and the administrative authorities as well as to the documents of the *Riksdag* and the courts. The right of access is granted to every Swedish citizen.<sup>32</sup> Any non-citizen shall be treated on the basis of equality with Swedish citizens, except when provided otherwise in an act.<sup>33</sup> This means that non-citizens also have the right of public access to official documents, but that this right can be restricted by provisions in any ordinary act.<sup>34</sup>

The right of public access of Swedish citizens is not absolute since the Freedom of the Press Act allows certain restrictions.<sup>35</sup> Such limitations are permitted only if they satisfy the following requirements: the restriction must be *necessary* in view of one or more of the interests enumerated in the Freedom of the Press Act, and has to be scrupulously specified in a provision of a specific act of parliament or, if in a particular case it is found more suitable, in another statute to which the specific act makes reference. Upon an authorization by way of such a provision the government may issue, by decree, more detailed regulations concerning the application of that provision.

### 3.2 PROCEEDINGS

The constitutional principle of governmental openness also finds its expression in the provision that proceedings in the courts shall be open to the public.<sup>36</sup> The public accessibility of these court proceedings forms part of the fundamental freedoms and rights of every citizen. The rule on the openness of court proceedings has been characterized as a valuable completion of the freedom of information.<sup>37</sup>

29. Bohlin, *supra*, note 22, at 18.

30. Chapter 2, section 1, sub 1 and 2, Instrument of Government.

31. Bohlin, *supra*, note 22, at 18; Erik Holmberg, Nils Stjernquist, *Grundlagarna* (Norstedt, Stockholm, 1980), 72. Proposition 1975/76: 209, at 110, 145 and 231; SOU (Statens offentliga utredningar) 1978: 34, at 80.

32. Chapter 2, section 1, Freedom of the Press Act.

33. Chapter 14, section 5, paragraph 2, Freedom of the Press Act.

34. Bohlin, *supra*, note 22, at 19, note 7.

35. Chapter 2, section 2.

36. Chapter 2, section 11, paragraph 2, Instrument of Government.

37. Proposition 1975/76: 209, at 127.

Unless otherwise provided by special rules in an act of parliament, any foreigner within the Realm is on an equal footing with a Swedish citizen regarding the freedom of expression, the freedom of information and the openness of court proceedings.<sup>38</sup> These three fundamental freedoms or rights may be restricted if the following requirements are met: (1) the restriction shall be made by an act of parliament, or by a decree issued upon an authorization in an act of parliament; (2) such a restriction may be made only for the achievement of a specified purpose which is acceptable in a democratic society; (3) the restriction may never go beyond what is necessary with regard to the purpose which has given rise to it, and neither may it extend so far as to constitute a threat to the free formation of opinions as one of the foundations of democracy; (4) a restriction shall not be made solely on the basis of a political, religious, cultural, or another comparable way of thinking; (5) the restriction shall be the result of a specific procedure.<sup>39</sup>

The latter means that a bill which affects one of those freedoms or rights shall, in principle, be considered in two readings by Parliament, one year passing between the two readings. This procedure applies only if a group of not less than ten members of Parliament asks for it and the *Riksdag* Committee on the Constitution considers that the bill really would affect one of the freedoms or rights concerned. If this is so, the *Riksdag* nevertheless can take its decision immediately if at least 5/6 of the voters are in agreement with the decision.

Under the *Riksdag* Act, the meetings of Parliament shall be public.<sup>40</sup> This right of public access to parliamentary meetings no longer has the status of a fundamental right under Swedish law since the new *Riksdag* Act is not a fundamental law any more. Yet, also public access to meetings of the *Riksdag* can be regarded as a valuable completion of the freedom of information.

The right of public access to meetings of the *Riksdag* may be restricted by assembling behind closed doors if this is required in view of the security of the Realm, or the relation with another state or an international organization.<sup>41</sup> This is a matter to be decided by the *Riksdag*. If the Government is going to deliver a message to the *Riksdag* at a meeting, the Government can order that the meeting will take place behind closed doors.

#### 4. The United States Constitution

The first amendment to the United States Constitution guarantees the freedom of speech and of the press and the right to assemble peaceably, and to petition the government for a redress of grievances. The Supreme Court acknowledges that certain rights of the public to receive or obtain information are implicit in the first amendment. Commentators consider these rights to be part of the public's *right to know*. The right to know under the first amendment includes the following: on the one hand the right of the public to receive information from a *willing* communicator

38. Chapter 2, section 20, paragraph 2, sub 1 and 6, Instrument of Government.

39. Chapter 2, section 12, paragraphs 1-3, Instrument of Government.

40. Chapter 2, section 4, *Riksdag* Act (*Riksdagsordningen*), SFS 1985: 1068.

41. Chapter 2, section 4, paragraph 1, *Riksdag* Act.

without government interference, either as a correlative right to the communicator's right to speak or as an independent right when the speaker is not in a position to assert his rights;<sup>42</sup> on the other hand the public's right to obtain or have access to government information, to a larger<sup>43</sup> or smaller<sup>44</sup> extent, even when the government is *unwilling* to communicate the information.

In the 1980s, federal courts acknowledged that the first amendment implies a right of public access to court proceedings and records. This right of public access is considered by the Supreme Court to be a fundamental right that, even though it is not expressly guaranteed, is indispensable to the enjoyment of the explicitly defined rights of the first amendment and that is therefore implicit therein.<sup>45</sup>

The Court held that the press has no first amendment right of access to the section of a jail where a prisoner reportedly had committed suicide.<sup>46</sup> The press has no constitutional right of access to information superior to that of the public at large.<sup>47</sup> Furthermore, the Supreme Court has noted that prisons, jails and military bases are institutions where public access is generally limited.<sup>48</sup>

The question arises whether a first amendment right of public access can also be acknowledged with respect to proceedings and records of the legislative and executive branches of government. Before going into this question, first the case law relating to court proceedings and records will be discussed.

#### 4.1 COURT PROCEEDINGS AND RECORDS

On July 2, 1980, the United States Supreme Court ruled that the first amendment guarantees the right of the public and the press to attend criminal trials.<sup>49</sup> Previously, the Court held that members of the public have no constitutional right under the sixth amendment to attend criminal trials.<sup>50</sup> The Court concluded that the right to a public trial, granted in the sixth amendment, could be invoked only by the accused in a criminal case. In 1984, the first amendment right of public access was held to cover proceedings for the *voir dire* examination of potential jurors and the transcripts of these proceedings as well.<sup>51</sup> About two years later the Court decided that the right of public access did also apply to preliminary hearings as conducted in California.<sup>52</sup> Appellate courts have recognized a first amendment right of public access to pre-

42. *Stanley v. Georgia*, 394 U.S. 557 (1969); *Lamont v. Postmaster General*, 381 U.S. 301 (1965); *Martin v. City of Struthers*, 319 U.S. 141 (1943); *Meyer v. Nebraska*, 262 U.S. 390 (1923).

43. Thomas I. Emerson, 'Legal Foundations of the Right to Know', 1976 *Washington University Law Quarterly* 1, at 2, 14 and 16.

44. Laurence H. Tribe, *American Constitutional Law*, second edition (Foundation Press, New York, 1988), at 944-945.

45. *Richmond Newspapers, Inc. v. Virginia*, 448 U.S. 555 (1980); plurality opinion, delivered by Chief Justice Burger, in which Justices White and Stevens joined, at 579-80, and concurring opinion, delivered by Justice Brennan and joined by Justice Marshall, at 588, note 4.

46. *Houchins v. KQED, Inc.*, 438 U.S. 1 (1978).

47. *Ibid.* See also *Pell v. Procunier*, 417 U.S. 817 (1974).

48. *Richmond Newspapers, Inc. v. Virginia*, 448 U.S. 555, at 576, note 11 (1980).

49. *Richmond Newspapers, Inc. v. Virginia*, 448 U.S. 555 (1980).

50. *Gannett Co. v. DePasquale*, 443 U.S. 368 (1979).

51. *Press-Enterprise Co. v. Superior Court*, 464 U.S. 501 (1984).

52. *Press-Enterprise Co. v. Superior Court*, 478 U.S. 1 (1986).

trial criminal suppression, due process, and entrapment hearings,<sup>53</sup> bail hearings,<sup>54</sup> pre-trial criminal records,<sup>55</sup> civil trials,<sup>56</sup> search warrant materials,<sup>57</sup> as well as plea agreements and related documents.<sup>58</sup>

The Supreme Court ruled that the press has no first amendment right to copy court copies of subpoenaed tapes of conversations recorded by former President Nixon which were admitted into evidence and played at a criminal trial of third persons arising from the 'Watergate' investigation.<sup>59</sup> Furthermore, the Court refused to grant the public or the press a right of access to discovery hearings.<sup>60</sup> Appellate courts denied public access to records pertaining to private civil cases prior to a judgment,<sup>61</sup> documents considered in civil discovery motions,<sup>62</sup> and to search warrant proceedings and materials regarding a pre-indictment investigation that was not concluded.<sup>63</sup>

The Supreme Court and the appellate courts have established a two-part test for determining whether a first amendment right of public access extends to a specific kind of proceeding or record. The decisions emphasize two complementary considerations: (1) whether the proceeding or record has historically been open to the press and the general public; (2) whether public access plays a significant positive role in the functioning of the particular process. Both questions must be answered positively before a constitutional right of public access can exist.

As to the first standard, in the early cases the Supreme Court relied on a common-law tradition of openness of criminal trials at the time the first amendment was ratified, thereby suggesting an intention and expectation on the part of the founding fathers of the Constitution that these proceedings would remain presumptively open.<sup>64</sup> Later on, the Court deemed a tradition of accessibility of preliminary hearings sufficient even though a common-law tradition of openness was absent at the

- 
53. *United States v. Brooklier*, 685 F.2d 1162 (9th Cir. 1982); *United States v. Criden*, 675 F.2d 550 (3d Cir. 1982).
  54. *In re Globe Newspaper Co.*, 729 F.2d 47 (1st Cir. 1984); *United States v. Chagra*, 701 F.2d 354 (5th Cir. 1983).
  55. *Associated Press v. U.S. District Court for the Central District of California*, 705 F.2d 1143 (9th Cir. 1983).
  56. *Westmoreland v. Columbia Broadcasting System Inc.*, 752 F.2d 16 (2d Cir. 1984); *Publicker Industries, Inc. v. Cohen*, 733 F.2d 1059 (3rd Cir. 1984); *Brown & Williamson Tobacco Corp. v. FTC*, 710 F.2d 1165 (6th Cir. 1983).
  57. *Re Search Warrant for Secretarial Area Outside Office of Thomas Gunn, McDonnell Douglas Corp.*, 855 F.2d 569 (8th Cir. 1988).
  58. *Oregonian Pub. Co. v. U.S. District Court for the District of Oregon*, 920 F.2d 1462 (9th Cir. 1990); *United States v. Haller*, 837 F.2d 84 (2d Cir. 1988); *In re Washington Post Co.*, 807 F.2d 383 (4th Cir. 1986); *United States v. Kooistra*, 796 F.2d 1390 (11th Cir. 1986).
  59. *Nixon v. Warner Communications, Inc.*, 435 U.S. 589 (1978).
  60. *Seattle Times v. Rhinehart*, 467 U.S. 20 (1984).
  61. *In re Reporters Committee for Freedom of the Press*, 773 F.2d 1325 (D.C. Cir. 1985).
  62. *Anderson v. Cryovac, Inc.*, 805 F.2d 1 (1st Cir. 1986).
  63. *Times Mirror Co. v. United States*, 873 F.2d 1210 (9th Cir. 1989).
  64. *Press-Enterprise Co. v. Superior Court*, 464 U.S. 501, at 505 (1984); *Globe Newspaper Co. v. Superior Court*, 457 U.S. 596, at 605 (1982); *Richmond Newspapers, Inc. v. Virginia*, 448 U.S. 555, at 569 (1980).

time the first amendment was adopted.<sup>65</sup> Nevertheless, a tradition of at least some duration is necessary because the rationale of the first part of the test is that a tradition of accessibility implies the favourable judgment of experience.<sup>66</sup>

As to the question whether public access plays a significant positive role in the functioning of the particular process, the Court has determined that public access to criminal proceedings is essential to the proper functioning of the criminal justice system. According to the Supreme Court, public access to criminal trials enhances the quality, and safeguards the integrity of the fact-finding process, fosters an appearance of fairness, thereby heightening public respect for the judicial process, and, in the broadest terms, permits the public to participate in and serve as a check upon the judicial process – an essential component in the structure of self-government.<sup>67</sup> Although the Court considers that many governmental processes operate best under public scrutiny, it recognizes that there are some kinds of government operations that would be totally frustrated if conducted openly, for example *grand jury* proceedings.

The Supreme Court made it clear that the constitutional right of public access to court proceedings and records is not absolute but that it may be restricted. The circumstances under which the press and public can be barred from a criminal trial are limited. The justification in denying access must be a weighty one. Where the government attempts to deny the right of access in order to inhibit the disclosure of sensitive information, it must be shown that such a denial is necessitated by a *compelling* governmental interest, and is narrowly tailored to serve that interest.<sup>68</sup>

With regard to the rationale of the first amendment right of public access to court proceedings and records, there have been different opinions in the Supreme Court. In the plurality opinion in *Richmond Newspapers, Inc. v. Virginia*, it was pointed out that the expressly guaranteed first amendment freedoms of speech and press and rights to assemble and petition share the common core purpose of assuring freedom of communication on matters relating to the functioning of government.<sup>69</sup> In guaranteeing freedoms such as those of speech and press, the first amendment can be read as protecting the right of everyone to attend trials so as to give meaning to those explicit guarantees. According to the plurality opinion, the first amendment ‘goes beyond protection of the press and the self-expression of individuals to prohibit government from limiting the stock of information from which members of the public may draw’.<sup>70</sup> Free speech carries with it some freedom to listen. In a variety of contexts the Supreme Court has referred to a first amendment right to receive information and ideas. In the context of trials this means that the first amendment guarantees of free speech and free press, standing alone, prohibit the government from summarily closing courtroom doors which had long been open to the public at the time the amendment was adopted.

65. *Press-Enterprise Co. v. Superior Court*, 478 U.S. 1 (1986); see the dissenting opinion of Justice Stevens, *ibid.* at 22.

66. *Ibid.* at 8.

67. *Press-Enterprise Co. v. Superior Court*, 478 U.S. 1 (1986); *Press-Enterprise Co. v. Superior Court*, 464 U.S. 501 (1984); *Globe Newspaper Co. v. Superior Court*, 457 U.S. 596 (1982).

68. *Ibid.*

69. 448 U.S. 555, at 575.

70. The opinion quotes *First National Bank of Boston v. Bellotti*, 435 U.S. 765, at 783 (1978).



The explicitly guaranteed rights to speak and publish concerning what takes place at a trial would lose much of their meaning if access to observe the trial could be foreclosed arbitrarily. The right of access to places traditionally open to the public, as criminal trials have long been, may be seen as assured by the amalgam of the first amendment guarantees of free speech and free press. A trial courtroom also is a public place where the people generally – and representatives of the media – have a right to be present, and where their presence historically has been thought to enhance the integrity and quality of what takes place.

The concurring opinion of Justice Brennan, joined by Justice Marshall, considered that the first amendment embodies more than a commitment to free expression and communicative interchange for their own sakes; it has a *structural* role to play in securing and fostering the republican system of self-government.<sup>71</sup> Implicit in this structural role is not only ‘the principle that debate on public issues should be uninhibited, robust, and wide-open,’<sup>72</sup> but the antecedent assumption that valuable public debate – as well as other civic behaviour – must be informed. The structural model links the first amendment to that process of communication necessary for a democracy to survive, and thus entails solicitude not only for communication itself, but also for the indispensable conditions of meaningful communication.

In *Globe Newspaper Co. v. Superior Court* the majority opinion, delivered by Justice Brennan, spoke of the common understanding that a major purpose of the first amendment was to protect the free discussion of governmental affairs.<sup>73</sup> The Court stated that, to the extent that the first amendment embraces a right of access to criminal trials, it is to ensure that this constitutionally protected discussion of governmental affairs is an informed one.

#### 4.2 LEGISLATIVE AND EXECUTIVE PROCEEDINGS AND RECORDS

Thus far, the Supreme Court has not recognized a constitutional right of public access to proceedings and records of the other, legislative and executive branches of government. Therefore it remains an open question whether the fundamental right of public access extends to meetings and records of all three branches of government. In answering this question, one might contend at the outset that the doctrine of separation of powers precludes any judicial review of denials by either the legislature or the executive of access by the public or press to proceedings and records of these branches of government. This contention is, at least in my view, no obstacle to a judicially enforceable right of public access to legislative and executive proceedings or records.

The ruling of the Supreme Court in *United States v. Nixon* on the scope of judicial power regarding the enforcement of a subpoena for confidential Presidential tape recordings and records for use in a criminal prosecution is of importance also for the issue under discussion now, although the Court’s ruling does not concern public access to executive information but relates to pre-trial discovery in a criminal

71. 448 U.S. at 587.

72. Quoting *New York Times Co. v. Sullivan*, 376 U.S. 254, at 270 (1964).

73. 457 U.S. at 604-605.

case. The Court stated that in the performance of assigned constitutional duties each branch of government must initially interpret the Constitution, and that the interpretation of its powers by any branch is due great respect from the others.<sup>74</sup> It was pointed out that the American system of government requires, that federal courts on occasion interpret the Constitution in a manner at variance with the construction given the document by another branch, and that the Court has a responsibility as ultimate interpreter of the Constitution.<sup>75</sup> The Court reaffirmed the holding in *Marbury v. Madison*<sup>76</sup> that it is emphatically the province and duty of the courts to say what the law is, also with respect to the claim of privilege for confidential Presidential communications. The same is true for a claim that the public and the press have no first amendment right of access to legislative or executive proceedings or documents.

The question whether a first amendment right of public access to legislative or executive proceedings and documents exists, can be answered by applying the Supreme Court's two-part test which is used with respect to judicial proceedings and records. The first part of the test requires that a particular kind of record or proceeding has historically been open to the press or public generally. There has to be a tradition of accessibility of some duration that implies the favourable judgment of experience. With regard to records the Supreme Court has stated in *Nixon v. Warner Communications, Inc.* that the courts of this country recognize a general right to inspect and copy public records and documents.<sup>77</sup> In contrast to English common law,<sup>78</sup> American decisions generally do not condition the enforcement of this right on a proprietary interest in the document or upon a need for it as evidence in a lawsuit.<sup>79</sup> The Court points out that the interest necessary to support the issuance of a writ compelling access has been found, for example, in the citizen's desire to keep a watchful eye on the workings of public agencies,<sup>80</sup> or in a newspaper publisher's intention to publish information concerning the operation of the government.<sup>81</sup> This common-law right to inspect and copy documents is not absolute. American case law has limited the right in order to, among other things, avoid unreasonable interference with the agency, and safeguard individual privacy.<sup>82</sup>

There is a long tradition of openness and there are specific constitutional provisions regarding public access to legislative information. Under Article 1, section 9, of the Constitution, a regular statement and account of the receipts and expenditures of all public money shall be published from time to time. Article 1, section 5, pro-

74. 418 U.S. 683, at 703 (1974).

75. *Ibid.* at 704.

76. 1 Cranch 137 (1803).

77. 435 U.S. 589, at 597 (1978).

78. See, e.g., *Browne v. Cumming*, 10 B & C 70, 109 Eng. Rep. 377 (KB 1829).

79. 435 U.S. at 597.

80. See, e.g., *State ex rel. Colescott v. King*, 154 Ind. 621-627, 57 N.E. 535, 536-538 (1900); *State ex rel. Ferry v. Williams*, 41 N.J.L. 332, 336-339 (1879).

81. See, e.g., *State ex rel. Youmans v. Owens*, 28 Wis. 2d 672, 677, 137 N.W.2d 470, 472 (1965), modified on other grounds, 28 Wis. 2d 685a, 139 N.W.2d 241 (1966). But see *Burton v. Reynolds*, 110 Mich. 354, 68 N.W. 217 (1896).

82. *Mac Ewan v. Holm*, 226 Or. 27, 46, 359 P.2d 413 (1960). See David S. Cohen, 'The Public's Right of Access to Government Information under the First Amendment', 51 *Chicago-Kent Law Review* 164, at 169 (1974).

vides that each House shall keep a journal of its proceedings, and from time to time publish the same, excepting such parts as may in their judgment require secrecy. Though not mandated by the Constitution, the House of Representatives began admitting the public and the press to its debates on April 8, 1789.<sup>83</sup> The Senate opened the doors to its legislative proceedings as from December 9, 1795.<sup>84</sup> Besides, there is the well-established tradition of publishing congressional records and reports.

In comparison with the long standing tradition of openness of congressional information there is no similar tradition of public accessibility of *executive proceedings*. The Supreme Court noted in *Branzburg v. Hayes* that the press is regularly excluded from the meetings of official bodies gathered in executive session.<sup>85</sup> Congress yet enacted 'open meetings acts'. Under the *Government in the Sunshine Act* of 1976, the meetings of certain agencies shall be open to public observation.<sup>86</sup> The Act applies to any agency headed by a collegial body composed of two or more individual members, a majority of whom are appointed to such position by the President with the advice and consent of the Senate, and to any subdivision thereof authorized to act on behalf of the agency. An agency meeting or any portion thereof may be closed only upon one of the exemptions enumerated in the Act.<sup>87</sup>

The *Federal Advisory Committee Act*, enacted in 1972, requires each advisory committee meeting to be open to the public.<sup>88</sup> The Act is applicable to the advisory committees established by either Congress or an agency, as well as to advisory committees utilized by an agency. The rule of openness does not apply to meetings which are concerned with matters exempt from compulsory disclosure by the federal *Freedom of Information Act*.<sup>89</sup> It is highly doubtful whether the practice under those open meetings acts is of sufficient long duration as to pass the current test of public accessibility by tradition. This conclusion also holds with respect to the practice of public access to agency records under the *Freedom of Information Act*. The question is whether the courts are willing to extend the first part of the test so that it also comprises the public accessibility of a certain meeting or record as provided by law.

As to the second standard – whether public access to meetings and documents plays a significant role in the functioning of the particular process – the arguments relied on by the Supreme Court in connection with court proceedings and records also apply here, especially the ground that public access to meetings and records of the legislative and executive branches permits the public to participate in and serve as a check upon the legislative and the executive process. What has been said about the rationale of the right of public access to court proceedings and records is of equal

83. See Daniel N. Hoffman, *Governmental Secrecy and the Founding Fathers* (Greenwood Press, Westport, Connecticut, London, 1981), at 48-49.

84. *Ibid.* at 87.

85. 408 U.S. 665, at 684 (1972).

86. 5 U.S.C. section 552b.

87. 5 U.S.C. section 552b(c).

88. 5 U.S.C. Appendix I.

89. 5 U.S.C. Appendix I, section 10(d).

relevance in the context of public access to legislative and executive meetings and documents.

#### 4.3 A DIRECT CONSTITUTIONAL RIGHT OF PUBLIC ACCESS?

One might even ask whether it is acceptable to ground the right of public access to government information directly on the first amendment, independent of any tradition of openness or provision in law, and solely based on the rationale of public access or the determination that it plays a significant role in the functioning of the particular governmental process, especially in so far as it permits the public to check upon the process – which is essential to a structure of self-government. Such an independent, directly enforceable first amendment right of public access to government information has been recognized by some authors, but is repudiated by others.

Thus a constitutional right of the public to obtain information from government sources has been asserted to be necessary or proper for the citizen to perform his function as the ultimate sovereign.<sup>90</sup> According to another opinion, the test by which the courts are to decide whether the first amendment commands access to a particular kind of official institution or information should be the question whether refusing access denies the public any effective way to hold the government institution accountable.<sup>91</sup>

As opposed to those reasonings, it has been argued that the first amendment does not mandate a constitutional right of access to government materials and facilities not generally open to the public.<sup>92</sup> The denomination of an independently enforceable, affirmative right of access would commit the Court, in this view, to extra-constitutional decision making and thus would violate the principle of separation of powers.<sup>93</sup>

So, a direct fundamental right of public access to government information is highly disputed among commentators. The Supreme Court has not acknowledged such a right.

## 5. The European Convention on Human Rights

The European Convention for the Protection of Human Rights and Fundamental Freedoms contains a provision on the openness of certain proceedings. Article 6 provides that in the determination of his civil rights and obligations or of any criminal charge against him, everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law. Under the same article, judgment shall be pronounced publicly, but the press and the public

90. Thomas I. Emerson, 'Legal Foundations of the Right to Know', 1976 *Washington University Law Quarterly* 1, at 14-17.

91. Anthony Lewis, 'A Public Right to Know About Public Institutions: The First Amendment as a Sword', 1980 *Supreme Court Review* 1, at 22-24.

92. David M. O'Brien, *The Public's Right to Know: The Supreme Court and the First Amendment* (Praeger, New York, 1981), 142.

93. *Ibid.* at 166.

may be excluded from all or part of the trial in the interest of morals, public order or national security in a democratic society, where the interests of juveniles or the protection of the private life of the parties so require, or to the extent strictly necessary in the opinion of the Court in special circumstances where publicity would prejudice the interests of justice.

Article 6 is applicable to judicial proceedings as well as to particular administrative and disciplinary procedures.<sup>94</sup> With respect to the rationale and purpose of this requirement of openness, it is stated that the public nature of the proceedings helps to ensure a fair trial by protecting the litigant against arbitrary decisions and enabling society to control the administration of justice, as well as to secure that the public is duly informed, notably by the press, and to contribute to ensuring confidence in the administration of justice.<sup>95</sup>

The European Convention contains no other explicit provisions on public access to government information. However, in several resolutions and recommendations of various bodies of the Council of Europe as well as in a number of decisions by the European Commission of Human Rights, a right of public access to government information has been connected, explicitly or implicitly, with everyone's right to freedom of expression under Article 10 of the Convention.

## 5.1 RESOLUTIONS AND RECOMMENDATIONS

In a resolution on mass communication media and human rights, the Consultative Assembly of the Council of Europe states that the right to freedom of expression shall include the freedom to seek, receive, impart, publish and distribute information and ideas, and that there shall be a corresponding duty for public authorities to make available information on matters of public interest within reasonable limits.<sup>96</sup> In a recommendation on the same subject, the Consultative Assembly proposes to extend Article 10 of the Convention by expressly securing the freedom to seek information with a corresponding duty on public authorities to make information available on matters of public interest subject to appropriate limitations.<sup>97</sup> The recommendation did not result in the proposed alteration of Article 10.

In its recommendation on access by the public to government records and freedom of information, the Parliamentary Assembly of the Council of Europe points out that a parliamentary democracy can function adequately only if the people in general and their elected representatives are fully informed.<sup>98</sup> The Assembly deems

94. See e.g.: European Court of Human Rights (Eur. Court H. R.), *König case*, decision of June 28, 1978, Series A, No. 27; Eur. Court H. R., *Bentham case*, decision of October 22, 1985, Series A, No. 97; Eur. Court H. R., *Engel case*, June 8, 1976, Series A, No. 22.

95. Eur. Commission H.R., report of December 14, 1981, Series B, No. 57, 24. See also Eur. Court H.R., February 22, 1984, Series A, No. 72; Eur. Court H.R., *Sutter case*, February 22, 1984, Series A, No. 74.

96. Council of Europe, Consultative Assembly, *Resolution Containing a Declaration on Mass Communication Media and Human Rights*, January 23, 1973, No. 428 (1970), DH-MM (88) 3, 3.

97. Council of Europe, Consultative Assembly, *Recommendation on Mass Communication Media and Human Rights*, January 23, 1973, No. 582 (1970), DH-MM (88) 3, 8i.

98. Council of Europe, Parliamentary Assembly, *Recommendation on Access by the Public to Government Records and Freedom of Information*, February 1, 1979, No. 854 (1979), at 4-5.

it desirable that, subject to certain inevitable exceptions, the public should have access to government documents. It considers that such freedom of information constitutes an adequate check on corruption and waste of public funds. Member States were invited to introduce a system of freedom of information, i.e. access to government files, comprising the right to seek and receive information.

On November 25, 1981, the Committee of Ministers of the Council of Europe adopted a recommendation on the access to information held by public authorities.<sup>99</sup> It considers that adequate information on public issues is important for the public in a democratic society, that access to information by the public is likely to strengthen the confidence of the public in the administration, and therefore that the utmost endeavour should be made to ensure the fullest possible availability to the public of information held by public authorities. The Committee recommends the governments of Member States to be guided in their law and practice by the principles appended to the recommendation. Under Principle I of the Appendix, everyone within the jurisdiction of a Member State shall have the right to obtain, on request, information held by the public authorities other than legislative bodies and judicial authorities. The principles on public access to administrative information shall, under Principle V, apply subject only to such limitations and restrictions as are necessary in a democratic society for the protection of legitimate public interests – such as national security, public safety, public order, the economic well-being of the country, the prevention of crime, or the prevention of the disclosure of information received in confidence – and for the protection of privacy and other legitimate private interests.

On April 29, 1982, the Committee adopted a declaration on the freedom of expression and information.<sup>100</sup> The Member States of the Council of Europe reiterated their firm attachment to the principles of freedom of expression and information as a basic element of a democratic and pluralist society. It is stated that in the field of information and mass media they seek to achieve, among other things, the following objectives: on the one hand protection of the right of everyone, regardless of frontiers, to express himself, to seek and receive information and ideas, whatever their source, as well as to impart them under the conditions set out in Article 10 of the European Convention on Human Rights; on the other hand the pursuit of an open information policy in the public sector, including access to information, in order to enhance the individual's understanding of, and his ability to discuss freely political, social, economic and cultural matters.

When analyzing this declaration two things attract attention: first, the rather strict distinction between the right to freedom of expression on the one hand, and access to information on the other; second, as a probable explanation for this distinction, the qualification of freedom of expression as a matter of 'right' and of access to information as a matter of 'policy'. This seems to imply that in the opinion of the Committee of Ministers, in contrast with the standpoint of the Consultative Assem-

99. Council of Europe, Committee of Ministers, *Recommendation on the Access to Information Held by Public Authorities*, 25 November 1981, No. R (81) 19, DH-MM (88) 2.

100. Council of Europe, Committee of Ministers, *Declaration on the Freedom of Expression and Information*, 29 April 1982.

bly, public access to government information forms no part of the right to freedom of expression as guaranteed in Article 10 of the European Convention.

## 5.2 DECISIONS OF EUROPEAN COURT AND EUROPEAN COMMISSION

In the following part, the holding of the European Court of Human Rights that Article 10 of the Convention also guarantees the right of the public to be properly informed will be explained first. Then, decisions of the Court and also of the European Commission of Human Rights on access to government information, whether or not generally accessible, will be discussed. The question of possible, positive obligations flowing from Article 10 of the Convention is going to be dealt with afterwards. Finally, some conclusions will be drawn.

### *The right of the public to be properly informed*

In *Sunday Times v. United Kingdom* the European Court of Human Rights pointed out that not only do the media have the task of imparting information and ideas concerning matters of public interest, but that the public also has a right to receive them.<sup>101</sup> The Court noted that Article 10 of the Convention guarantees not only the freedom of the press to inform the public but also the right of the public to be properly informed.<sup>102</sup> In this case the families of numerous victims of the drug thalidomid, who were unaware of the legal difficulties involved, had in the Court's opinion a vital interest in knowing all the underlying facts and the various possible solutions. The Court concluded that an injunction of the High Court restraining publication by *The Sunday Times* of a proposed article about that drug, was an interference with the applicants' freedom of expression which did not correspond to a social need sufficiently pressing to outweigh the public interest in freedom of expression, and was therefore a violation of Article 10.

It appears from the context of this case that the phrase 'the right of the public to be properly informed' designates the right of the public to receive information from a *willing* communicator without interference by the government. That phrase has no reference to a possible right of access to information in the hands of an *unwilling* government because the Court's judgment does not relate to such a situation. In later cases, the Court held that the freedom to receive information basically prohibits government restrictions on receiving information that others wish or may be willing to impart.<sup>103</sup> The question whether Article 10 of the Convention confers a right of access to government information that a public authority is not willing to communicate, will be discussed in the following parts.

101. Eur. Court H.R., *The Sunday Times case*, decision of April 26, 1979, Series A, No. 30, paragraph 65.

102. *Ibid.*, paragraph 66.

103. See Eur. Court H.R., *Leander case*, decision of March 26, 1987, Series A, No. 116, paragraph 74, and Eur. Court H.R., *Gaskin case*, decision of July 7, 1989, Series A, No. 160, paragraph 52.

*Access to government information not generally accessible*

The European Commission of Human Rights was confronted in several cases with a situation in which the applicants claimed a violation of their right to receive information under Article 10 because their request for having access to government information was denied by the public authority concerned. In some decisions the Commission *assumed* that the right to receive information is not limited to generally accessible information, and that it may under certain circumstances include a right of access to sources of information which are not generally accessible but which are of particular importance for the person concerned.<sup>104</sup>

In other decisions the Commission was more positive on a right of access to government information under Article 10. In *X. v. Ireland* the Commission noted that, although the right to receive information is primarily intended to guarantee access to general sources of information, it *cannot be excluded* that in certain circumstances it includes a right of access to records which are not generally accessible.<sup>105</sup> The Commission was not of the opinion that Article 10 imposes an obligation on public authorities to *publish* such information as opposed to *facilitating access* to them. Moreover, the Commission noted that in the present case the applicant was granted access to 'monitoring' data in the course of the hearing before the High Court and that there was no indication from the case file that further access to data in possession of the County Council was denied to him.

The latter decision of the Commission relates to the situation of a party in an administrative case who claimed that his right to receive information was infringed upon. The Commission took into consideration that the applicant was granted access to the information as a party in the proceedings before the High Court. So far, the Commission only acknowledged his right of *party* access to specific government information. The Commission also referred to one of the former decisions in which it assumed a right of access by the interested person to records which are of particular importance for his own position. This wording seems to indicate that the Commission assumed merely a right of *party* access or *personal* access to specific information but not a right of access for the *public* at large. Only to the extent that the Commission was of the opinion that Article 10 imposes no obligation on State authorities to publish the information as opposed to facilitating access to them, it may have decided on public access negatively, on the one hand, as far as an obligation to publish is concerned, and positively, on the other hand, to the extent that facilitating access would also include granting access to the public at large. This, however, is not altogether clear.

In my opinion, it would not be correct to recognize a right of party access or personal access in the context of the right to receive information under Article 10. In the first place, it is inconsistent to acknowledge a right of access only for the person or party concerned whereas Article 10 grants the right to receive information to *every-*

104. Eur. Commission H.R., *X. v. Federal Republic of Germany*, decision of October 3, 1979, Decisions and Reports 17, at 227; Eur. Commission H.R., *X. v. Federal Republic of Germany*, decision of December 10, 1984, Application No. 9296/81 (unpublished).

105. Eur. Commission H.R., decision of December 7, 1981, Application No. 8878/80 (unpublished). See also Eur. Commission H.R., *X. v. United Kingdom*, decision of May 13, 1986, Application No. 11516/85 (unpublished).



one. Secondly, the purpose of the right of personal access – the protection of each individual’s right to informational self-determination – and the purpose of a right of party access – protecting the rights and interests of parties – do not coincide with the rationale of the freedom of expression, of which the freedom to receive is a part. Freedom of expression and information is a basic element, one of the essential foundations, of a democratic society. In harmony with that rationale the purpose of the right of public access is to make available to the public in a democratic society adequate information on public issues, and to strengthen public confidence in authorities.

In 1987 the European Court observed in *Leander v. Sweden* that the right to freedom to receive information basically prohibits a government from restricting a person from receiving information that others wish or may be willing to impart to him.<sup>106</sup> According to the Court, Article 10 does not, however, in circumstances such as those of the present case, confer on the individual a right of access to a register containing information on his personal position, nor does it embody an obligation on the government to impart such information to the individual.

Does the *Leander* judgment mean that the freedom to receive information only includes a right to receive information from a *willing* communicator without government interference, but not a right of public access to information which the government is *not willing* to impart? I think it does not. Under the circumstances of the particular case, the judgment of the Court on the freedom to receive information and the right of access to the register is correct. The question whether the applicant was entitled to have access to the register containing information on his personal position was a matter of *personal* access, not *public* access. It was therefore considered rightly under Article 8, which grants everyone the right to respect for his private and family life, his home and his correspondence. The Court noted that both the storing of information relating to Mr. Leander’s private life in a secret police register and the release of such information, both of which were coupled with a refusal to allow him an opportunity to refute it, amounted to an interference with his right to respect for private life as guaranteed by Article 8. As to the possible right of personal access to that information Article 8 has to be considered, in my opinion, as a special provision in relation to Article 10. The fact that this information was not communicated to Mr. Leander cannot, according to the Court, by itself warrant the conclusion that the interference was not necessary in a democratic society in the interest of national security, as it is the very absence of such communication which, at least partly, ensures the efficacy of the personnel control procedure. In the judgment of the Court there had been no breach of Article 8.

The European Court has neither acknowledged nor excluded a right of public access to government information pursuant to Article 10. This issue has been decided by the Commission in cases which will be discussed in the next part.

---

106. Eur. Court H.R., *Leander case*, decision of March 26, 1987, Series A, No. 116, paragraph 74.

*Public access to generally accessible government documents*

After the Court dealt with a situation of *personal* access in the Leander case, the European Commission had to decide on two complaints about a refusal to grant *public* access to government information. In *Clavel v. Switzerland*<sup>107</sup> a Swiss journalist was refused access to the land register of a commune. He wanted to check which plots belonged to a certain industrial in view of an article he was going to publish. Under Article 970, paragraph 2, of the Swiss Civil Code, a right of access to the register is granted to anyone who proves to have an interest. The requester was found not to have a legitimate interest to get access to the register. The Commission recalled its decisions according to which the right to receive information concerns primarily access to general sources of information and particularly prohibits a government from restricting a person from receiving information that others wish or may be willing to impart to him. It referred in that respect to the Leander case as well. The Commission pointed out that it follows from Article 970, paragraph 2, of the Swiss Civil Code that the land register does not constitute a generally accessible source of information because in order to get access to it, one has to demonstrate a legitimate interest. In the opinion of the Commission, Article 10 of the Convention does not, in the circumstances of the present case, confer on the individual a right of access to the register, nor does it embody an obligation for the authorities to impart such information to the individual.

A striking difference with the earlier mentioned decisions is that the Commission limits its inquiry to the question whether the requested information is generally accessible under domestic law and does not consider whether there exists a right of access to information which is not generally accessible. Possibly because of the Leander case, the right of access is restricted to information which is generally accessible. The decision implies that Article 10 secures a right of public access to government information which is generally accessible under the domestic law of a Member State. As such it is an indirect fundamental right of access, dependent on a domestic rule or practice of public accessibility.

That the freedom to receive information indeed secures a right of public access to government information which is generally accessible under domestic law, also follows from another decision of the Commission. In *X. v. Austria*<sup>108</sup> the applicant complained under Article 10 of the Convention that he had no effective right of access to the computerized legal information system on social security law set up by the Austrian social security authorities. Section 31 of the Austrian Social Security Act provides, within the limits of technical and operational possibilities and on payment of costs, for a right of public access to the computerized legal information system on social security law. The information system covers in particular all relevant legal provisions and their amendments as well as the case law and doctrine relating to them.

The Head Office of the Social Security Institutions in Austria informed the applicant that it estimated the necessary investment for technical installations enabling

107. Eur. Commission H.R., *Clavel case*, decision of October 15, 1987, Application No. 11854/85 (unpublished).

108. Eur. Commission H.R., decision of April 13, 1988, Application No. 10392/83 (unpublished).

his access to the system at about 50,000 Austrian shillings and the costs of use per hour at 2,000 Austrian shillings. The applicant complained in particular that the envisaged costs for technical installations and use of the information system were prohibitive. He considered that the State is obliged under Article 10 of the Convention to contribute to an effective right of access to an existing information system and, therefore, to provide for the technical facilities of access to this system at reasonable fees.

The European Commission recalled in its decision that the freedom to receive information is primarily a freedom of access to general sources of information which may not be restricted by positive action of the authorities. The Commission noted that the applicant did not claim information concerning his own personal data, but a right of access to general information, i.e. documents, jurisprudence etc., on Austrian social security law. The Commission found that the applicant had a statutory right of access to the information system. When he availed himself of that right he was in principle subject to the technical facilities of that information system. In the opinion of the Commission the applicant's submissions did not disclose any indication that the Austrian authorities, when setting up the information system, arbitrarily restricted the access of other users or that the estimated costs for special technical requirements and actual use were prohibitive and therefore interfered with the applicant's rights under Articles 10 and 14 of the Convention.

This decision is important because the Commission not only examines whether there is a right of public access to government information under Article 10, based on the general accessibility of the information by domestic law, but it also considers whether the conditions on which domestic law grants access interfere with the right of public access under Article 10. This means that restrictions of a domestic right of public access to government information which interfere with the right to receive information will have to satisfy the requirements of paragraph 2 of Article 10. Under this provision, an interference has to be prescribed by law and must be necessary in a democratic society in view of one or more of the interests mentioned in that paragraph. The Court has noted that, whilst the adjective 'necessary', within the meaning of Article 10, paragraph 2, is not synonymous with indispensable, it neither has the flexibility of such expressions as admissible, ordinary, useful, reasonable or desirable, and that it implies the existence of a pressing social need.<sup>109</sup>

#### *Public access to generally accessible government proceedings*

The freedom to receive information under Article 10 may also be held to apply to *proceedings* which are generally accessible. Although the Commission found that Article 10 does not confer a right on every person to attend any meeting he may wish to,<sup>110</sup> this finding does not exclude a right of public access to a particular kind of

109. Eur. Court H.R., *The Sunday Times case*, decision of April 26, 1979, Series A, No. 30, paragraph 59.

110. Eur. Commission H.R., *X. v. United Kingdom*, decision of May 4, 1987, Application No. 12040/86 (unpublished).

meeting if such a meeting is generally accessible under domestic law. To the extent that it concerns a hearing in the meaning of Article 6 of the Convention, this provision is applicable because in this respect it is a special provision in relation to Article 10.

### *Positive obligations*

The European Court reached the same conclusion on Article 10 in *Gaskin v. United Kingdom*<sup>111</sup> as it did in *Leander*. The former relates to the refusal to allow the applicant access to an entire file, held by the Liverpool City Council, concerning his private and family life during the period when he was a child in the care of the City Council. In the view of the Court, the applicant did not complain about a violation under Article 8 of the Convention of the *negative* obligation not to interfere with his private and family life, but about a breach of a *positive* obligation flowing from Article 8. In accordance with its established case law, the Court, in determining whether or not such a positive obligation existed, referred to the fair balance that had to be struck between the general interest of the community and the interests of the individual.<sup>112</sup>

In striking this balance the aims mentioned in the second paragraph of Article 8 of the Convention may be of a certain relevance, although this provision refers in terms only to *interferences* with the right protected by the first paragraph – in other words, it is only concerned with the negative obligations flowing therefrom. The Court considered that the confidentiality of the contents of the file contributed to an effective operation of the child-care system and, to that extent, served a legitimate aim by protecting not only the rights of contributors but also of the children in need of care.

In the Court's opinion, persons in the situation of Mr. Gaskin have a vital interest, protected by the Convention, in receiving the information necessary to know and to understand their childhood and early development. On the other hand, the Court stated that it must be borne in mind that confidentiality of public records is of importance for receiving objective and reliable information, and that such confidentiality can also be necessary for the protection of third persons. Under the latter aspect, a system like the British one, which makes access to records dependent on the consent of the contributor, can in the opinion of the Court in principle be considered to be compatible with the obligations under Article 8, taking into account the State's margin of appreciation.

The Court considered, however, that under such a system the interests of the individual seeking access to records relating to his private and family life must be secured when a contributor to the records either is not available or improperly refuses consent. Such a system is only in conformity with the principle of proportionality if it provides that an independent authority finally decides whether access has to be granted in cases where a contributor fails to answer or withholds consent. Because no such procedure was available to the applicant, the procedures followed failed to

111. Eur. Court H.R., *Gaskin case*, decision of February 23, 1989, Series A, No. 160.

112. See Eur. Court H.R., *Rees case*, decision of October 17, 1986, Series A, No. 106, paragraph 37.

secure respect for Mr. Gaskin's private and family life as required by Article 8 of the Convention. The Court thus held that there had been a breach of that provision.

The *Gaskin* case raises the question whether similar positive obligations could be acknowledged under Article 10. This question is of importance in view of the fact that there are Member States under whose system of law there exists no general right of public access to government information, and consequently, in accordance with the current case law of the Commission, no right to receive such information under Article 10. In my opinion, one can argue that, although the essential object of Article 10 is to protect the individual against arbitrary interference by the government, there may in addition be *positive* obligations inherent in an effective respect for the freedoms of Article 10, albeit subject to the State's margin of appreciation. It could be contended in this view that, in accordance with the recommendation on access to government information of the Committee of Ministers, on the one hand access to adequate information on public issues is of importance for the public in a democratic society, whereas on the other hand confidentiality of certain government information may be necessary for the protection of particular legitimate public and private interests.

A domestic system of law is not in conformity with the principle of proportionality if it denies the public a general right of access to government information as a matter of overall practice, without any regard to the question whether the denial of such public access to requested government information is really necessary in a democratic society for the protection of a legitimate public or private interest. Such a system would thus constitute a breach of Article 10.

There may be other positive obligations under Article 10 as well, for example the requirement that an independent authority finally decides whether public access has to be granted in cases where a public authority has denied such access. Those positive obligations also apply to Member States where a general right of public access is acknowledged by law.

### *Conclusions*

In sum, the European Court holds that the freedom to receive information basically prohibits a government from restricting a person from receiving the information that others wish, or may be willing, to impart to him. Its holding that Article 10 does not embody an obligation for an unwilling public authority to impart information to a requester referred to the situation of *personal* access to personal information, to which Article 8 applies as a special provision in relation to Article 10. Therefore the Court has not excluded a possible right of *public* access to government information under Article 10.

The European Commission recognized at first a right of *party* access to certain government information which is not generally accessible. In later cases, it has acknowledged a right of *public* access to information which is generally accessible by virtue of domestic law. In this view, the right of public access to government information under Article 10 is merely an indirect fundamental right, dependent on the general accessibility of the information pursuant to domestic law. If the information is indeed generally accessible, the Commission reviews whether the domestic con-

ditions on public access interfere with the freedom to receive information under Article 10 of the Convention.

It can be argued that there are positive obligations inherent in an effective respect for the freedoms under Article 10, albeit subject to the State's margin of appreciation. The acknowledgment of such positive obligations is important, especially with regard to Member States whose domestic law does not confer to the public a general right of access to government information.

## 6. Evaluation

In Sweden, the right of public access to parliamentary, executive and judicial documents is acknowledged as a direct fundamental right which is explicitly guaranteed by a fundamental law. The same is true for the right of public access to proceedings of the courts. The right of public access to parliamentary meetings no longer has the status of a fundamental right.

Under the American Constitution, the right of public access to particular kinds of court proceedings and records is acknowledged by the Supreme Court as a fundamental right which is implicit in the freedoms of speech, press and assembly. It only exists in an indirect way to the extent that it is based on a tradition of openness of some duration and a significant positive role of public access in the functioning of the particular process. On the same basis, one can also recognize a fundamental right of public access to the debates of the House of Representatives and the Senate as well as to congressional records and reports. However, thus far the Court has not held that the fundamental right of public access extends to particular kinds of legislative and executive proceedings and records as well.

The European Convention on Human Rights contains one explicit and direct fundamental provision on the openness of particular kinds of judicial, administrative and disciplinary proceedings. A right of public access to government information is acknowledged by the European Commission of Human Rights to be implicit in the fundamental right to receive information if such information is generally accessible by virtue of domestic law. It is an indirect fundamental right, dependent on the public accessibility of such information under domestic law.

The status of fundamental right is significant for a right of public access in several respects. When a right of public access is expressly guaranteed in a fundamental law, as is the case for instance in Sweden with regard to court proceedings and official documents, that right may only be repealed by means of the same procedure applicable to changing the fundamental law, for which in most cases more stringent procedural requirements have to be complied with compared to altering ordinary laws.

Another important consequence of the fundamental right status is that for restricting the right of public access more rigorous standards have to be met than with respect to legal rights in general. Under the Swedish law and the European Convention on Human Rights, limitations on a fundamental right of public access are permitted only if they are prescribed by law and if they are necessary in a democratic society for the protection of specified public or private interests. 'Necessary' is not synonymous with terms such as admissible, ordinary, useful, reasonable, or

desirable, but it implies the existence of a pressing social need. Likewise, under American constitutional law, limitations of the fundamental right of public access to court proceedings and records have to satisfy strict standards. It must be demonstrated that a denial of access is necessitated by a compelling governmental interest, and is narrowly tailored to serve this interest.

There may be positive obligations flowing from the fundamental freedom of expression and information as well. In the context of the European Convention on Human Rights such positive obligations would be significant, especially for Member States where no statutory, let alone a fundamental, general right of public access to government information has been conferred under domestic law. It should be noted in this respect that in most of the Member States of the Council of Europe – as in a majority of the countries all over the world – neither a statutory nor a fundamental, general right of public access to government information has been acknowledged up to now.

## 7. Public Access and Information Technology

Another major issue concerns the meaning of modern information technology for the public's right of access to government information. In the computer age, this right will only be secured if it includes public access to both paper and *electronic* government information. A Swedish commentator pointed out that computerization seems to involve certain risks which could lead to an erosion of the right of access, but that it may also be seen as an instrument which can be used to strengthen and further develop the principle of openness.<sup>113</sup>

Although computers are not *creating* or inevitably leading to secret files, they do have important physical and administrative consequences that may require new legal rules and supervisory mechanisms to prevent abusive secrecy practices.<sup>114</sup> American commentators fear the potentially great danger that government agencies will use computerization as a *technology of secrecy*.<sup>115</sup> For example, when new programming is necessary to extract information from computer systems, agencies and courts in the United States have sometimes held that such programming is analogous to record creation, and is therefore not required under the Freedom of Information Act, which only obliges to search for available records.<sup>116</sup> In the computer era, however, some degree of programming or program modification may be required to obtain access to electronic information. Unless the computer programming issue is resolved, it signals the emergence of a new form of government secrecy.<sup>117</sup>

New information and communication technologies may also serve as a *tech-*

113. Peter Seipel, 'Teledoc and Open Records', 3 *Computer/Law Journal* 1982, 466.

114. Alan Westin, 'The Technology of Secrecy', in Norman Dorsen and Stephen Gillers (eds.), *None of Your Business. Government Secrecy in America* (The Viking Press, New York, 1974), 295.

115. Westin, *supra*, note 114, at 317; Jerry J. Berman, 'The Right to Know: Public Access to Electronic Public Information', 3 *Software Law Journal* 1989, 501-503.

116. Jamie A. Grodsky, 'The Freedom of Information Act in the Electronic Age: The Statute is Not User Friendly', 31 *Jurimetrics Journal* 1990, 19.

117. Berman, *supra*, note 115, at 504.

*nology of freedom*<sup>118</sup> in that they are used to enhance freedom of information in general and public access to government information in particular, as a part thereof. Computerization can make it possible to obtain information which is difficult if not impossible to get from manual files. It can also lead to better statistical data and management reports about agency operations and decisions. Furthermore, electronic information systems permit sophisticated searches for data, complicated analysis of large quantities of data, and, generally, finding information more quickly and more easily.

The ambivalence in the meaning of modern information technology for the right of public access asks for a twofold examination. First, the question must be answered whether traditional rules on public access apply equally well to electronic information as to paper documents. In this respect, important issues are: (1) What is or should be the object of the general right of public access in the case of electronic information? (2) When can computerized information be regarded as available to the agency? (3) Is it lawful to destroy or alienate machine readable records? (4) Should the requested, electronically stored information be provided only in the form of a paper print-out or also in an electronic form?

Second, the question arises how modern information technology can contribute to enhancing public access.

## 7.1 OBJECT OF PUBLIC ACCESS

Most freedom of information laws grant a right of public access to *records*. Although these laws are usually called 'Freedom of Information Act' or 'Access to Information Act', on a closer examination of such laws it becomes clear that *information* as such is not the object of the right of public access, but rather the physical thing which carries the information – the medium. Those laws are qualified more accurately, therefore, by using terms like 'Open Records Act' or 'Access to Records Act'.

The legal identification of information and medium has caused no difficulties in applying such a law in the traditional static information environment in which paper documents carry the information. Modern information technology, however, in a sense detaches the data from their medium,<sup>119</sup> thus creating a more dynamic or flexible information environment.<sup>120</sup> This is apparent, for example, in the case of relational database technology, which allows data elements from different pathways or fields to be connected to one another in non-linear combinations. All kinds of modern information technologies are obscuring the boundary between record and non-record material.<sup>121</sup> As information technology evolves, records become more difficult to conceptualize in terms of discrete, tangible documents.<sup>122</sup> In this respect, the question arises of what is, or should be, the object of a right of public access in

118. See Ithiel de Sola Pool, *Technologies of Freedom* (Belknap Press, Massachusetts, 1983).

119. See Jon Bing, 'Information Law?', 2 *Journal of Media Law and Practice* 1981, 219.

120. See Herbert Burkert, 'Data Protection and Access to Data', in P. Seipel (ed.), *From Data Protection to Knowledge Machines. The Study of Law and Informatics* (Kluwer, Deventer, Boston, 1990), 61, and Peter Seipel, 'Paper Laws in Transition', *ibid.*, 99.

121. Grodsky, *supra*, note 116, at 21.

122. *Ibid.*



the case of computerized information. For instance, should a computer tape be regarded as a tool to produce a record, the paper print-out, or is it an accessible record itself? Is it justified to consider data from different fields in a relational database which relate to the same matter as a record subject to a right of public access?

In defining the term 'records' for the purpose of the federal Freedom of Information Act, the United States Supreme Court referred to the Records Disposal Act.<sup>123</sup> Under the latter Act, records include all books, papers, maps, photographs, *machine readable materials*, or other documentary material, regardless of physical form or characteristics.<sup>124</sup> The Court's decision seems to imply that machine readable materials are, in principle, records within the scope of the Freedom of Information Act. Federal appellate courts have ruled explicitly that computerized records are records under the Freedom of Information Act. It was held that, in view of the common, widespread use of computers by government agencies for information storage and processing, any interpretation of the Act which limits its application to conventional written documents would contradict the general philosophy of full agency disclosure which Congress intended to establish.<sup>125</sup> The court concluded that the Freedom of Information Act applies to computer tapes to the same extent as it applies to any other documents. Another ruling by an appellate court pointed out that computer-stored records, whether stored in the central processing unit, on a magnetic tape or in some other form, are still records for the purpose of the Freedom of Information Act.<sup>126</sup> Although accessing information from computers may involve a somewhat different process than locating and retrieving manually-stored records, these differences may not be used to circumvent the full disclosure policies of the Act.<sup>127</sup> The important conceptual distinction between 'records' narrowly defined and 'information' broadly construed has been held central to the debate over the application of the Freedom of Information Act to computer-generated materials.<sup>128</sup>

In two recent bills on freedom of electronic information, one introduced in the House of Representatives and the other in the Senate, the term 'record' includes computerized, digitized, and electronic information, regardless of the medium by which it is stored.<sup>129</sup>

Under the Swedish Freedom of the Press Act, official documents in the meaning of written or printed records have traditionally been the object of the right of public access until 1974. From 1974, the revised Act stated that its provisions with respect to documents shall likewise apply to maps, drawings, pictures, and recordings for electronic data processing, or other recording which can be read or listened to only by means of technical aids. Due to another amendment, which became effective on January 1, 1978, the present Act states that the term 'document' includes any representation in writing or picture, and any recording which can be read, listened to, or otherwise apprehended only by means of technical aids. According to the ex-

123. *Forsham v. Harris*, 445 U.S. 169, 183 (1980).

124. 44 U.S.C. section 3301.

125. *Long v. Internal Revenue Service*, 596 F.2d 362 (9th Cir. 1979).

126. *Yeager v. Drug Enforcement Administration*, 678 F.2d 315, 321 (D.C. Cir. 1982).

127. *Ibid.*

128. Grodsky, *supra*, note 116, at 23.

129. H.R. 2773, section 110(2)(A), 101st Cong., 1st Sess. (1989); S. 1940, section 7 (1991).

planatory document on the government bill, a 'recording' is any constellation of data which are related because of their substance.<sup>130</sup> It is irrelevant in this respect whether those data constitute a selection from a large collection of data, a merger of data from several files, or a result of some other type of processing.<sup>131</sup> This definition of 'recording' means that, although under the Swedish Act documents are formally the object of the right of public access, it is actually a constellation of data, not the medium itself, which has to be regarded as the object of this right in the case of a recording.

The French and also the Canadian freedom of information law contains a definition of record in which computerized records are mentioned explicitly. According to the French law, 'traitements automatisés d'informations non nominatives' are considered to be administrative documents.<sup>132</sup> Under the Canadian Act, 'record' includes 'any correspondence, ... machine readable record, and any other documentary material, regardless of physical form or characteristics, and any copy thereof.'<sup>133</sup>

Under the Dutch Act on Openness of Administration, the object of the right of public access is not a document as such, but the information which is contained therein.<sup>134</sup> 'Information' means data which are laid down in a document and which relate to an administrative matter.<sup>135</sup> A 'document' is a written paper or any other material containing data which is held by a government agency.<sup>136</sup> 'Other material' includes, for example, magnetic tapes.<sup>137</sup>

## 7.2 AVAILABILITY OF ELECTRONIC INFORMATION

With regard to paper records freedom of information laws require public authorities to search for and disclose *available* records, but they do not compel authorities to create *non-existing* ones in order to fulfil requests for information. Is this distinction between record *searching* and record *creation* also valid in the context of computerized information? What constitutes a search for available electronic records?

Some agencies and courts in the United States have made a distinction between computer *searching* and computer *programming*, considering any new programming or program modification to be analogous to record creation and therefore not required as part of the search process under the Freedom of Information Act.<sup>138</sup> According to this standpoint, any programming which is needed to retrieve information from a computer is considered to be record creation. However, in 1988 the Office of Hearings and Appeals of the Department of Energy held that reprogramming should in some cases be considered an appropriate part of a search for records.<sup>139</sup> In the

130. Proposition 1975/76:160, at 90.

131. See also Seipel, *supra*, note 113, at 482.

132. Section 1.

133. Section 3 of the Access to Information Act, Statutes of Canada, 1980-81-82-83, C. 111, Schedule I.

134. Section 3.

135. Section 3, subsections 1 and 3.

136. Section 1(a).

137. Papers of the Second Chamber, 1986-1987, 19 859, no. 3, 21.

138. See Grodsky, *supra*, note 116, at 26.

139. Department of Energy, Decision and Order, Office of Hearings and Appeals, No. KFA-0158 (May 26, 1988). See Grodsky, *supra*, note 116, at 28.

opinion of the Office, the mere retrieval of information already existing in a database, even if a computer must be programmed to select specified types of data, does not constitute the creation of a new record. The Office did not specify how much effort agencies should expend on such programming.

However, the legislative history of the Freedom of Information Act indicates that a reasonable amount of effort on the part of the agency is required in locating the requested record.<sup>140</sup> The application of this reasonableness-test to computerized information should not turn on the programming-no programming distinction as such, but rather on the time and costs involved. In many cases, some new computer programming to retrieve electronic information may be less costly and time consuming than searches for paper records. According to the House bill on freedom of electronic information, a search for computerized records would include 'a reasonable amount of computer programming necessary to identify records.'<sup>141</sup>

A similar test is applied in Sweden. The explanatory note on the Freedom of the Press Act points out that a certain selection or merging of data should be regarded as a recording which is available to the public authority, if the selection or merging can be produced by routine measures.<sup>142</sup> However, if a more qualified, constructive performance is needed, for example the writing of a new computer program, then the recording which would be the result of this activity cannot be considered to be available to the authority.<sup>143</sup> Whether the activities that may have to be performed are designated as programming is *in itself* without significance. Writing a new computer program or modifying an existing one may be a routine activity. A public authority is required to write a new program only if this can be done by means of a simple performance and without considerable costs or other complications.

The Canadian Access to Information Act contains an explicit provision on the availability of computer information. Any record requested under this Act that does not exist but can, subject to such limitations as may be prescribed by regulation, be produced from a machine readable record under the control of a government institution using computer hardware and software and technical expertise normally used by the government institution, shall be deemed to be a record under the control of the government institution.<sup>144</sup> It is prescribed by regulation that such a record need not be produced where the production thereof would unreasonably interfere with the operations of the institution.<sup>145</sup>

The question arises whether restricting the right of public access to electronic information which is available or can be made available by a reasonable effort or a routine measure is an interference with the fundamental right of access, in particular the right to receive information under Article 10 of the European Convention on Human Rights. It is questionable whether the exclusion of a particular kind of information from a domestic right of public access to government information can be regarded as an interference with the right to receive. Even assuming that such an ex-

140. H.R. Rep. No. 876, 93d Cong., 2d Sess. 6 (1974).

141. H.R. 2773, section 110(3), 101st Cong., 1st Sess. (1989).

142. Proposition 1975/76:160, at 90.

143. *Ibid.*

144. Section 4, subsection 3, Access to Information Act.

145. Section 3 of the Access to Information Regulations, SOR/83-507, 1983, Canada Gazette, Pt. II, p. 2474.

clusion constitutes an interference, it may be justified if it is prescribed by law and necessary in a democratic society for the protection of a legitimate public or private interest. If public access is restricted to electronic information which can be made available by a reasonable effort or a routine measure because it is necessitated by the prevention of disorder in the operations of government agencies, which would be the result of placing an unreasonable burden on the authorities, and if that limitation is prescribed by law, there would be no violation of Article 10.

Even if the restriction in question is considered not to be an interference with the right to receive information and a positive obligation under Article 10 is acknowledged to provide access to government information, a fair balance has to be struck between this interest and the interest of preventing disorder. Balancing these interests may reasonably result in the restriction in hand.

### 7.3 DESTRUCTION AND ALIENATION OF MACHINE READABLE RECORDS

Since freedom of information laws grant access only to information which is available or can be made available through reasonable effort, it is of the utmost importance that records which are valuable from the point of view of openness are kept and preserved by public authorities in order to be accessible and readable in the short, medium and long term. The degree of such a retention and preservation is highly determinative for the factual meaning of the right of public access. The foregoing also applies to machine readable records, certainly if one bears in mind that electronic destruction of such records is quite simple because deletion is one of the programmed functions of computer systems, and that computerized data, generally, are meant to be preserved temporarily, not permanently.

In the United States of America, the importance of preserving machine readable records is highlighted by the decision of the Bush administration to dispose of electronic mail that included messages pertaining to Iran-Contra activities.<sup>146</sup> Public interest groups challenged the decision. The administration argued that the electronic mail messages did not constitute 'records' under the Presidential Records Act nor 'agency records' under the Freedom of Information Act, because they merely serve as alternatives to communicating through telephone calls or personal visits. The court, however, concluded that a rational fact finder might find this premise for refusing to retain such communications or make them available under the Freedom of Information Act to be 'arbitrary and capricious.'<sup>147</sup>

The Swedish Freedom of the Press Act presupposes that official documents are kept by public authorities to the extent necessary to achieve the purposes of the principle of openness.<sup>148</sup> Destruction of official documents to such an extent that public control of the measures of public authorities is made difficult or even impossible, is considered to be contrary to the principles on which the rules about public access to official documents rest. This does not prevent the destruction of records which are of

146. See Grodsky, *supra*, note 116, at 38.

147. *Armstrong v. Bush*, 721 F.Supp. 343 (D.D.C. 1989) aff'd in part, rev'd in part on other grounds 924 F.2d 282 (D.C. Cir. 1991).

148. Proposition 1948:230, at 125; proposition 1981/82:37.

less importance. In 1987, the Committee on Data and Publicity pointed out that the introduction of modern information technology has further complicated the problem of destruction of documents.<sup>149</sup> Various kinds of thinning out or transforming of information can occur by taking certain data away or by other forms of partial destruction. Besides, the risks for an unintentional destruction have increased strongly, foremost through wanting care, neglected transfer of data to new media, or neglected care for the documentation to keep the information usable. Care and destruction of documents are intertwined in a way unknown before. Although the Committee considers destruction of official documents a restriction of the right of public access, it deems a certain destruction inevitable. In order to avoid the destruction of documents to be in conflict with the fundamental right of public access, the Committee takes the view that the right to destroy should be included in the Freedom of the Press Act.<sup>150</sup> It proposed to provide that official documents may be destroyed only if it can be assumed that the destruction will be of small significance to the citizen's right of access to official documents, and that the destruction takes place on the basis of provisions in an act of Parliament.

The destruction or alienation, for instance by selling to a private party, of public documents which are generally accessible under domestic law constitutes an interference with the right to receive information under Article 10 of the European Convention on Human Rights, if it means that the information contained therein is no longer available for public access. Such an interference is justified only if it is prescribed by law and necessary in a democratic society for the protection of a legitimate public or private interest. In this way, Article 10 sets certain standards to the commercialization of generally accessible, electronic government information.

#### 7.4. PUBLIC ACCESS IN ELECTRONIC FORM

Regarding paper documents, the public is entitled to inspect the record on the premises of the public authority or to receive a copy of the document. Under current Swedish and American law, an authority is not obliged to accommodate a requester's preference for access in an electronic form, for example a copy on computer tape or disk.

The Swedish Freedom of the Press Act states that an authority shall be under no obligation to make a recording for electronic data processing available in any form other than a transcript, a paper print-out.<sup>151</sup> The official reason for this restriction is to prevent the provided electronic copies from being used for any unauthorized data registration that leads to an invasion of personal integrity.<sup>152</sup> This exception to the principal rule that the requester is entitled to a copy applies generally, even when no risk for an invasion of privacy has been found to exist.

As to the United States of America, in *Dismukes v. Department of the Inte-*

149. *Data- och offentlighetskommittén, Integritetsskyddet i informationssamhället 3. Grundlagsfrågor, Departementsserien Justitiedepartementet* (Ds Ju) 1987:8, at 60.

150. Ds Ju 1987:8, at 62.

151. Chapter 2, section 13.

152. Proposition 1973:33, at 85 and 113.

rior<sup>153</sup> the plaintiff had asked the Department a copy of a computer tape that contained the names and addresses of the participants in six Bureau of Land Management oil and gas leasing lotteries. The Department was willing to provide the data on microfiche only, which was the usual medium for dissemination. The court held that an agency has no obligation under the Freedom of Information Act to accommodate the requester's preference. The agency need only provide responsive, nonexempt information in a reasonably accessible form. Because the Freedom of Information Act deals with the *content* of information, not its *form*, the court concluded that a requester does not have an absolute right to designate the form of the information as long as the variation in format does not reduce the quantum of information available to the requester. The court determined that neither the plaintiff nor any document in the record suggest that the quantum of information contained in the microfiche varied in any way from that recorded on the computer tape. Furthermore, the court considered whether the release of information on microfiche would unreasonably hamper plaintiff's access to the information in terms of expense and inconvenience. The court found that even though the microfiche was slightly more expensive than the computer tape, it was a satisfactory alternative because it was most useful to the general public and did not erect unreasonable barriers to plaintiff's access to the information.

In another case, *National Security Archive v. CIA*,<sup>154</sup> a public interest research group requested an index of previously released records by the Central Intelligence Agency under the Freedom of Information Act. The plaintiff group asked for the data on a computer tape or disk so that the information could be scanned electronically more quickly than on paper. The agency refused to accommodate the group's preference. Instead, it produced a 5,000 page print-out that made a stack three and a half feet, or about a meter, high. While the group argued that the size of the print-out made analysis practically impossible, the court held that the CIA had provided the information in a reasonably accessible form, and dismissed the complaint.

The judgments of the courts have been criticized. One commentator stated that paper print-outs and other customary means of distributing computer stored information may no longer satisfy public access needs.<sup>155</sup> Magnetic tapes, disks, or even on-line retrieval might be necessary to effectively analyse large quantities of raw data. The same commentator deems it necessary for agencies and courts to recognize those cases in which machine readable information will be vital to meaningful public access. Another commentator holds that by releasing electronic information in a non-electronic form, by definition a less powerful format, the agency has actually denied the requester one of the attributes of its records: that they can be easily analysed on a computer.<sup>156</sup> Electronic information systems permit data to be used in many ways not possible with paper records. They enable users to access time sensitive information more quickly, analyse data statistically more easily and perform sophisticated searches to find relevant data.

153. 603 F. Supp. 760 (D.D.C. 1984).

154. Civ. No. 89-0142 (D.D.C. 1989).

155. See Grodsky, *supra*, note 116, at 32.

156. Leo T. Sorokin, "The Computerization of Government Information: Does it Circumvent Public Access Under the Freedom of Information Act and the Depository Library Program?", 24 *Columbia Journal of Law and Social Problems* 1990, 277-278.

According to another author, agencies should permit requesters to specify whether they want records in electronic or paper form, recovering any disparate costs of satisfying requests for particular media from the requester.<sup>157</sup> Requiring an agency to make information available in electronic form when that would not burden the agency greatly and when utilizing paper or other non-electronically accessible forms of the information would burden the requester is deemed consistent with the spirit of the Freedom of Information Act. If an agency normally keeps information in electronic form and the requester wants it on paper, it ought to be sufficient if the agency provides a public terminal with an attached printer.

The Senate bill on freedom of electronic information states that an agency shall provide records in any form in which such records are maintained by that agency as requested by any person. Moreover, an agency shall make reasonable efforts to provide records in an electronic form requested by any person, even where such records are not usually maintained in such form.<sup>158</sup>

The Canadian Access to Information Act provides that a person who is given access to a record or a part thereof under this Act shall, subject to the regulations, be given an opportunity to examine the record or part thereof or be given a copy thereof.<sup>159</sup> As the term 'record' also includes a machine readable record and any copy thereof, a requester is, in principle, entitled also to a copy in electronic format. Generally, the form of access is to be determined by the requester.<sup>160</sup> However, if the record is in a form which does not lend itself easily to reproduction, or if it is so lengthy that its reproduction would unreasonably interfere with the operations of the public authority, the authority can require that access take the form of examination. If the record must be severed before access is given or is in a form that does not readily lend itself to examination, the public authority can require that access be provided through supplying a copy.<sup>161</sup>

A denial to accommodate the requester's preference regarding the form of access to electronic information may be a violation of a fundamental right of public access. For instance, under the European Convention on Human Rights a limitation of the forms in which generally accessible government information is provided to the public is to be regarded, in my opinion, as an interference with the right to receive information. Such interference has to satisfy the standards of Article 10, paragraph 2, in order to be justifiable under the terms of the Convention. This means that the limitation has to be prescribed by law and must be necessary in a democratic society for the protection of a legitimate public or private interest as mentioned in paragraph 2 of Article 10. If a certain restriction on the available forms of public access is indeed prescribed by law and is necessary for the prevention of disorder in the carrying out of governmental tasks, because providing a particular form of access would be unduly burdensome for the public authorities concerned, such a restriction may be justified. The denial of the requested form merely because an alter-

157. Henry H. Perritt, 'Federal Electronic Information Policy', 63 *Temple Law Review* 1990, at 229.

158. S. 1940, section 4 (1991).

159. Section 12, subsection 1.

160. See Jill Wallace, 'The Canadian Access to Information Act 1982', in Norman S. Marsh (ed.), *Public Access to Government-Held Information: A Comparative Symposium* (Stevens, London, 1987), at 136.

161. Section 8, Access to Information Regulations.

native format conveys the same quantum of information in a reasonably accessible form, does not meet the standards in question. A limitation of the form of access to a paper print-out of electronic data in view of the protection of personal privacy, which is so general in nature that it equally applies to cases in which no invasion of personal privacy is to be feared, would be disproportionate.

In *X. v. United Kingdom*,<sup>162</sup> the European Commission of Human Rights held that in the circumstances of this case the Convention could not be interpreted to guarantee a right to receive information in a particular form, and that the applicant had no right to receive a copy of the requested post-mortem report itself since he had in any event received, or could apparently receive if he formulated a suitable request, the substantive information sought by means of the written answers to his questions. The Commission pointed out that the applicant in this respect had not indicated, what, if any, further information he required and had not received. It followed therefore, in the opinion of the Commission, that there had been no interference with his access to information.

In this respect I disagree with the Commission. The denial of a specific form of access has to be regarded as a restriction of the right of public access. Although it is not a limitation on the *contents* of the information, it is a restraint on the *manner* in which the information may be accessed. This is comparable with the right to freedom of expression which can be interfered with by restrictions on either the contents or the time, place and manner of free speech. In the case of a restriction on the reception of television programmes from a telecommunications satellite by means of a dish aerial, the European Court held that Article 10 not only applies to the contents of information but also to the means of transmission or reception, because any restriction imposed on the means necessarily interferes with the right to receive and impart information.<sup>163</sup>

## 7.5 ENHANCING PUBLIC ACCESS

The rules on the right of public access provide only minimal guarantees that the authorities will organize their information collections and their procedures for handling information in ways which further a policy of openness.<sup>164</sup> It has traditionally been assumed that the principle of openness can be applied effectively to the procedures and routines for administration, decision making, consulting, and handling of matters which each authority develops. Nevertheless, several problems arise in applying public access laws.

One of the greatest problems encountered in satisfying requests under the American Freedom of Information Act is that requests are often incompatible with the ways agency records are originally collected and organized.<sup>165</sup> For example, at the Occupational Safety and Health Administration most inspections are undertaken and documented by geographical region, industry, accident, or type of complaint.

162. Decision of May 13, 1986, Application No. 11516/85 (unpublished).

163. Eur. Court H. R., *Autronic AG case*, decision of June 20, 1989, Series A, No. 178, paragraph 47.

164. See Seipel, *supra*, note 113, at 506-507.

165. Grodsky, *supra*, note 116, at 41.



Requests under the Freedom of Information Act, however, are usually directed to specific products or companies, at particular locations. Retrieving the specific information requested may require new computer programming. This can have an adverse effect on the obligation of the agency to comply with the request for information. While lack of compatibility between requests and compiled information also affects requests for paper records, computer retrieval in some ways exacerbates the problem.<sup>166</sup> Although computers can be fast and consistent, they may be less flexible than the manual systems they have replaced. While they are proficient at processing anticipated forms of informations they are less adept at performing operations – such as responding to Freedom of Information Act requests – which have not been preprogrammed into their software or machine language.

Another problem is that facilities for requesters to survey, retrieve, combine, identify, and locate information receive little, if any, attention.<sup>167</sup> A requester may decide which records he or she wishes to inspect, but the rules on the right of public access provide no advice on making this decision. A request for information which has not been sufficiently specified does not need to be dealt with by the agency.

A third problem is caused by the fact that under freedom of information laws agencies mostly decide on the disclosure of a record when a request for the record has been received. The right of access is presently a ‘passive’ instrument for obtaining information.<sup>168</sup> Its orientation is *ex post*, not *ex ante*. In many respects, computer systems are characterized by structuring in advance. There is a shift from reliance on discretionary decisions in individual cases to analysis and description in advance of rules for decision making. This challenges the traditional nature of the rules on the right of public access. If each public authority is left to deal with the problems of public access to information stored in computer systems when requests are made, access will probably often presuppose expensive improvisations.<sup>169</sup>

The effort and costs required for complying with public access provisions constitute another problem. These burdens increase as a result of the problems mentioned before. The discrepancy between requests for information and the way government information is organized as well as the lack of precision of such requests may result in searches by agency personnel which are burdensome to agencies. Deciding *ad hoc* and *ex post* on the disclosure of information may ask for laborious and expensive improvisations.

The stated problems can be alleviated to a considerable degree if electronic data processing is organized in such a way that the right of public access is taken into consideration as much as possible. This has been perceived, in particular, by the Swedish legislator. The Secrecy Act states that any authority whose activities involve the use of automatic data processing shall organize the processing taking into consideration the right of access to official documents, prescribed in the Freedom of the Press Act.<sup>170</sup> Furthermore, the authority shall arrange the data processing taking into consideration the interest which private subjects may have in using a terminal or

---

166. Grodsky, *ibid.*

167. Seipel, *supra*, note 113, at 507.

168. Seipel, *supra*, note 113, at 507.

169. *Ibid.*

170. Chapter 15, section 9, Secrecy Act.

other technical device within the authority for the purpose of having access to official documents. The collection, storage, and retrieval of information should be organized, especially, by taking structural and procedural measures which enhance public access. Such measures have to be taken in the stage of designing and building computer systems.

The discrepancy between information requests and information collections can be reduced if public access needs are taken into consideration on the occasion of structuring data and files. Public access needs can be ascertained by documenting the most common types of requests for information and by allowing individuals and public interest groups to inform agencies about the types of data that will be most beneficial to them.<sup>171</sup> Furthermore, certain new developments in hardware and software technology – such as relational databases and hypertext – will enhance computer flexibility and responsiveness to unanticipated forms of requests.<sup>172</sup>

The problem of deciding *ad hoc* and *ex post* can be diminished by structuring information systems in such a way that messages and documents can be given the status of drafts, intra-agency memoranda, etc., and can be labeled as secret or confidential if necessary.<sup>173</sup> The risks from the point of view of secrecy should be assessed in advance as much as possible. Information to which secrecy provisions apply should be protected by access restrictions, monitoring and alert functions, as well as procedures for deidentification and encryption. The development of expert systems and artificial intelligence systems for the processing of information requests may facilitate the decision making process.

The introduction of means to identify and locate information, such as publicly available indexes of various kinds, can help requesters to specify the information they want to have.<sup>174</sup> This may result in better specified requests and in a reduction of the effort required for a search by agency personnel. The bill on freedom of electronic information, as introduced in the United States Senate, provides that each agency shall currently publish in the Federal Register, electronically by computer telecommunications, and by other means, for the guidance of the public an index of all information retrievable or stored in an electronic form by the agency.<sup>175</sup>

In addition to the structural and procedural measures mentioned before, new information technologies will ultimately reduce the effort and cost associated with retrieval of electronic information, and therefore may have positive consequences for the right of public access, allowing for: faster searches; searches through unorganized data; integration of data from diverse files; and easier response to *ad hoc* requests.<sup>176</sup> In a general way, public access to government information can be significantly enhanced by using new technologies as well as by better structural and procedural methods for collecting, storing and retrieving information.

171. Grodsky, *supra*, note 116, at 42.

172. Grodsky, *ibid.* at 41.

173. See Seipel, *supra*, note 113, at 509-512.

174. See also Westin, *supra*, note 114, at 318, Seipel, *supra*, note 113, at 510, and Berman, *supra*, note 115, at 522.

175. S. 1940, section 3 (1991).

176. Grodsky, *supra*, note 116, at 41.

## 8. Epilogue

Towards the end of this century and on the threshold of the 21st, the right of public access to government information can only be held to be, on a worldwide scale, an *emerging* fundamental right. Although a fundamental right of public access to official records was recognized in Sweden as early as 1766, it was not until the last decades of the present century that rights of public access to certain court proceedings and records, under American law, and to generally accessible government documents, under the European Convention on Human Rights, were deemed inherent in the freedoms of speech and press.

In most countries of this world, a right of public access to government information has not been acknowledged as a statutory right, let alone as a fundamental right. Public access to government information is, however, no favour. It ought to be recognized as a fundamental right of the people which is so weighty that it may be restricted only if, and only to the extent that, such a restriction is necessary in a democratic society for the protection of particular public and private interests. For most countries this would boil down to a fundamental change in prevailing legal and political thinking.

Because of its importance for a democratic society, the public's right of access to government information should be acknowledged as part of a third generation of human rights. It ought to be a challenge for the people in the next century to achieve this object. Also the enhancement of a right of public access to government information by using profitable, new information and communication technologies should be a major objective.

# The Commercial Use of Government Controlled Information: A Guideline for Regulatory Policy Choices

*Hendrik J. de Ru*

As the commercial value of government controlled information increases, governments are more and more tempted to commercialize disclosure. Databases developed at the expense of taxmoney are considered as possible sources of extra public sector income. The private sector is eager to help and privatization policies might be used to promote profitability. Is this wise use of public resources or do we need statutory provisions to vindicate the democratic ideal of free government information?

## 1. Freedom of Information vs. Commercialization

Most governments in Western industrialized nations operate a land register. These registers are considered as an essential part of the infrastructure for economic activities. Ownership, sales and mortgages and even prices can be traced. Registers serve to protect the rights of owners and buyers of real estate and they play an important role in facilitating financial transactions. They give exact information on boundaries and value at the time of transactions. Also, they stabilize the real estate market.

Operating land registers is considered a classical function of the public administration. At the same time, private industry – real estate development corporations, investors, brokers – takes a keen interest in these registers. If the public authority which operates the register would develop a database to enhance access of the information, would it be allowed to sell the information for profit?

The same question applies to all kinds of information public authorities have gathered for their public policies. On the other hand, if the government developed a database for legislation and regulations, to be available on line for public authorities, could it deny access to private parties and if not, could it prevent commercialization by others?

In everyday life, the public administration collects enormous amounts of information. Not all of this information is valuable to others. Some is, often the more as it is computerized. Sometimes, only a small effort may make its value boom. In other cases, however, making the information available to the public requires a large amount of extra work. If the government would choose for contracting out the creation of databases, what else could it offer in return than a price to be paid, a sole distributorship? Could this create a substantial source of public sector income or will this be frustrated by *government in the sunshine*-legislation? Could the latter prob-

lem be solved by choosing for privatization of the activities concerned, leaving them to the private sector which as such is free to commercialize the information?

Recently, Western industrialized governments have adopted so-called *government in the sunshine*-legislation. This legislation promotes democracy and open government, it is a modern device in the checks and balances required by constitutional law. Access to government information, more specifically to government documents, is seen as a democratic right of every citizen. The exercise of this democratic right should not be frustrated by commercial fees. The principle of free access to public sector information largely reduces the commercial value of the information. More in general, *government in the sunshine*-legislation restricts the commercial use of public information.

At the same time, however, this implies that the incentive to produce databases is largely absent. The development of databases is left to the government to decide, and a positive outcome is most unlikely as most governments have deficits rather than money to spend at the expense of taxpayers. Or should the government have the opportunity to charge users of databases at least for the costs of development? In case it could, whose rights would need protection?

In this article, commercial use of government controlled information is considered as a problem of legislation and regulation. At first sight, it seems too complicated a policy issue, to be decided by the judiciary. Before I can analyze the question 'how to regulate' (paragraph 4) I will make two preliminary comments. First, I will analyze the character of the information concerned (paragraph 2). Next, I will briefly explain the relevance of privatization policies in this field (paragraph 3).

## 2. Different Types of Government Controlled Information and Their Legal Status

### 2.1 MANDATORY PUBLICATION

The maxim that everyone is supposed to know the law of the land implies that legislation and government regulations are published properly. Mandatory publication of these texts often is based upon outdated publication techniques. As parliamentary documents and parliamentary debates in principle are available for and open to the public, public awareness of public policy and of new legislative texts is ensured. Once legislation is enacted it is published officially. The same goes for regulations. Publication of statutes and regulations amending of earlier statutes and regulations though, not always entails publication of the full text as amended.

Mandatory publication only bears upon the legislative act as such, even if it just contains a technical amendment which cannot be understood on its own, without knowledge of the full text of the statute or regulation concerned. In practice this is hardly a drawback though, as commercial firms are eager to sell full text editions of legislation and regulations. These texts prove to be available in due time. Also they are reliable and often even more accessible than the official text as a result of editorial extras.

In fact, many modern states rely on the private sector for statutes and regula-

tions to be known and accessible. From a point of view of government duties *vis à vis* citizens, however, the government does not really take full responsibility for compliance. Especially in very specialized fields, like the transport of dangerous chemicals, it may be very hard for newcomers in the industry to understand fully the obligations which might have to be found scattered over many different government publications. It can happen that only the leading industry in the field keeps an up-to-date record of all government rules, whereas others only can guess. Within EC law, for example, this might serve as a device to keep foreign competitors out. Under such circumstances, the judiciary might ascertain a distortion within the internal market or might excuse non-compliance.

From a point of view of decent and reliable government, mandatory publication by government itself, and the practice as described above might be considered to be too minimal and even inadequate and contrary to what might be expected from government. The state of the art in information techniques requires government responsibility for the availability of up-to-date full texts of legislation and regulations, free of charge. As a result, commercial editing of these texts is rather likely to suffer than to expand.

## 2.2 GOVERNMENT ISSUED INFORMATION – PROPAGANDA

The next category of government information consists of texts which are published voluntarily by the government in relation to its public policies. As a method to influence the behaviour of citizens information can be very effective, even more effective than criminal law sanctions, heavy fines and other command and control techniques. In some countries, the change in smoking and drinking habits for example came about as a result of government information campaigns rather than as a result of the taxation of cigarettes.

As such, spontaneously provided government information is not apt for commercialization. The more government has a stake in publication (it might even turn into propaganda) the less likely it is for the private sector to have an important part in its distribution. However, the more the information is likely to affect economic behaviour, the more the first publication will be valuable. For example Gulf War news could be very valuable for its first distributor. In these cases commercial use as such is not the problem. The point is who has access to the information. Which journalist or enterprise is granted commercial profit? This falls within the scope of rules and regulations on government procurement and contracts.

## 2.3 INFORMATION AVAILABLE UPON REQUEST (ENFORCEABLE)

If information is not made available by the government, either because it is not obliged to do so, or because it does spontaneously supply it in its own interest, citizens might request disclosure. Under *government in the sunshine*-type of legislation, citizens in principle have the right of access to government information. This can be enforced by courts, unless the government is entitled to withhold the information for reasons stated in the statute concerned (for example: defense secrets, interests of

third parties, etc.). In existing *government in the sunshine*-legislation the commercial use of the information concerned by the government itself is not a reason to withhold the information, even when commercial interests of the government at large might be a legal reason to refuse disclosure.<sup>1</sup>

#### 2.4 MORE AND LESS VALUABLE DATA AND DATACOLLECTIONS

Of course, commercial use depends on the value of the data concerned. Not all information controlled by government is valuable. Commercial use will only be likely in the case of valuable data. The value of data is not simply a result of market forces. The price largely depends on characteristics of the supply side. All information subject to disclosure, for instance as a result of *government in the sunshine*-legislation, loses its value to a large extent as it is available to anyone, virtually for free (except for news value, *see supra*, 2.2). On the other hand, the value might increase again according to the way data have been put together and to the way they are accessible.

If the government takes an interest in making a database, the database once it exists will again be available to the public under the conditions of the government in the sunshine legislation, which deprives it of its commercial value. If the government provides the information to a firm to develop the database, the firm concerned will never be able to claim exclusive rights. It will always have to fear competitors and hence firms will not always be eager to enter the market, unless they will be able to create a niche. As a result, even valuable data might remain uncollected.

### 3. Consequences of Privatization Policies

The word privatization is used in several ways. In the broadest sense, it is applied as a coverall term referring to a whole range of reformative actions designed to subject administrative activities to the disciplines of the market. In a narrow sense, the concept of privatization is limited to clear acts of selling government-owned enterprises, assets or shareholdings. For the purpose of this article, privatization is understood in the broadest sense. It includes corporatization as well as the creation of special incorporated bodies, shifting away activities from the generality of government. It also includes contracting out of activities which formerly were executed by the Civil Service.

As far as government documents are concerned, privatization as described above will result in de-governmentalization of the documents of the organization concerned. As a result of privatization, these documents will cease to be government controlled. As most *government in the sunshine*-legislation refers to government controlled information or documents, privatization will entail that the documents concerned will not be subject to this legislation anymore.

As a result of privatization, the principle of open government might be frustrated. Also, contracting out and public-private partnerships might grant private parties exclusive rights on formerly government controlled information. The effect

---

1. Cf. Beers *supra*.

of privatization will depend on the characteristics of the information. On the one hand, the company concerned might keep the information for itself. On the other hand, the company might use its monopoly to develop a profitable database, which would have been less feasible when the original information still would have been government controlled.

The latter situation might also be created for another purpose. When private industry is enabled to develop databases in a monopoly-like situation, the government might consider asking a commercial price for the fact that the firm has access to the information. In the end, the taxpayer will benefit from this creation of public sector income. The government might explicitly use the construction of privatization for this purpose.

#### 4. How to Regulate the Commercial Use of Government Controlled Information?

Most governments in Western industrialized nations seek to develop rules for the commercial use of government controlled information. Several options are available. Rulemaking policies in this case range from detailed legislation and regulations to the definition of general principles. In the first case the administration will play an important role, in the latter case judicial control will prevail.

##### 4.1 CONSTITUTIONAL ASPECTS: GENERAL PRINCIPLE

The principle of open government in a democratic and pluralist society entails that all government information is available to the public unless specific legislative provisions provide secrecy. In the last decades this presumption in favour of disclosure has been introduced in quite a number of constitutional systems.

##### 4.2 PUBLIC SECTOR AND TAXATION ASPECTS

Facilities developed on the basis of public sector resources (tax money) are often considered to be provided free of charge (public goods) *unless* the government explicitly decides to charge users. *Freedom of information* type of legislation is based upon the principle that the information concerned is given for free (public good), or virtually for free (in the latter case only costs of copies have to be paid). This implies that commercialization of government controlled information always requires a specific decision, often on a legislative or regulatory basis.

##### 4.3 PUBLIC POLICY, THE ROLE OF THE GOVERNMENT

In order to start collecting data or to develop a database, a government agency will always take a formal decision to do so, or it will justify this as part of its policies. This decision is crucial as a basis for a practical approach of the rulemaking prob-



lem. The formal decision might provide the basis to answer the question whether the government wants the information and whether it requires the development of a database for its own operations or as a policy instrument.

In case the answer to this question is positive, and a database is developed, the value this adds to the information is added for the sake of the government. This implies that the information might be labeled as *public sector information*, even if development of the database is contracted out to private companies.

In case the answer to the question stated above is negative, the value added by the development of a database is to be considered as a private sector value. Hence the information is to be labeled as private sector information. The practical approach which is proposed here depends on an authority which independently can assess the nature of the information concerned. The judiciary will meet the requirements of independence. In legal systems which feature *Freedom of Information Act* type (FoIA-type) legislation, the judiciary or one of its branches will be experienced in handling criteria to judge the legal aspects of government information. Then it is only a small step to a judgment on the nature of the information as such. Disclosure (if necessary confidential) of the reasons why the government collected the information concerned and developed a database will enable the judiciary to assess whether it concerns *public sector information* or not. The burden of proof that it does not concern public sector information lies with the government. In other words, government controlled information will be presumed to be *public sector information* proving the opposite will be very difficult if not impossible.

The concept of *public sector information* extends the scope of FoIA-type legislation to the private sector. It prevents the use of privatization techniques to frustrate disclosure. On the other hand it requires a clear statement from the government if it really would like to limit the scope of FoIA-type legislation.

#### 4.4 MARKET ENTRY

As the commercial use of government controlled information in many cases will depend on private sector initiatives, the question arises which restrictions in disclosure might result from private sector activities. To a large extent this will depend on the extent to which market entry is free or not. In case someone has access to the government controlled information (free market entry), the potential sales together with competition will determine the private sector activities. In fact, the private sector will be free to develop the commercial use of the information concerned. Government might seek to influence the commercial use by contracting out the development of databases.

As a result of public procurement regulations market entry in this case will also be subject to competition, unless the government has specific reasons to limit market entry as such. In the latter case restriction of market entry might be considered a result of an implied nationalization or as a result of the necessity of self-procurement (which might be based on specific powers or legislation, cf. national safety and defence reasons).

## 4.5 SUMMARY

The situations described in paragraphs 4.1-4.4 might be summarized in the following table.

*Table: connection between the choice for the role of government and the choice for market entry regulations*

Constitutional/ public sector aspects 4.1 - 4.3  Market entry 4.4	Government needs the info, public policy		Government does not need the info
	govt. adds value	private sector adds value	private sector develops
Free	5	2	4
Contracting out	5	3	0
Restricted	1	5	0

## Explanation:

0: Does not occur/inconsistent.

- 1: If government needs the information it may even need to develop its own database in cases of classified information (cf. national security, interests of private parties, personal privacy, law enforcement strategies etc., normal clauses in FoIA-type legislation, subject to judicial review), it concerns public sector information for public sector eyes only; even if the public sector chooses to develop databases by itself, for instance for economic reasons, this still will be regarded as public sector information.
2. This combination occurs for instance in the field of publication of legislation and regulations, government needs the information, publication is mandatory, yet complete and up-to-date texts are published by private sector companies.
3. The government may choose to contract out the development of databases it needs to the private sector.
4. Speaks for itself.
5. Competitive situation possible.

## 4.6 THE PRICE

The price to be charged for the information requested and supplied will vary depending on the question whether it concerns *public sector information* or not. If not, the government simply has no reason either to develop the information or to sell it. On the contrary, if it concerns information the government wants, it will be subject to FoIA-type legislation, which implies the information will be available to anyone for virtually nothing unless the government explicitly decides otherwise. In the latter case the price should in fact be determined by public, even fiscal policy considerations: are the production costs of the information to be paid by the generality of taxpayers, with tax money, or are these to be covered by third party users?

#### 4.7 JUDICIAL CONTROL

The question whether government controlled information can be commercialized or not can be answered on the basis of the criterion of *public sector information* (see *supra*, 4.3). Although this is a broad concept, in every single case it can serve as a perfect basis for judicial review (does government need the information in the form it is requested for its own operations and policies or not?) together with the other principles (see *supra*, 4.1, 4.2 and 4.4).

Courts will be able to answer this question not only on the basis of a formal decision of the administration but also with regard to administrative decisions and conduct. If the information indeed is considered public sector information, it will be subject to the rules for disclosure and the possibilities for commercial use will be limited. Ultimately, the concept of public sector information will be defined as a result of impartial and independent judicial review.

### 5. Conclusion

Rulemaking for the commercial use of government controlled information proves to be not too complicated as long as it relies on the broad concept of *public sector information* together with judicial control. Action of the legislature might be limited to the introduction of the concept of *public sector information*. Within the field of public policy, the concept guarantees freedom of information. At the same time, the introduction of this concept entails that the information policy will be largely determined by the underlying choice for the scope of the public sector. Primarily, this is to be decided by the legislature and the executive, whereas the possibility of judicial control will prevent abuse. Under these organizational guarantees (explicit decision by legislature and/or executive, together with judicial control), the concept leaves some room for commercialization and for the development of synergy between the public and the private sector.

# The Commercial Use of Government Controlled Information and its Information Law Environment in the EEC

*Herbert Burkert*<sup>1</sup>

## 1. Some Information Law Puzzles

### 1.1 TWO CASES

The commercial use of public sector information, increasing with the discovery of the value of information and reinforced by traditional lack of funds in public administrations, is experiencing some problems with the existing legal framework for the handling of public sector information. To approach these problems two cases shall be presented as an introduction to that subject area: Article 10 of the French Access Act and the German company Register Case. Article 10 (2) of the French Access Law<sup>2</sup> reads:

'(...) The exercise of the right to access (...) excludes, for its beneficiaries or for third persons, the reproduction, circulation or use for financial ends of the documents which have been communicated'.

Anybody familiar with the history and structure of access to information legislation is puzzled by this section.

'Access to government information laws' do not usually question the motives of a request for information nor do they impose restrictions on re-use. The section can, of course, be explained in the French context: Section 10 (1) of the Act says that 'Access to official documents shall be subject to literary and artistic property rights'. The whole section was introduced because it was feared that the law might undermine the function and role of *La Documentation Française*.<sup>3</sup> So is it a restatement of government copyright? If so, there may be material which may be obtained under the access act, because it does not meet the criteria set down for copyright in the

- 
1. This paper presents the personal view of the author. The author wishes to express his gratitude to all the persons who have been so freely sharing their experiences, knowledge and information with him in Ottawa and Quebec and particularly to the colleagues in the PUBLAW project who had to suffer from his constant digressions from the research subject: Marie-Hélène Boulanger, Birgit Brauner, Tina Klapp, James Michael, Yves Poulet, Cécile de Terwagne.
  2. Loi No. 78-753, 17 juillet 1978. Translation into English from Civil Service department 1979, A 104.
  3. Huet/Maisl 1989, 582. [References to the authors cited can be found at the end of the article].

French copyright act.<sup>4,5</sup> Or does this section extend the copyright act to such material? Or is it a restriction on access? The latter has been doubted by the institution which is to supervise the application of the French access act: The *Commission d'accès aux documents administratifs* (CADA) stated, with regard to the function of Article 10, that it is a confirmation of the principle of legitimate private use<sup>6</sup> and sees no reason to part from its principle *not* to consider the motives of the requester.<sup>7</sup>

One might also wonder what might happen to the applicability of this section in the light of the EEC Directive on access to environmental information which does not contain such a restriction.<sup>8</sup> In conformity with the first EEC directive on the coordination of Community Law (1968), all EEC countries allow access to company registers.<sup>9</sup> In Germany, however, the question was put before the courts whether the term 'access' covers requests which aim at the totality of the register and/or at substantial updating requests. The German *Bundesgerichtshof* has regarded such requests not to be covered by that term, neither with regard to the national law nor with regard to the relevant EEC directive.<sup>10</sup>

A company had asked a register court to be allowed to prepare microfiches of all the registered material filed with that court. It had offered to bear all costs of this process as well as to provide its own personnel to carry out the copying under the supervision of and in coordination with the court administration. While other register courts had allowed such actions the court in question refused. It argued that this request was not covered by the term 'access' of the relevant section in the Commercial Code. That therefore it was a matter of discretion whether to allow such a procedure. In exercising its discretion the court had to take into account that the German law has established a system of decentralized registers (there are more than 400 in the old *Länder* of Germany). Finally in contributing to such a centralized register in the private sector the court would affect the privacy interests of individuals being registered, since nationwide retrieval by name would become possible.

The *Bundesgerichtshof*, the court of last instance in that matter, had ruled that it shared the view that the term 'access' did not cover the request in question. It therefore also refused to refer the matter to the European Court of Justice, since the Directive also used the term 'access'. Thus the terminology was not to be interpreted (which would have required referral) but simply not applicable. The Court then went

4. Loi du 11 mars 1957 and loi du 3 juillet 1985.

5. Schoettl 1988, 8.

6. Art. 41 (2) loi du 11 mars 1957. Cf.: CADA 1982, 61f.

7. CADA 1990, 117.

8. Council Directive of 7 June 1990 on the freedom of access to information on the environment, (L 158/56 of June 23, 1990). The Directive, however, contains the possibility for Member States '(...) for such information be refused where it affects: (...) – commercial and industrial confidentiality, including intellectual property' [Article 3(2)]. One might argue that this would only, by systematic interpretation, relate to intellectual property of *third parties* affected by such a request, because otherwise the right of access would become meaningless where national laws have not excluded government copyright (see also below 5.4). One has to see which conclusions the Member States will draw.

9. This and the following observations are based on material which has been compiled in the context of the PUBLAW study funded by the EEC DG XIII, carried out in cooperation with the Centre de Recherche Informatique et Droit, Université de Namur, and Prof. James Michael from the Faculty of Law, University College London. The views expressed are only to be attributed to the author.

10. BGH Decision of 12 July 1989 – IVa ARZ (VZ) 9/88.

on to state that the decision of the register court was indeed a matter of discretion and that it did not see, in the arguments of the refusing register court, any misuse of this discretion. The decision has been heavily criticized in legal commentaries,<sup>11</sup> particularly the refusal of the Court to put the matter to the European Court of Justice.<sup>12</sup> While the French example introduces us to the difficulties of the relationship between access to government information legislation and government copyright, the German case shows tensions between classical register laws and data protection principles. Similar tensions occur with regard to other traditional registers like car registers<sup>13</sup> or voters' registers<sup>14</sup> and data protection. The Council of Europe has a working group on problems which arise from the interrelation between data protection and access to government information legislation, particularly with regard to bulk access to personal data.<sup>15</sup>

## 1.2 PUBLIC INFORMATION LAW

The regulations cited in these examples might be put together under the operative heading of *public information law*. Public information law may, historically, be seen to consist of two different sets of rules: First the traditional (administrative) legal rules which have been 're-viewed' or extended or revised or even newly created under the aspects of *information and communication*. This comprises – *i.a.* – procedural guarantees within the citizen-administration relationship which are now being

- 
11. Cf. *inter alia* Hirte 1990 with further references.
  12. It is not quite clear from the decision whether the Court considered this to be an 'acte clair'. (With regard to this notion in Community Law: Kapteyn/Verloren van Themaat/Gormley 1989, 325ff.)
  13. In France, *e.g.*, the CNIL has sanctioned the commercial use of administrative information relating to car registrations because of a general interest in promoting this sector of the national economy. (Commission Nationale de l'Informatique et des Libertés, Délibération No. 83-35 du 7 juin 1983 relative au fichier central des automobiles, *Journal Officiel* du 25 novembre 1983.) The CNIL, however, specified new modes concerning the organization and the management of this processing: a better coordinated control of the public administration on the association making this information accessible, a preliminary agreement with the information receiver, and the restriction of accessibility to French car producers and certain importers in France. While this latter restriction is seen as a consequence of the data protection purpose limitation principle, having defined the purpose of the register as *inter alia* serving the *national* economy, it seems doubtful to us whether this particular restriction could be maintained against the background of Community Law, with regard to an information request from an inhabitant of EEC Member State which has enacted equivalent data protection regulations. This case not only reveals conflicts between traditional registers and data protection but also with EEC competition law.
  14. In Luxembourg, *e.g.*, election material which the political parties wish to distribute by post has to be handed over to the population register authorities for distribution because the authorities refuse to make their address registers accessible to the political parties. *Avis du Comité consultatif* (Luxembourg) Novembre 9, 1984, 9.
  15. Council of Europe, Committee of Experts on Data Protection, Working Party No.11 (Data protection and freedom of information) regarding possible future action in the area of data protection and freedom of information. Established against the background of Parliamentary Assembly Recommendation 1037 (1986).

read as guarantees of *due information flows*.<sup>16</sup> Another example in this context is the re-discovery of government (crown) copyright as an instrument of information control.<sup>17</sup>

The other set comprises mainly newly created regulations addressing *information technology* directly. Public sector privacy acts may be seen as examples of this second set, even where they include coverage of traditional files. This set would also contain amendments to traditional regulations, e.g. public register laws in view of new technological opportunities for exploitation. One might also count the re-reading of traditional regulations in explicit reference to information technology among this group.<sup>18</sup> Even parts of acts belonging to the first set may belong to the second set, e.g. certain amendments in former Scandinavian access to government information acts, now dealing with the impacts of information technology.

This last example shows that the separation between the two sets is rather arbitrary, and it certainly does not provide for a useful structure of the body of public information law. Also, today, with experiences of rapid change in information and communication technology, we might prefer regulations which deal with technological change on the 'pragmatic' rather than on the 'syntactical' level, i.e. we would prefer information and communication rules which are immune against changes in the technology. At this stage this idea will not be developed further.<sup>19</sup> It seems sufficient here to note that the separation line has existed and is still showing its influence.

Because of its relative novel character, and because of its inherent lack of consistency, public information law so far has proved to provide little guidance for such crucial decisions as for instance the commercialization of public sector information.

## 2. Limitations of Information Management and Information Policy

Unfortunately, sufficient guidance cannot come from public administration itself and its information management rules nor from information policy considerations alone, since in both areas there has been a reluctance to integrate (public) information law and information law policy considerations. Such considerations are almost exclusively seen as 'barriers' and 'obstacles'. Besides, information management and information policy have their own difficulties in dealing effectively with the issue of commercialization.

16. The US Freedom of Information Act of 1966 was seen as a reform of the Administrative Procedures Act of 1946 and the housekeeping statute of 1789 (cf. Relyea 1981). In Germany there have been proposals to integrate the data protection act, so far as it relates to the public sector, into the Administrative Procedures Act.

17. Cf. e.g. UK Department of Industry. Tradeable Information. Guidelines. London 1986. *Guideline* 124.

18. The very notion of data protection, in German Constitutional Law, e.g. was developed out of the traditional concept of an '*Allgemeines Persönlichkeitsrecht*', but with an explicit reference to information technology: '*Diese Befugnis bedarf unter den heutigen und künftigen Bedingungen der automatischen Datenverarbeitung* (Emphasis by H.B.) *des besonderen Schutzes...*' (Decision of the German Constitutional Court in EuGRZ 1983, at 588).

19. Elements of such a structure will be discussed below.

## 2.1 INFORMATION MANAGEMENT DIFFICULTIES

There is only scattered evidence, within the EEC, of the existence of comprehensive sets of such administrative information management rules.<sup>20</sup> This is partly due to the different speed of penetration of new information and communication technologies within public administrations in Europe. If there is such penetration there is not always, at the same speed, awareness of organizational implications which would demand such rules. Information and communication technology is still very often only regarded as an additional *tool* to increase performance rather than as an *agent of structural change*. Where such an awareness exists, the implementation of such rules is often resource-intensive to a degree which makes it difficult to handle strategic issues above tactical issues.

## 2.2 INFORMATION POLICY DIFFICULTIES

These difficulties reflect difficulties with and of administrative information policies which could guide the development and implementation of information management rules. In some countries, these difficulties may result from an either conservative or postmodernist doubt about the effectiveness of rational approaches in administrative policy making altogether. In other countries the administration may not be seen or is simply not potent enough to act as an agent of such policy making. Where such policies exist, the objectives may have been too limited. They may have hitherto focused on improving intra- or inner-administrative efficiency. If there have been adjustments to continuous demands of 'administrative reform', they focused on selected, politically presentable improvements of the administration-citizen relationship.<sup>21</sup>

Where administrations went beyond this objective and entered the sphere of information economy policy making, such policies tended to focus, in the tradition of classical industrial policies, on the 'hardware' segment and on general infra-structure oriented measures with little or no links to inner-, and intra-administrative information policies. When administrations started getting into issues of the information market proper, if at all, they were faced with a number of conceptual difficulties which make it difficult, not only for public administrations, to devise comprehensive policies, such as the specific properties of the commodity 'information', effects of economies of scale and of scope, particularly present in information markets, and of market imperfections.<sup>22</sup>

- 
20. The Guidelines of the UK Department of Industry quoted above may be seen as an exemption, but they seem to be exclusively oriented towards commercialization. These guidelines have had enormous influence, together with similar developments in the US, on the formulation of an EEC policy (see below). Another approach, excluding, however, the issue of commercialization may be found in Pelou 1988.
  21. These observations intend no evaluation of the current situation. They are far too general to serve such a purpose. In addition one should keep in mind that inertia and preferences for routine serve important stabilizing purposes in political systems. Cf. e.g. Luhmann 1971. Too active a role of administrative subsystems might also, within some political systems, (further) upset the delicate relationship with the legislature (cf. Burkert 1985).
  22. Cf. e.g. d'Alcantara 1989, Mackaay 1990, Dommering 1991, 17f.



### 3. The Need for a Comprehensive System of Public Information Law and Information Law Policy

One of the reasons why the issue of 'Commercial Use Of Government Controlled Information' is being considered as *problematic* may thus be the difficulty to obtain clear guidance from public information law and legal policy. Managing public sector information entails the observance of legal requirements for administrative actions. Unfortunately, while providing comprehensive guidance in matters like personnel management and with regard to management of resources like land and money, public law has only slowly advanced to the subject of information management.<sup>23</sup> This lack of awareness has practical consequences.

The French data protection act and the French access act were passed almost at the same time in the French parliament, without 'knowing from each other', the former a response to the threat of information technology for civil liberties (Set (2) in our definition above), the latter a modest attempt of administrative reform 'to ameliorate' the relationship between the citizen and the administration (Set (1)). It was only when the two bodies implemented by the acts clashed over questions of competence that interrelations were 'discovered'.<sup>24</sup>

With this state of affairs it is not surprising that public sector information management, when it seeks to integrate legal aspects into its considerations, and into its decision on commercialization in particular, is faced with a set of rules which appear as a patchwork rather than as a guiding structure. Information managers in public administration, if there are already any, have to cope with the additional complexity of law apart from the complexity that economics already present.

In this context the EEC Guidelines on the synergy between the public and the private sector play an important role.<sup>25</sup> In spite of the long process in which they were created, they are, in my view, not an information policy but rather an appeal to develop such a policy. But they recognize in principle the role of an information law policy in this context,<sup>26</sup> although one might disagree on their particular view of this role.

So how can we re-introduce the voice of legal policy into the debate of commercialization?<sup>27</sup> We propose to look at the existing set of regulations trying to identify their current functions and restructure them around concepts which would more easily and more comprehensively be applicable to the decision problems caused by the commercialization question. In this process we would have to integrate foreign examples, since the commercialization issue has become an international one.

23. Sofar I have come across only one textbook of administrative law which devotes the 'Management of Government Information' a specific chapter: Dussault/Borgeat 1989.

24. In the United States where both the Privacy Act and the Freedom of Information Act rely on litigation rather than on institutionalized watchdogs, the courts (or rather those who sued) had to discover the inconsistencies between both acts until the legislature intervened many thousands of dollars later.

25. Commission of the European Communities. Directorate-General for Telecommunications, Information Industries and Innovation. Guidelines for improving the synergy between the public and private sectors in the information market. Luxembourg 1989.

26. Cf. Guidelines 17 ff.

27. In this context I will not deal with the reasons why we should do this. At this stage let it be assumed that professional self-interest presents a valid ground.

Against this background this paper has a double objective: it seeks to contribute to a restructuring of information law as a necessary supplement to information policy and information management.<sup>28</sup> And it is an attempt to contribute to a re-orientation of the ‘commercialization’ debate by introducing more strongly information law policy considerations.

#### 4. The Issue of Commercialization

In the 1989 Guidelines the Commission stated *inter alia*:

‘1. Public administrations regularly and systematically collect basic data and information in the performance of their governmental functions. These collections have value beyond their use by governments, and their wider availability would be beneficial both to the public sector and to private industry. Public organizations should, as far as is practicable and when access is not restricted for the protection of legitimate public or private interests, allow these basic information materials to be used by the private sector and exploited by the information industry through electronic information services.

(...)

3. Basic data and information collected by the public sector should be regularly reviewed, with regard to the possibility of their further use, and exploitation.

(...)

9. Electronic information services directly supplied by the public sector should be regularly reviewed, with a view to deciding whether their provision by the public or private sector is most appropriate, or whether the involvement of the private sector in their production or distribution, or their replacement by appropriate commercial services is desirable.

(...)

19. When public sector information or data is made available for private sector use or exploitation, any pre-existing citizens rights of access to the original information as determined by legislation must be preserved.’

These guidelines reflect the new perspective on public sector information and on the role of the public sector with regard to the distribution of information:

- There is increasing economic pressure on the public sector which forces it to review its cost effectiveness.
- In this review process, against the background of a generally growing consciousness of information technology and information management, the public sector ‘re-discovers’ its own information resources and their economic potentials.
- In parallel there is a corresponding outside demand for these information resources in view of their eventual economic exploitation by the private sector.
- This development is spurred by the migration from traditional support media like paper files towards electronic filing within public administrations.

28. Taking what Dommering (1991, 3) has called the ‘conceptual’ approach.

Before we go on further it might now be appropriate to explain what I understand by *commercialization*: By commercialization I refer to this part of privatization actions in which services which previously have been (or would have been) provided by public sector entities are being contracted out, retaining, however, collective (public sector) decision making processes on the individual contracts. The other aspect of privatization, the complete transfer of agencies and sets of activities from the public sector to the private sector is seen here as a 'desocialization' process. Since the information activities of the public sector are not (perhaps not yet?) generally at stake I see the questions surrounding the distribution of public sector information rather as a commercialization than as a desocialization issue.<sup>29</sup>

While the political pressure to consider the commercialization of public sector information and information distribution functions is increasing, it becomes obvious that the public sector has not been operating in a legal void. As for instance the Guideline no. 19 quoted above states, there are legal rights connected to public sector information. This area lacks, however, coherence. To show this lack of coherence and before we pursue the question of the inner structure of such regulations, we shall examine areas in which the impact of information law already can be felt. We have identified five of such areas: data protection legislation, access to government information legislation, secrecy regulations, copyright, and competition law. For each of these areas we shall briefly describe its function and its effects on the issue of commercialization.

## 5. The Regulatory Framework of Public Sector Information

### 5.1 DATA PROTECTION

The most obvious information related type of regulation in recent years has become data (or privacy) protection. Data protection regulations seek to ensure that public sector information holdings of personal information follow a set of what has been considered as fair information practices. Quite a number of such laws have developed in the EEC so far. Data protection (privacy) protection has been adopted in the Member Countries: Denmark,<sup>30</sup> France,<sup>31</sup> Germany,<sup>32</sup> Ireland,<sup>33</sup> Luxembourg,<sup>34</sup> the Netherlands,<sup>35</sup> Portugal<sup>36</sup> and the United Kingdom.<sup>37</sup> This still leaves

29. With regard to the terminology cf. Crozier 1987, Donahue 1989.

30. Private sector: Lov of 8 June 1978 nr. 293 *om private registre mv.* Public sector: Lov of 8 June 1978 nr. 294 *om offentlige myndigheders registre*, amended by Lov nr. 383 of 10 June 1987, consolidated in lov nr. 622 of 2 October 1987.

31. *Loi no. 78-17 du 6 janvier relative à l'informatique, aux fichiers et aux libertés* (JO, 7.1. 1978, 227ff.)

32. Data Protection Act of 1978.

33. Data Protection Act 1988.

34. *Loi du 31 mars réglementant l'utilisation des données nominatives dans les traitements informatiques.*

35. *19 095 Regels ter bescherming van de persoonlijke levenssfeer in verband met persoonsregistraties (Wet persoonsregistraties)*. 27 december 1988. In force as of 1 July 1989.

36. Law 10/91 of 29 April 1991.

37. Data Protection Act 1984.

Belgium, Greece, Italy, and Spain<sup>38</sup> without such legislation apart from problems which arise from inconsistencies between the already existing legislations.<sup>39</sup>

The general situation has remained so unsatisfactory that finally the EEC is going ahead with an own initiative: the draft directive on data protection which seeks to provide common conditions for the handling of personal information within the Common Market.<sup>40</sup> The general principles that have been developed throughout the national legislations have already been summarized in other international legal instruments, like the Convention of the Council of Europe for the Protection of Individuals with regard to Automatic Processing of Personal Data<sup>41</sup> and the OECD Guidelines on Data Protection<sup>42</sup>. There is now also a UN declaration on this subject.<sup>43</sup> The modifications of these principles in the national acts affect the extent to which traditional forms of information handling are covered, whether the legislation extends to the private sector, whether data relating to legal persons is included, and whether there are independent supervisory authorities and to which extent the rules allow for self-regulation.

These general regulations are supplemented by special sector legislation which seeks to apply the general principles to various information intensive sectors requiring special attention. We find such regulations on the national level, e.g. with regard to specific public sector registers or, as recommendations, on the international level as recommendations of the Council of Europe.<sup>44</sup>

The effects of data protection on the commercialization of personal data are obvious: personal data are usually not collected by the public sector in order to be communicated in bulk to the private sector for commercialization; such transfer usually

---

38. Recent activities in these countries: Belgium: *Projet de loi relatif à la protection de la vie privée à l'égard des traitements automatisés de données à caractère personnel* 1990. Greece: Greek Bill on the Protection of the Individual with Regard to Automatic Processing of Personal Data. In: Council of Europe DPConf (87)3 + Corrigendum, Strasbourg 28. Oktober 1987. Italy: Camera dei Deputati No. 1144 (Picano ed altri, 18.1.1984). Portugal: Proposals 135/V (Government); 381/V; 519/V; see: Privacy Laws and Business, No.14 (August 1990),7. Spain: Draft of December 10, 1985 in: Conference on the problems relating to legislation in the field of data protection. Secretary of State for Public Administration and Council of Europe. Madrid 1986.

39. Cf. for further details Ellger 1990 and Nugter 1990.

40. Commission of the European Communities COM (90) 314 final.

41. Adopted by the Committee of Ministers of the Council of Europe on 17 September 1980.

42. OECD Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data. Recommendation of the Council of Europe adopted at its 523rd Meeting on 23 September 1980.

43. United Nations General Assembly, Guidelines Concerning Personal Data in Automated Files A/44/826 of 4 December 1990.

44. E.g.: Recommendation No. R (81) 1 adopted by the Committee of Ministers of the Council of Europe on 23 January 1981 on regulations for automated medical data banks. Recommendation No. R (83) 10 adopted by the Committee of Ministers of the Council of Europe on 23 September 1983 on the protection of personal data used for purposes of scientific research and statistics. Recommendation R (85) 20 adopted by the Committee of Ministers of the Council of Europe on 25 October 1985 on the protection of personal data for the purposes of direct marketing. Recommendation No. R (86) 1 adopted by the Committee of Ministers on 23 January 1986 on the protection of personal data used for social security purposes. Recommendation No. R (87) 15 adopted by the Committee of Ministers on 17 September 1987 regulating the use of personal data in the police sector. Recommendation R (89) 2 on protection of personal data used for employment purposes adopted by the Committee of Ministers on 18 January 1989.

implies a change of purpose. Such a change of purpose is in principle made admissible in national legislations based on some or all of these conditions: if there is individual consent, if there is an overriding public interest or if the interest of the receiver supersedes the interest of the person concerned. Unless there has been a method to ask for consent in the collection phase individual consent for the bulk dissemination of personal information can either not be assumed or is too unpractical to demand or is simply not there. The other two conditions involve a weighing of interests. Such balancing is difficult to sufficiently generalize, as it would be necessary for bulk commercial use. Where such generalizations occur they usually provide the person concerned with the option to be removed from the data collection in question.

Before the advent of privacy regulations, however, there was a large body of register laws which provided for the collection of personal information in order to make such information public. Very often, these laws gave a general unrestricted right of access to personal information. May this information not be transmitted freely? Register legislation, however, has been coined for traditional – paper file – registers. These registers had a number of ‘built-in’ restrictions which had served as tacit protection mechanisms. Where such registers turn automatic they usually provide a new quality of accessibility which has to be reconsidered. This reconsideration again has to take into account the reasons for which these traditional registers had provided general access (e.g. to guarantee the integrity of the voting process or of business corporations). Consequently, in a number of EEC countries access to such traditional but now automatized registers has become restricted.<sup>45</sup> Data protection thus on the general as well as on the sectoral level tends to limit the capability to commercialize personal information.

## 5.2 ACCESS TO GOVERNMENT INFORMATION

Access to government information regulations have a longer tradition than data protection laws. Access legislation answers concern with large bureaucracies and intransparent policy making procedures. The oldest of such regulations dates back to the 18th century (Sweden). After 1945 this regulatory approach was taken up in other Scandinavian countries, in the US (since 1966), and in some Commonwealth and EEC countries. EEC member states with such legislation are currently: Denmark,<sup>46</sup> France,<sup>47</sup> Greece<sup>48</sup> and the Netherlands.<sup>49</sup> Drafts have been introduced into the parliamentary process in the Federal Republic of Germany (with regard to environmental data); Ireland has recommended to its administration to follow the prin-

45. Cf., e.g. the cases of the use of the voters' register in Luxembourg and the car register in France, see *supra* note 13.

46. Lov nr. 572 af 19 december 1985 om offentlighed i forvaltningen.

47. *Loi no. 78-753 du 17 juillet 1978: Titre premier: de la liberté d'accès au documents administratifs and Loi no. 79-587 du 11 juillet 1979 relative à la motivation des actes administratifs et à l'amélioration des relations entre l'administration et le public.*

48. Law No. 1599/1986.

49. *Wet van 9 november 1978, Stbl. 581, houdende regelen betreffende de openbaarheid van bestuur.*

ciples of the Council of Europe's Recommendation 81 (19) on access to administrative documents.<sup>50</sup>

The Italian Parliament, in the context of its constitutional reform activities, has seen a drafted access law, which is close to the text of the French law.<sup>51</sup> Portugal has constitutional clauses relating to a right of access.<sup>52</sup> Courts have interpreted these clauses so far, however, as demanding a special lawful interest. Also the Spanish Constitution<sup>53</sup> provides such an access right; here too, however, no transformative legislation has been passed yet. As quoted before, the EEC Commission has issued a directive on access to environmental information which will force Member States to enact such legislation by 1993.<sup>54</sup> The Commission has also been urged by the European Parliament to become a little more transparent itself.<sup>55</sup>

Purpose and scope of access laws, or freedom of information laws, as they are sometimes called, have best been summed up in – again an international instrument – the already mentioned Council of Europe Committee of Ministers' Recommendation No. R (81)19 to Member States on the Access to Information held by Public Authorities:

- (I) 'Everyone within the jurisdiction of a Member State shall have the right to obtain, on request, information held by the public authorities other than legislative bodies and judicial authorities.
- (II) Effective and appropriate means shall be provided to ensure access to information.
- (III) Access to information shall not be refused on the ground that the requesting person has not a specific interest in the matter.
- (IV) Access to information shall be provided on the basis of equality.
- (V) The foregoing principles shall apply subject only to such limitations and restrictions as are necessary in a democratic society for the protection of legitimate public interests (such as national security, public safety, public order, the economic well-being of the country, the prevention of crime, or for pre-

50. Ireland has also enacted an Ombudsman Act (in 1980).

51. It has recently given access if a legal interest can be shown. Legge 7 agosto 1990, n. 241: *Nuove norme in materia di procedimento amministrativo e di diritto di accesso ai documenti amministrativi*: Art. 22 (1): 'Al fine di assicurare la trasparenza dell'attività amministrativa e di favorirne lo svolgimento imparziale è riconosciuto a chiunque vi abbia interesse per la tutela di situazioni giuridicamente rivelanti il diritto di accesso ai documenti amministrativi, secondo la modalità stabilite dalla presente legge'.

52. Art. 37 (1) and more specifically (with regard to administrative information) Art. 48 (1) and (2) and 268 (1) and (2) of the Portuguese Constitution. Whereas Art. 268 (1) gives a right of transparency concerning administrative activities which directly affect the citizens and thus restates already existing rights before the constitutional reform, now Art. 268 (2) provides a more general right of access to administrative archives and registers, limited only to restrictions made by law for areas of internal and external security, investigation of crime and privacy. The time limits for the answer of information requests are also to be fixed by special legislation. There is no such general access law in force yet, but the major political parties, including the governmental party, have either already introduced or are preparing drafts concerning such access rights. The French access act seems to serve as the main model in these discussions.

53. Section 105 b) of the 1978 Constitution.

54. Council Directive of 7 June 1990 on the freedom of access to information on the environment (90/313/EEC).

55. Resolution of the European Parliament of 22 January 1988.

venting the disclosure of information received in confidence), and for the protection of privacy and other legitimate private interests, having, however, due regard to the specific interest of an individual in information held by the public authorities which concerns him personally.

- (VI) Any request for information shall be decided upon within a reasonable time.
- (VII) A public authority refusing access to information shall give the reasons on which the refusal is based, according to law or practice.
- (VIII) Any refusal of information shall be subject to review on request<sup>7</sup>.

The national laws may differ to the degree in which they word the exemptions and provide time-limits for responses to be observed by the administration. They may further differ with regard to the fee structure for access requests, whether they provide for a supervisory authority and with regard to the possibilities left to an individual whose access request has been refused.

In the context of data protection we have already referred to problems which occur between public register laws (which might be read as specific access to information laws) and privacy. The main problems of access legislation proper today are – as with public registers and their privacy implications – caused by information technology and they do affect commercialization. These problems – which have mainly occurred in the US so far<sup>56</sup> – can be summarized with the following questions:

- Does the access right comprise electronic documents?
- Does the notion of ‘electronic document’ include data sets in data banks? Has the requester the right to demand that the administration writes a specific retrieval program to meet the requester’s information demands? Does an access request comprise the right to demand the totality of a public sector database? At what costs?
- If information is available both in the traditional and the electronic format, who has the right of choice between the medium, the administration or the requester?

There seems to be a general understanding in jurisdictions which are already faced with these kind of problems<sup>57</sup> that, because of the state of ‘electronification’ of their internal information handling procedures, the basic right of access should not be jeopardized.

Other problems do occur from the interrelation with data protection. If a country has both sets of regulations, how can the interests of privacy be balanced against the public’s right to know? To what extent can one claim access to other people’s personal data using the access law? May a person requesting information for him or herself choose between the access right in the data protection law and the access right in the freedom of information law?

As a citizen’s right, the exercise of access rights involves relatively moderate fees which are meant to recoup merely the basic costs of providing copies and support medias. The market value of such information may be considerably higher. This

56. Cf. for details and further references Perritt 1988 and 1989.

57. For the Scandinavian discussion: Seipel 1990, 102ff.

may frustrate marketing strategies of the public sector. If the public sector seeks to commercialize the information by itself, it cannot demand market prices where it has to answer information requests on a low fee bases; where the public sector seeks to hand out information resources to the private sector on an exclusive basis, such a strategy will also be thwarted by the need to answer similar requests by any other third parties, including competitors of such a privileged party. Third parties, finally, having acquired such information are faced with marketing problems, if the public sector continues to provide the same information on its moderate fee bases.<sup>58</sup>

### 5.3 SECRECY

The public sector acts as a trustee of private sector and individual information. To maintain the flow of these inputs this trust must be justified. But secrecy is not only a matter of trust for public administrations. It is also one of its tools to overcome deficits in resources by the freedom to time its actions and re-actions. Secrecy is an element of administrative strategy to maintain control with limited resources.<sup>59</sup>

Both considerations have become part of the various obligations that are directed at those who handle public sector information, regulations ranging from civil service codes to penal law. But also in access legislations we find specific exemptions which have to be observed in the interest of maintaining this strategic advantage or in the interest of third parties whether individuals, companies, or other public sector institutions which trust in the confidentiality of information exchanges.

The effects on commercialization are of an indirect nature. Strict rules on confidentiality and their enforcement tend to favour a defensive approach to information requests because the civil servant will seek to minimize all personal risks arising from information disclosure.

### 5.4 COPYRIGHT

Copyright has turned from a royal privilege which included censorship to an economic incentive for individual and collective creativity in otherwise volatile markets. Copyright has two basic functions: to guarantee the integrity of the work created and to ensure financial compensation for this work. In their accumulation both elements contribute to the continuity of creative processes in societies.<sup>60</sup> Against this background it is somewhat difficult to understand to which extent these privileges are meant to serve the public sector as the creator of works. However, only few countries have no copyright at all for the public sector like the US. In all EEC countries, there is such a copyright, either unrestricted as in the UK, or with some exemptions relating to official documents and the texts of law. Copyright for the public sector may perhaps be understood, again, in terms of a trustee function for the crea-

58. For further details: Burkert 1989b.

59. Cf. Burkert 1990b.

60. Cf. Mackaay 1990.



tive work of public servants in as far as it does not affect the 'publicity' function of the public sector.

There remains, however, some uneasiness about the use of copyright by the public sector in guaranteeing the integrity of the works produced.<sup>61</sup> If the public sector uses this right, and in particular the penal law elements of copyright, for checking on the unauthorized use of public sector material there might easily occur conflicts with freedom of information principles.

The impact of copyright has become even more complicated with the technological changes in public administrations: as administrations migrate from traditional paper files to electronic filing they have to solve the question to what extent copyright protection, if at all accorded to the public sector, can be maintained for databases. Does it cover their contents, does it cover the retrieval procedures, does it cover the way information is arranged in these databanks? Here, at least, a coming EEC directive might bring some clarification.

Copyright – where available – is certainly the most effective principle to steer the commercial exploitation of public sector information via the licensing process.

Such commercial use may, however, produce negative effects in return. Public servants, finding themselves in a 'hybrid' situation of acting as a public servant *and* as an entrepreneur, may demand additional compensation for their double role and/or problems of efficiency might occur. Those having provided data to such bases may in turn demand financial compensation as well. Licensees find themselves in an unclear situation with regard to those who may wish to continue access to such data banks in using simply their access rights. And finally, it is doubtful whether the public sector can dispose of its 'publicity' functions simply by 'licensing away' a database.

## 5.5 COMPETITION LAW

Competition law has to maintain market equilibria and to counterbalance strategies which seek to exclude market forces in the area of distribution and pricing. Competition law in the EEC is on the way of becoming EEC law with rather unclear boundaries to national competition law.<sup>62</sup> While competition law is slowly reducing public monopolies, it does not exclude public sector *economic activities* in general. The degree of public sector participation in private markets is a policy decision and has recently been the main area of an international debate on de- or reregulation, affecting mainly, in the area of information and communication, communication carriers.

But while this may be regarded as a policy issue, once an area has been defined in which the public sector should be present, then the public sector is also subject, as any other competitor in the market, to the rules of competition law. The impact of competition law is likely to be felt by the public sector because in many cases the public sector would enter the market with a number of 'natural' advantages. These

61. Cf., e.g., Schoettl 1988, 16f.

62. Cf. *Europäische Gemeinschaften, Wirtschafts-, und Sozialausschu: Stellungnahme zu dem 19. Bericht über die Wettbewerbspolitik. 91/C60/07 in Amtsblatt der Europäischen Gemeinschaften C 60/19 vom 8.3.1991.*

advantages may range from the specific ‘good will’ the public sector may enjoy to more substantive advantages, as e.g. , in the area of information, the fact that the public sector may require others, by force of law, to provide information for its databases.

Even where the public sector does not enter the market with its own information resources it has to observe rules of fair competition when it makes its resources available to market participants in order to avoid unfair preferential treatment of different information requesters.

## 6. Towards a Comprehensive Approach

### 6.1 SUMMARY: INCONSISTENCIES IN THE PRESENT INFORMATION LAW FRAMEWORK

In our introduction, we identified two sets of information laws: the traditional, ‘reviewed’ laws and the technology specific. We briefly analyzed five types of regulations, which, belonging to different sets, all have their impact on the commercialization of public sector information. To summarize our observations with regard to these five types, we can state that, while, within the current crisis of legitimacy of public sector information distribution, this distribution process should be made as efficient and as profitable as possible, one must keep in mind the specific demands of each type of regulation:

- access laws demand that public sector information is made accessible (and kept accessible) as widely as possible at the price of its support with no regard for motives and further purposes;
- data protection laws demand that personal information is as little available as possible and, if available, the purpose for which it has been collected should be taken into account;
- secrecy laws demand that information is not being distributed and favour a climate of non-disclosure;
- copyright law permits the state to keep a close control on the further use of such information but it must not overstep its rights;
- competition law demands that if information is distributed by the public sector its ‘natural’ advantages as (in many cases) the monopolist collector of such information should be used as little as possible; by giving away such information for distribution by other parties none of these parties should receive preferential treatment.

Clearly, not all of these legal restraints can be taken into account without contradictions; nor can all legal options be used to the same extent without jeopardizing other objectives. In contrast to laws of nature, however, human made laws can be changed. One obvious reaction might be to try to adapt legislation to the policy needs of the day. But most of these laws have also strong symbolic functions: particularly access and data protection laws may be seen as defending the legitimacy of public information handling against the challenges of information technology. Discarding with these regulations is creating new policy problems rather than solving existing ones.

Therefore it seems necessary to create information law policies which take into account the legitimacy of public sector information handling in all its aspects.<sup>63</sup> This demands a comprehensive approach to develop a balanced, foreseeable, consistent and effective public policy with regard to the use of public sector information. The EEC is currently struggling to arrive at a more detailed guidance for Member States in developing such policies.<sup>64</sup> These activities will play an important part in the context of the IMPACT II program, while a number of activities have already been going on in its Member States since quite some time. Outside the EEC, similar activities are under way in the US and in Canada, on the federal<sup>65</sup> and the provincial level.<sup>66</sup>

Currently it is difficult to state what such a comprehensive policy should look like. It is dubious whether an overall strategy can be found which would be applicable equally well in all the different political and cultural environments. So we restrict ourselves in describing some of the possible approaches and the problems which might be encountered.

## 6.2 STEPS TOWARDS A MORE CONSISTENT AND COMPREHENSIVE FRAMEWORK

In a first step, it is necessary to review the large-scale map of constitutional principles and to re-read them under the aspect of information and communication.<sup>67</sup> This would be a task which would qualify as an exercise in Information Law *Policy* since on this level legal and political issues become inseparable. Information law specialists would certainly not be the sole actors in this field but necessary participants in a broader social debate.<sup>68</sup>

First step: *Comparative Analysis of A European Understanding of Fundamental Information and Communication Rights*

In the absence of a European Constitution this task would have to be directed to the

63. Cf. Burkert 1990b.

64. *Kommission der Europäischen Gemeinschaften: Vorschlag für einen Beschluß des Rates über ein Programm zur Schaffung eines Marktes für Informationsdienste (IMPACT II). KOM (90) 570 endg. Brüssel, den 23. Januar 1991.*

65. Government of Canada. Interdepartmental Working Group on Database Industry Support. Disseminating Data Base Information: A Quick Primer for Government Managers. Draft April 8, 1991.

66. Ministère des Communications, Québec. *Groupe de travail sur la commercialisation des banques de données des organismes publics. Rapport 1991.*

67. This approach resembles the approach which Dommering 1991, 3 ff. calls the 'a priori' approach. As will be shown below I seek to integrate the 'a posteriori' approach as well by acknowledging the specific contributions from the courts. Since the 'a priori' and the 'a posteriori' approach are closely interconnected (Dommering 1991, 4), it might perhaps be useful and borrow from de Sousa Santos 1987, who uses the concept of large-scale, medium-scale and small-scale maps (mixing up, however, I believe, the geographical terminology). Dommering's approach is wider than my own, since I restrict myself, in this context, to *public* information law.

68. They have played a pioneer role, however. We refer to the basic contributions towards a comprehensive concept of information law (under different aspects) by Bing, Bull, Fiedler, Ganley, Huet, Maisl, Seipel, Steinmüller and Tapper. With regard to the situation up to the 1980s: Burkert 1982; a more recent and more comprehensive survey is provided by Dommering 1991, 5ff.

national constitutions of the EEC Member States, their case law and surrounding doctrine and would include a similar exercise with regard to the European Convention on Human Rights which is being seen as a sort of interim European (Community) Human and Civil Rights Codex.<sup>69</sup> The lack of a European Constitution might prove to be an advantage in such a context: the results of such an exercise might well contribute to more explicit information and communication rights in a future European Constitution than in many national constitutions. This approach in comparative constitutional law with the perspective of constitutional harmonization of human and civil rights is certainly a difficult undertaking, but it would provide the information law community with an opportunity to provide the tools for a task which would eventually have to be shouldered by an appropriate representative body within the future framework of European political unity. Such a task would certainly ask for further collaboration between the Council of Europe and the European Community for which precisely the work on data protection and freedom of information has already set an important precedent.

Such an analysis would not be restricted to those human and civil rights which today already refer explicitly to information and communication. Already at this stage one would encounter a number of difficulties, however: while, for instance, Article 8 of the Human Rights Convention is being interpreted as comprising a right to privacy, Article 10 so far has not been acknowledged as containing a general right to government information, contrary to some of the constitutions of the Member States. Such a comparative approach would also have to examine other constitutional principles and protections. One might, for instance, use the principle of general freedoms together with the explicit freedom of information rights and interpret them as a *freedom of choice* with regard to the use of specific features of communication devices.<sup>70</sup>

Another task in this context would be to examine whether the functional change ('*Funktionswandel*') which we observe in constitutional law, from defensive rights and conserving institutional guarantees towards active participation rights and rights to social services would not also affect our current understanding of information and communication rights. This leads us to another difficult, although not novel task which would be to re-examine the relationship between the constitutional guarantees surrounding economic choices and systems: the guarantee of private property and private enterprise, the legitimacy of public intervention into property rights and the role of social rights are already today being re-examined under information and communication aspects in contexts like commercial free speech, free flow of data and data protection or the horizontal effects of a right to privacy. This debate would be of fundamental importance to questions of commercialization of public sector information.

On the basis of these analyses we would then have to deal with the classical problems of the interrelation among these information and communication rights and between traditional rights and freedoms, and we would have to discuss balanc-

69. Cf. Joint Declaration by the European Parliament, the Council and the Commission on Fundamental Rights of April 5, 1977 (C 103/1).

70. We might *e.g.* read the current EEC proposals on caller identification within ISDN networks as an attempt to operationalize this principle. EEC COM (90)314 – SYN 288 of September 13, 1990.

ing and ranking concepts. This debate would have to be carried out in constant interchange with the judiciary bodies within Europe which will be faced with the need to decide even before such a framework is fully developed and whose decisions will play an important role in elaborating such a framework.

The second step: *Operationalizing Constitutional Principles*

This work would have to be followed if not already accompanied by operationalizing these large-scale legal maps to medium and small-scale maps. One task in this context would be, certainly in the context of public information law, to adjust the inner structure of information law to the concepts of information management, just as continental civil law adjusted its structure to contract and property.<sup>71</sup> Such an adjustment would ease the *application* of information law, would help to make it more understandable to those subjected to it and would implicitly help to test its comprehensiveness and consistency.

Some of the privacy laws already provide trial models for such operationalizations being structured according to the various stages of information handling. But such a set of regulations would have to go beyond privacy considerations and should be built on models which have at least already integrated general access regulations, such as the Quebec access act. We might, for instance, envisage a code of public information law which is dealing with information collection, the treatment of information (including issues like file matching), information storage and destruction, information communication (inter-agency, intra-agency, agency-person concerned, agency-third parties), and (active) information dissemination, inner and extra-agency information control, carrier and contents regulations.<sup>72</sup> Such a code would have to deal with assurances of information functions and would have to ensure and secure information cycles and their quality and might make specific provisions for specific types of information contents.

Such a code would also have to deal with one of the main characteristics of information law, i.e. technological change.<sup>73</sup> Here again other technology laws would help to serve as models. This might result in a type of information law which would be more robust towards technological innovation. As I have observed in a different context, the main characteristics of technology law seem to be (1) the emphasis on procedure, (2) the emphasis on self-regulation, (3) the emphasis on negotiation among and with specialists and specialists for the 'general',<sup>74</sup> and (4) the rise of institutions of alternative conflict resolution.<sup>75</sup>

- 
71. Dommering, who seeks to integrate public and private law orders the legal rules around the concepts of 'markets' and 'rights' (Dommering 1991, 21 ff.) which indicates the use of concepts from Economics of Law approaches. But he also includes more structural information and communication related concepts. Similar approaches have been undertaken (with regard to the 'semiotics of information') by Klaus and Steinmüller, and with regard to communication by Moles and Machlup.
72. I confess to difficulties at present to envisage exactly how telecommunications and mass communications regulations could fit into this operationalization process. I do not see such difficulties, however, of integration with regard to the large-scale map to be developed at step 1.
73. This seems to be what Dommering 1991, 2 calls the 'technological factor'.
74. Laufer 1990.
75. Cf. in detail Burkert 1989a.

### *A program for the 21st century?*

By now the reader may get the impression that the author has 'misused' the problems of commercialization to develop a program for information law jurisprudence for the 21st century. The author also confesses that his views are strongly influenced by the German approach to the role of constitutional law, which is certainly not shared in all EEC Member States. But such a perspective would eventually be balanced in the broader research context for which the EEC, having already realized the importance of information and communication for the political future of Europe, could provide an adequate institutional framework either in its existing research institutions or by providing the opportunity for new forms of European information law policy research. Indeed, the reader is correct in assuming that the author wanted to profit from the interest in a broader concept which the commercialization issue is generating. This digression is also justified by the fundamental debates which e.g. the discussion of transborder data flows and more recently the EEC draft directive on data protection have initiated. The commercialization of public sector information will certainly not calm down these discussions.

### 6.3 LEARNING FROM EXAMPLES?

In parallel to this strongly synthetical approach we could also take an analytical approach by analyzing and criticizing similar attempts currently under way to arrive at a coherent information policy. Such an approach would, however, entail at least a description of the various information regulation frameworks which goes beyond the scope of this paper. Nevertheless, one such development should at least briefly be mentioned here. Again it is the commercialization issue which has worked as a catalyst here.

The central issue seems to be which role, in principle, to accord to the public sector. Here, particularly in the US one can observe various shifts of emphasis.<sup>76</sup> While till the 1970s the leading 'information' function of the public sector, particularly in the context of the production and circulation of scientific information, seems to have been undisputed,<sup>77</sup> towards the 1980s, as in other sectors, increasing skepticism with regard to the efficiency of the public sector in this function can be observed.<sup>78</sup> While a number of countries, first of all the UK<sup>79</sup> and to some extent the EEC with its Guidelines seem to have followed this shift, in the US yet another shift can be observed which seeks to de-ideologize the question about the role of the public sector in providing information services. This more balanced approach has recently been reflected in a statement the American Information Industry Association

76. For a more detailed description *see*: Schiller 1989.

77. Cf. National Commission on Libraries and Information Science: 'Towards a National Program for Library and Information Services: Goals for Action'. Washington D.C. 1975.

78. Cf. National Commission on Libraries and Information Science: 'Public Sector/Private Sector Interaction in Providing Information Services'. Washington D.C. 1982.

79. Cf. UK Department of Trade and Industry: Government-held Tradeable Information. An Introduction. London 1986.

has passed in 1990 and which contains the following principles which are quoted here to supplement the principles quoted from the EEC Guidelines:

1. 'Citizens have a right of access to information held by government entities which should only be restricted by enactment of narrowly drawn statutes necessary to protect certain specific legitimate interests such as privacy.
2. Laws, regulations and policies governing public access to government information government should apply equally to all information regardless of the media in which it exists.
3. Information held by a government entity should be available to all persons on an equal and timely basis in all reproducible media used by the government entity to store or to distribute the information.
4. No person, public or private, should have a monopoly control over information held by a government entity, nor should government impose or claim any copyright or other restrictions on the ability of citizens to use and disseminate such information.
5. Government should encourage the widest possible dissemination of public information by making it available at a price not to exceed the marginal cost of dissemination.
6. Government laws, regulations and policies should facilitate public access to government information by encouraging a diversity of sources, including the library community and private sector information industry, to offer or provide access to such information'.

It is difficult to clearly judge the reasons for this new shift. My assumption would be that the retreat from providing information resources, a move from which eventually the private sector might profit, was observed to be too abrupt, within the time frames of building commercial information services.

#### 6.4 NEW PERSPECTIVES ON COMMERCIALIZATION

##### *Preliminary conclusions for information law policy*

There are other examples which show us that one can address one of the most crucial problems of commercialization, data protection, by providing radical solutions. Quebec intends to reform its access to information and data protection legislation to exclude the commercial usability of public sector personal information altogether. This is a concept which goes far beyond what the framework of the EEC draft directive is suggesting. One will have to see to what extent this proposal will be put into practice and, if put into practice, how it will work.

By obliging the public agency which is responsible for the contract for dissemination to maintain accessibility for the citizen based on the access right, it also solves inherent conflicts arising from exclusivity. Again this may seem to be a radical solution which might reduce marketing opportunities for the private enterprise entering such a contract. But it maintains the essential quality of citizen access. From an economic viewpoint, it may also be seen as a challenge to the private sector

to provide value-added services beyond a mere reproduction of such data bases which are already available and would thus increase the quality of information services offered on the market.

*Preliminary conclusions for information policy*

Recent shifts in US policy seem to indicate that there is a stronger preparedness today to look more closely at the advantages and disadvantages of both public services and private services without making *a priori* judgments on the efficiency of both sectors. While this is mainly an issue of *information policy* rather than of *information law policy*, it remains related to the latter, if we assume a constitutionally rooted legal obligation of the public sector to provide certain services and to provide them efficiently.

Current thinking seems to try to identify the organizational particularities of both types of services and judge them on their most likely performances.<sup>80</sup> It may be assumed, for instance, that services the result of which can be clearly measured, and whose providers may have to be exchanged in the execution of a contract, are best provided by the private sector, since under these conditions the competitive forces can more likely operate fully. Where there is a strong emphasis on the means and ways in which these services are executed and where symbolic performance is at least as important as quantifiable results, however, services may more likely be better suited for the public sector. This distribution is based on an ideal-type performance in both sectors.

In the broader framework of information policy this would require to analyze, beyond legal policy implications, which particular information service belongs to which functional category before making policy decisions on the commercialization of public sector information.

As in other market areas, it may also be necessary to look for compensatory strategies. In general, while market economies have shown their strength particularly in recent years, it has also become obvious that this strength is also derived from their capability to adjust to extra-market demands and to provide for social safeguards. It may well be the moment to start thinking – in time – about compensatory information policies in the field of information services to avoid a situation, as in the health services, in which we shall have to develop ‘info-care’ systems at the same costs at which we now see ‘medicare’ systems develop. The danger for the EEC, in my personal view, is that it might be following, once again, the US where the US has already moved on to a position more closer to what once was a common understanding of the role of the public sector in the information cycle in Europe.

As these developments clearly indicate, in the further development of a framework for a European Information Law Policy and for European Information Law one has to remain open to what is happening outside Europe without falling into the traps of mimicry. Is this then a truly 21st century task or perhaps already a task for 20th century information law?

---

80. Cf. Donahue 1989 with further references.



## References:

**Burkert 1982**

Burkert, H., Theories of Information in Law. In: *Journal of Law and Information Science* 1 (1982), 120-130.

**Burkert 1985**

Burkert, H., Representative Democracy and Information and Communication Technology: the Malady, the Cure, its Effect. In: *Can Information Technology Result in Benevolent Bureaucracies*, L. Yngström, R. Sizer, J. Berleur, R. Laufer. Amsterdam, New York, Oxford 1985, 113-124.

**Burkert 1989a**

Burkert, H., The Law of Information Technology. Basic Concepts. In: ABDI/BVIR (ed.): *Computers and Telecommunications: is there a lawyer in this room?* Brussel 1989. 15-24

**Burkert 1989b**

Burkert, H., Legal basis for selling information by the public sector. In: International Chamber of Commerce: *International Contracts for Sale of Information Services. The Dossiers of the Institute of International Business Law and Practice*. Paris 1989, 61-90.

**Burkert 1990a**

Burkert, H., Secrecy and Transparency: The Role of Information Law. In: *L'informazione nell'economia e nel diritto. Osservatorio 'Giordano Dell'Amoe' sui rapporti tra diritto ed economia del Centro Nazionale di Prevenzione Difesa Sociale*. Milano, Congresso internazionale, 30-31 marzo 1989. Milano 1990, 149-173.

**Burkert 1990b**

Burkert, H., Public Sector Information and the Private Sector Information Market. In *Search of a New Legitimacy of Information Handling*. Luxembourg 1990.

**CADA 1982**

Commission d'accès aux documents administratifs: L'accès aux documents administratifs. *Deuxième rapport d'activité*. Paris 1982.

**CADA 1990**

Commission d'accès aux documents administratifs: *Guide de l'accès aux documents administratifs*. Paris 1990.

**Civil Service Department 1979**

Disclosure of Official Information: *A Report on Overseas Practices*, H.M.S.O. London 1979.

**Crozier 1987**

Crozier, M., *État modeste, état moderne. Stratégies pour un autre changement*. Paris 1987.

**d'Alcantara 1989**

D'Alcantara, G., Concepts clés pour une économie de l'information. In: Informatique, Information: Une nouvelle économie? *Journal de Réflexion sur l'informatique* No. 14 & 15 (November 1989), 59-61.

**De Sousa Santos 1987**

De Sousa Santos, B., Law: A Map of Misreading. Toward a Postmodern Conception of Law. In: *Journal of Law and Society*. Vol. 14 (1987), no.3, 279-302.

**Dommering 1991**

Dommering, E.J., An Introduction to Information Law. Works of Fact at the Crossroads of Freedom and Protection. In: Dommering, E.J.; Hugenholtz, P.B. (eds.): *Protecting Works of Fact. Copyright, Freedom of Expression and Information Law*. Amsterdam 1991, 1-40.

**Donahue 1989**

Donahue, J.D., *The Privatization Decision*. New York 1989.

**Dussault/Borgeat 1989**

Dussault, R.; Borgeat, L., *Administrative Law*. A Treatise. Volume 3. Second Edition. Toronto 1989.

**Ellger 1990**

Ellger, R., *Der Datenschutz im grenzüberschreitenden Datenverkehr*. Baden-Baden 1990.

**Hirte 1990**

Hirte, H., Kommerzielle Nutzung des Handelsregisters, in: *Computer und Recht* 1990, 631-637.

**Huet/Maisl 1989**

Huet, J.; Maisl, H., *Droit de l'informatique et des télécommunications*. Paris 1989.

**Kapteyn/Verloren van Themaat/Gormley 1989**

Kapteyn, P.J.G.; Verloren van Themaat, P., *Introduction to the Law of the European Communities. After the coming into force of the Single European Act*. Second edition, edited by Gormley, L.W., Deventer 1989.

**Laufer 1990**

Laufer, R., The Question of the Legitimacy of Computers: An Epistemological Point of View. In: *Report from Namur: Landscapes for an Information Society*. New York 1990.

**Luhmann 1971**

Luhmann, N., Lob der Routine. In: Luhmann, N.: *Politische Planung. Aufsätze zur Soziologie von Politik und Verwaltung*. Opladen 1971, 113-142.

**Mackaay 1990**

Mackaay, E., Economic Incentives in Markets for Information and Innovation. In: *Harvard Journal of Law & Public Policy*. Vol. 13 (1990), No. 3, 867-909.

**Nugter 1990**

Nugter, A.C.M., *Transborder Flow of Personal Data within the EC*. Deventer 1990

**Pelou 1988**

Pelou, P. (ed.), *La documentation administrative*. Paris 1988.

**Perritt 1988**

Perritt, H.H., *Electronic Acquisition and Release of Federal Agency Information*. report Prepared for the Administrative Conference of the United States. 1988.

**Perritt 1989**

Perritt, H.H., Electronic Acquisition and Release of Federal Agency Information: Analysis of Recommendations adopted by the Administrative Conference of the United States. In: *Administrative Law Review*, 1989, 253-314.

**Relyea 1981**

Relyea, Harold C., *The Administration and Operation of the Freedom of Information Act: A Capsule Overview 1966-1980* published by the Congressional Research Service, Washington D.C., July 1981.

**Schiller 1989**

Schiller, H.I., Culture Inc. The corporate takeover of public expression. Oxford 1989.

**Schoettl 1988**

Schoettl, J.-E., L'administration dispose-t-elle d'un droit d'auteur? In: *Droit de l'Informatique* 1988, no. 4, 6-17.

**Seipel 1990**

Seipel, P., Paper Laws in Transition. In: Seipel, P.: *From Data Protection to Knowledge Machines. The Study of Law and Informatics*. Deventer.Boston. 1990, 99-134.

# Data Protection in a Time of Changes

*Jon Bing*

*'You do not find computers on streetcorners or in free nature, but in big, powerful organizations.'* In this way Alan F. Westin, who started the discussions on legal policies related to computer systems with his book *Privacy and Freedom* in 1967, offered an explanation of why the issue became controversial.<sup>1</sup> The concern for data protection, it was suggested, was a symptom of a distrust between the public at large on the one hand, and the government and large, private companies on the other hand. This suggestion, made in a time overshadowed by the Vietnam war and the Watergate crisis, was quite convincing.

This was also the age of the IBM 360-series, the large mainframes with files maintained by punched cards and the request PLEASE DO NOT FOLD, SPINDLE OR MUTILATE THIS CARD becoming some sort of symbol of the power which these computers exercised over the individuals to be served by them. The slogan of increased efficiency was that of avoiding re-keying data – one keystroke per character should be sufficient. The big files were accessed through the emerging terminal networks, many agencies could be served by one computer facility, which might be geographically far removed from the user. The vision of 'a national databank' was met by strong opposition from those concerned with the relation between data protection and computers.<sup>2</sup>

## 1. The Changing Technology

Today, there is reason to remember the origin and background of the modern discussion on data protection. Because we are in a sense still within the magic circle of influence drawn by the mainframes of the late 1960s and early 1970s. The understanding of computer technology underlying the data protection legislation emerging in the 1970s – and also largely the 1980s – is limited to this type of computer processing. The legislation reflects a dated view.

A typical example is the basic concept of a 'file' or 'register' or whatever word is used to indicate the collection of personal data which is governed by legislation.

Most acts wholly or partly rely on such a concept, which qualifies only some organized collections of data as subject to regulation. See for instance the Council of

---

1. Westin is cited according to the author's own notes from a 1972 conference in Paris.

2. Cf. for instance the analysis of 'The Rise, Fall, and Resurrection of the National Data Center'; Arthur R. Miller, *The Assault on Privacy*, University of Michigan Press, Ann Arbor 1971: 54-66.

Europe convention, which is based on the concept of 'automated personal data files' (Art 3(2)(c)), the European Community draft directive on data protection, which is based on the concept of 'a register of personal data'<sup>3</sup> (Art. 2(b)), while the OECD Guidelines only mention personal data with some vaguely stated qualifications of nature and context (para 2).<sup>4</sup>

Remembering the maxim coined by Westin, we may turn it around to illustrate that today computers indeed are found on streetcorners or in free nature. At streetcorners there may well be a games arcade, offering computer-based video games with some of the more sophisticated computer graphics available, and including a dated Pac-Man game which has made more money for its owner, Warner Bros, than their best-selling *Star Wars* movies.<sup>5</sup> And in free nature, there is apt to be found a young and energetic executive tapping along on his or her laptop. Or even strapped to the leg of a jogger, in order to keep track of the number of paces.

This perspective makes it evident that the technological background for data protection legislation has changed in a dramatic way. The 'file' may today be held on a personal computer which has the same performance as the mainframes of the 1960s. And the personal computer is scaled down to a laptop portable computer, or even a notebook with a comparable performance. Current digital diaries – palmtops – have the possibility of including small databanks of business cards, memos, schedules and telephone directories. These are formally 'files', and their use will easily in principle be governed by the data protection legislation designed to be applied to the cumbersome database systems in public administration and large, private companies.

It is obvious that the technological development in itself has made it difficult to approach regulation in the same way as before. It may be questioned if the basic conceptual structure of the first generation data protection legislation is valid, and if the justification for using 'personal data file' or similar constructs to limit the field of application of an act should be explored.

An even more striking example is the old discussion of whether the legislation should be technology related. The computer industry has always maintained that the computer may have been the *occasion* for the data protection issue becoming topical, but not the *cause*. The issue is also relevant to systems handling personal data using non-computerized technology, the 'manual' systems. Nevertheless, legislation has used technology as a primary or secondary criterion. Indeed, the oldest national data protection act in the world, the Swedish Act of 1972, is still today limited to systems based on the electronic processing of data.

But the distinction has always been somewhat difficult to make, and is today being blurred by efficient and cheap scanners for optical character reading or conversion of images to computerized form. A printed page is 'machine readable' in the

- 
3. Only the Danish version of the draft directive was available to the author, and the translation to English may in detail vary with respect to the official English version.
  4. Peter Seipel, one of the major architects of the Guidelines, points out that there was 'an unwillingness to use any terms which might suggest that automated processing is involved, thus even the word 'file' is banned from the text.' Cf. Peter Seipel 'Transborder Flows of Personal Data'; *Transnational Data Report*, January 1982: 32.
  5. Cf Jon Bing 'The electronic game gambit'; *Impact of science on society: Science and games*, Unesco, Paris 1982: 425-431.

same sense as a text stored on a diskette. It needs a different device to be read – a scanner rather than a disk drive, the access time may be somewhat longer. But these are actually only characteristics of different storage media, both are ‘machine readable’.

## 2. Data Quality

These changes may also be paralleled in changes of the social policies, and in the issues relevant with respect to data protection. There are a number of changes in what kind of data are being processed, and how they are generated. Looking at the public sector, one may discern several generations of data processing systems. The first generation – which was the generation on which our first generation of legislation was based – was characterized as indicated above: large files maintained by a flow of paper forms to and print-outs from computer centers. The second generation placed a terminal in front of the user, and on this terminal the form – which before had to be filled out by hand and mailed to the computer center – was copied onto the screen. Some additional features included simple verification functions, and slotting certain data elements into the appropriate fields of the soft form on screen, for instance accessing a database, retrieving income figures from an applicant and fitting them into the proper box in the form, perhaps even checking whether the figure retrieved was below or above certain threshold values.

The current generation, which is introduced in many European countries, especially in social benefit administration, includes knowledge-based methods. In our context this is mainly relevant because decision support may include different types of decisions, requiring different data – typically decisions known as legal expert judgments, assessments etc. Their handling requires qualifications by the users, and by employing knowledge-based methods one may argue that support can be offered for such judgments, and that such support may result in increased efficiency.<sup>6</sup>

Looking at this very rough sketch, one may claim that the computerization has, over the last 20-25 years, also influenced procedures and rules within public administration. Development has favoured rules which are adapted for computerization, what in German is known as ‘*Automationsgeeignete Rechtssetzung*’. This suggests several things. It suggests that rules and procedures will avoid drawing on personal data which have to be collected while dealing with a certain case – the ‘case relative facts’, which may be collected from the client (through an application, an interview or otherwise), from third parties (like an employer, a relative etc.) or through investigations (a social worker or a police officer is requested to visit the claimant at his or her home). Such procedures will require some time, there is effort in interpreting the data with respect to the criteria of the rules to be applied, and there is the recording of the data involved.

There may also be data available in un-structured form at the agency in question, or at other agencies, like letters on file. These may be easier to access than case

---

6. Cf. Jon Bing ‘Three Generations of Computerized Systems for Public Administration, and Some Implications for Legal Decision-Making’; *ratio Juris* Vol 3, No 2, July 1990: 219-236.

relative facts, but these also will have to be interpreted with respect to the relevant rules and specified for the system.

Obviously, the more easily accessible data are those which have been pre-collected, which are pre-classified, typically in a database structure. These are the descendants of the large files established for the mainframes of the 1960s, and which still are very much a part of public administration. The organization of data has certainly outlived the technological restraints that dictated this organization. Here, we will not pursue the discussion of whether alternative methods for organizing data would be as efficient, and give stronger support to data protection objectives. But these databases are certainly efficient, and they reinforce the need for some of the conceptual structure in the first generation of data protection legislation. But, as our discussion above has shown, these structures are not the only ways for storing data in current technology, and the databases do not have to be big, national files, but may be a small business card system of your digital diary. Data stored in such data bases have to be appropriate for such classification, this implies that they will have to represent data according to 'strict criteria' rather than 'vague criteria'.

Rather than analyze this distinction, one may give an example from Norwegian social security procedures. In claiming old age pension (which in Norway is a benefit for all citizens), it is relevant to know whether the claimant supports a spouse. When the system was introduced, the claimant was asked this in a questionnaire. Obviously, depending on the economic situation of the claimant, this may be a matter of judgment. A part-time job for the spouse may be seen as a mere hobby by some well-off couple, while it makes another spouse self-supporting within the more modest requirement of his or her family situation. This question has been replaced by the simple question asking for the income of the spouse. This is supplemented by rules, which then calculate whether the spouse is to be classified as 'supported'.

It is only a matter of courtesy to ask the claimant for the income data of his or her spouse. As the claimant has specified his or her unique personal identification number, the current and former spouses may be identified through the links of the Central Personal Register, and the income of the spouse is easily available from the databases of the tax authority. Obviously, this favours a development where the data will be drawn directly by the system from the available sources, and the claimant is not aware of the fact that they have been collected and used to make a decision relevant to his or her welfare.

This trivial example is obviously an insufficient basis for a general conclusion, stating that the development towards use and re-use of previously collected personal data are characteristic of the thrust of the development. But it is offered as a working hypothesis, a hypothesis which may be illustrated by the small sketch below, where the 'window' through which public administration views the data subject, is emphasized.

### 3. Emphasized Sources of Factual Information

This argument takes us to the question of *data quality*. This is one of the basic principles of data protection, and is – for instance – featured in Article 5 ('Quality of data') of the Council of Europe convention, which is mainly intended to ensure that

data are obtained and processed lawfully and fairly, are stored for legitimate purposes, are adequate and relevant with respect to these purposes, and are not stored for a period exceeding what is required. However, Art 5(d) also requires data to be 'accurate and, where necessary, kept up-to-date'.

Other legal instruments on data protection contain similar provisions, for instance the OECD Guidelines, part two, paragraph 8 – 'Data Quality Principle', stating that data should be 'accurate, complete and kept up-to-date'.

It is interesting to reflect on the relation between data protection and administrative procedures. The first generation data protection legislation was written from the perspective of the data subject, the individual whose data are recorded. For instance, the data subject should be given the right according to the Council of Europe Convention Art 8(c) to 'rectification or erasure' of data which violate the principle from Art 5(d) cited above. To enforce such individual rights, the data subject is granted a right of access (in the Council of Europe Convention Article 8(a) and (b)).

In the perspective of administrative procedures, the question whether individual data are 'accurate' has become less important than the question whether they are 'adequate'. One may be interested in figures characterizing the quality of the system as such. An example of a survey related to this, was the samples checked by a project organized by the Office for Technology Assessment at the US Congress with respect to criminal history records, and where a standard well known from data protection was applied: was the data 'complete, accurate, and unambiguous'.<sup>7</sup> In North Carolina, only 12.2 per cent of the summaries was found to be complete, accurate and unambiguous. The corresponding figures for California and Minnesota were 18.9 per cent and 49.5 per cent.

The author lacks knowledge of other similar surveys. Indications from Norway makes it not unreasonable to assume that these figures are not unique. They imply, of course, that there is a large number of data subjects which may exercise their right to rectify data. But even more importantly, the figures tell us that this individual right is *insufficient* to ensure the data quality necessary to make it acceptable with respect to our traditional standards of justice to promote increased efficiency in public administration through computerized and knowledge-based systems.

This is augmented by the fact that, with respect to administrative procedure, the understanding of data quality as 'complete, accurate, and unambiguous' may not be sufficient. The infamous example of Kungsbacka municipality in Sweden may be an example. Files were matched in order to identify persons receiving housing aid (a special social benefit) to which they were not entitled. Approximately 1,000 persons were identified and reported to the police. Of these, 25 percent could be discarded out of hand as above suspicion. A rather large fraction of the rest were convicted in the first instance court but acquitted at the next level. A total of 10-20 individuals were actually convicted of social security fraud.<sup>8</sup>

The explanation was simply that different definitions of 'income' had been used in the files matched. It is, of course, well known that there are differences between 'gross income', 'net income' and so on. Swedish law actually contained more

7. Cf. David Burnham *The Rise and Fall of the Computer State*, Weidenfeld and Nicolson, London 1983: 74. The research was conducted by Dr. Kenneth C. Laudon.

8. Cf. Jan Freese, *Den maktfullkomliga oförmågan*, Wahlström och Widstrand, Stockholm 1987: 97.



than 25 different definitions of income. Matching them resulted in inappropriate inferences.

The point of this example is that the data actually were 'complete, accurate, and unambiguous'. In formal terms, no violation of the discussed principle of data protection took place. It was the rule – the hypothesis of combining correct but inappropriate data – which led to the unhappy result. Such may also be the result of combining data referring to different time segments of the life of a data subject, as the different databases have strongly deviating updating cycles, ranging from real time (like a database of the accounts in a bank accessed from a point of sales terminal) to annually (like the income figures, which usually specify last year's income).<sup>9</sup>

This demonstrates in my opinion one of the weaknesses of the first generation of data protection legislation – the emphasis on the individual data subject – which legislation has not been able to police the large systems established and emerging in public administration. To do this, one needs legislation which is concerned with 'group privacy', or rather with the legitimate interests for groups and individuals to control the quality of computerized systems, especially decision-support systems. The quality relates both to the data and the rules, as well as to procedures and other aspects of the systems.

In societies which introduce knowledge-based systems at a large scale and promote the communication between agencies of pre-collected facts and the use and re-use of such facts in different contexts and different systems, it will become vital to establish norms for quality and adequacy. Whether one will argue for such a development on the basis of data protection or on the basis of rule of law and due process (German: *Rechtssicherheit*), is a matter of taste. It is just an indication of the close relation between these two perspectives.

The French data protection legislation introduces the provision that nobody should be made subject to a judgment of his or her behaviour only on the basis of computerized procedures. This principle has now also found its way into the draft EC directive.<sup>10</sup> Perhaps, this principle can be related to the introduction of knowledge-based and decision-support systems in public administration. If so, it may have deep implications and may be of more concern to the future organization of private and public administration than data protection.

## 4. Collecting Data at the Source

### 4.1 ELECTRONIC TRAILS OF TRIVIAL DATA

One rather obvious activity which still has to be carried out, is the recording of data for the first time. The systems discussed does not have any 'automatic input proce-

9. Several aspects related to this point are discussed in Jon Bing 'The Emergence of a New Law of Public Administration: Research Issues Related to the Norwegian Housing Aid System'; H.W.K. Kaspersen and A. Oskamp (eds.), *Amongst Friends in Computers and Law: A Collection of Essays in Remembrance of Guy Vandenberghe*, Computer/Law Series 8, Kluwer, Deventer 1990: 229-240.

10. Cf. Art. 14(2).

ture', the interface between machine and reality still is a man, a human input unit, which specifies the data according to the rules of the system. When stored in the system, these data may be communicated to other systems and put to other uses, but the first specification is made by a human.

There are though a growing number of exceptions. One interesting category is *automatic traffic systems*, including automatic traffic control systems. For instance, the driver may disobey a red traffic light and the car breaks the beam of a photoelectric cell. In most current systems, this triggers a camera which makes a photograph of the license plate.

Systems are now appearing, based on a microchip which can be polled from outside the car and yield the identification of the chip, and consequently of the car.<sup>11</sup> These systems are emerging as solutions for toll roads, since they permit a car to pass at high speed, and checking at the same time that the fee due has been paid. If not, the identification is recorded in the computer system (and a photograph taken).

Proposals have been made to make such systems nationwide, for instance in New South Wales<sup>12</sup> and Norway, making it possible to travel through all the different toll roads on a single chip. Also, this would make a scheme of differentiated tariffs possible, making it cheap to cross the road at night, expensive during rush hours.<sup>13</sup> There is no reason for the systems to be limited to toll roads, it could be extended for red light control, speeding, parking etc.

In such systems, the data are generated automatically by the car passing a polling gate. These data are very trivial. For the systems discussed, they would only include vehicle identification, point of polling, time and date – if part of automatic traffic control – the violation in question, for instance the speed. The data are trivial, but there may be large volumes of them, and are collected systematically with a mindless accuracy.

These systems are actually one example of *access control systems*, which are becoming part of buildings and other enclosed, local areas to ensure security, and also facilitate assistance in a crisis, for instance on an offshore oil rig. Such systems generally imply the use of a card with a magnetic stripe, perhaps used with a PIN-code for added security. A 'people chip' has, however, already been suggested – and used (it is reported, though not documented) in certain situations, for instance in controlling prisoners which are allowed limited freedom outside institutions.

Variations are systems for hotels, where the keys are identified, and this identification is stored in a microchip integrated in each lock. These systems are installed by hotels in order to enhance the security of the rooms as the key will yield the identification of the last persons (or rather, keys) accessing the room.

And on reflecting, one will find that there are a number of other access systems in use or emerging. A mobile telephone system will generally identify the geographic cell from which a call is being made, tracing the phone throughout the

- 
11. Such a system operates in a toll road system for Oslo, Norway, which the author passes several times a day.
  12. Where it really is suggested to be statewide.
  13. This has been introduced at the Norwegian city of Trondheim, where one only pays once a day, though one is permitted to pass as many times during the day as necessary. This presumes storing the identification of all vehicles for one day.

countryside. Electronic passports are being considered, simplifying the registration at hotels and offering rather detailed information on travels.

Again, these systems do not store more than trivial data – an identification (related through a card or a similar, physical object with a certain probability to an individual), a place and a time.

The mobile telephone system mentioned above, is also an example of data being recorded through transactions with private or public service providers. The most well-known example is different systems for *electronic funds transfers*, from automatic tellers to point-of-sales terminals. These services are accessible by using a card with a magnetic stripe or a chip. Authentication is generally achieved through a four digit PIN-code, but there are services accessible without any authentication (telephones, taxis). Again the data recorded are trivial – identification, date and time, sum of the transaction, and nature of the transaction. This latter data element can give rather detailed information from point-of-sales terminals.

There is a number of other systems generating data from transactions which may be somewhat less obvious. For instance, the use of the conventional telephone implies the recording of the subscriber. A rather interesting alternative to wiretapping would be to record the identity of the recipient of phone calls from a certain subscriber. This would surely describe the interests and personality of that subscriber in some detail. Similar remarks can be made on the use of pay television, especially pay-by-view television. And certainly also for other conventional services – the subscriptions of newspapers and journals, for instance.

Together, these examples outline two large groups of systems: the access control systems, which trace the movements of cars or persons, and the *transactional systems*, which generate data on services used (generally also implying the whereabouts of a person).

#### 4.2 DATA PROTECTION AND ELECTRONIC TRAILS

First generation data protection legislation was preoccupied with the sensitivity of personal data. This is reflected in the provisions of many national statutes, which qualify a certain set of data as ‘sensitive’ and subject to special protective measures. This is also true for the Council of Europe Convention, which in Article 6 names ‘special categories of data’, *i.e.*, data ‘concerning health or sexual life’ and ‘criminal conviction’.<sup>14</sup> The data trails from the systems described above are certainly not sensitive data. They are trivial, nearly without nuisance value if they become known to others. Some of them involve financial transactions, and for that reason security measures are imposed – the separation of the personal data from these financial data would hardly require sophisticated security measures, and if the economic risk is low, such measures are even dropped, cf. the systems to access telephone services or taxis, which do not require authentication by PIN-code or otherwise.

It is only when seen as patterns, that these trails become interesting. Such trails describe a person, a personality, habits, movement etc. in surprising detail. Just tracing geographical information onto a map could be of great interest. But one should

14. Cf. also the OECD Guidelines para. 3(a).

reflect on *who* would take this interest. In what situations would this detailed patterns or profiles be of interest to a third party?

This emphasizes the fact that personal data rarely have an economic value. The value is generally of an immaterial value (see below), only in special situations can personal data be peddled. We exclude the extreme cases of blackmailing, and look towards the normal situations. And we find, it is suggested, two situations in which the data may be of interest.

The first is related to *marketing*. The trails come together to make a pattern, and this is a pattern of consumption and movement. Obviously, this will be valuable to enterprises marketing a certain product or service, or operating within a certain geographical area. The value of information for high quality, selective mail is high. And the information to be gained from an analysis of the trivial traces left by individuals, would have a quality to rival any information derived from questionnaires or public listings.

This should therefore not be under-estimated. On the other hand, the risk for infringement is limited to offensive marketing, to junk-mail and phone marketing. Nobody will make decisions for you, they will only tempt you – or annoy you – with offers and possibilities for making decisions yourself. This is an area of data protection which attracts much attention. Though this may be justified, it is nevertheless something which should be kept in its appropriate perspective.

The second is that of *individual and collective surveillance*. The two aspects of this situation are actually quite different. By *individual surveillance* a situation is perceived in which the attention of the authorities is directed towards a certain person. It will typically be a person suspected guilty of a crime. The point is that the suspicion has arisen out of circumstances not part of the information trail, but this information may be useful in confirming the suspicion: for instance, the trail may indicate where the suspect has been at certain times, which persons or institutions he or she has contacted etc.

This is the use well known from German examples, where the police has successfully used *Rasterfahndung* in locating, for instance, terrorists.<sup>15</sup> It is obviously quite relevant to data protection issues, but the concern is mainly one of securing that the procedures take into account the interests of data protection when deciding whether the police or another authority should have access to the files containing the trails.

By *collective surveillance* a rather different scenario is envisaged. An example may clarify the technique. One may imagine that a statistical analysis had been made of the personal data of those convicted for professional drug trade. We presume that this analysis showed a statistical significant positive correlation of some of these elements with the conviction. This 'profile' was then used to comb through relevant files in order to identify individuals who match the profile, but have escaped the notice of the police until now. This 'suspect population' is then made subject to a more intense surveillance.

An important difference with the example of individual surveillance, is that in this case there is no suspicion or cause for attention directed towards an individual

15. Cf. Jon Bing, *Reflections on a Data Protection Policy for 1992*, K.V. Russell (ed.) *Yearbook of Law, Computers & Technology*, Butterworths, London 1991: 164-177.

outside the analysis of data itself. It is also a case in which data quality becomes very important. And it has data protection implications of a different magnitude: in this case, we know that by necessity the majority of those subject to surveillance are *not* actually criminals, but only persons qualified by coincidence as members of the suspect population.

The example has been the obvious of police surveillance. But the Swedish Kungsbacka case discussed above is an example of a less dramatic nature. It reminds us that this use of computerized files is related to the use of personal data in decision support systems. And it reminds us that such collective surveillance by no means is as recent as computer technology. One will no doubt recollect instances where the membership of a group is associated with a probability of sharing also a negative attribute. Examples abound, from the US internment of Japanese people during the second world war, to the recent surveillance of Palestine national residents in European countries during the Gulf crisis.

But this more traditional collective surveillance has always been based on rather simpleminded and obvious attributes, as the examples illustrate. The modern electronic surveillance may combine numerous and subtle characteristics in the profile to identify the 'suspect population'. The transparency is reduced, and the surveillance will be undercover. This makes it more difficult to control through a political discussion which controversial measures have been taken, and one should consider whether there should be procedures which help determining the intensity of surveillance which has been accepted in a country.

Again, these are issues not comfortably handled within the first generation data protection legislation.

#### 4.3 THE POSSIBLE DEVELOPMENTS

Above, we briefly exemplified some of the technology which cause an explosive growth of the data of our electronic trails, and a couple of the issues related to the use of such data. But the sketch would be too incomplete if we did not also indicate some of the probable developments in the near future. A major force in this development is the European integration, especially the advent of the single market in 1992, and the agreement with the EFTA-countries to create a European economic space.

Part of the objective is to reduce conventional border control in the form of customs or passport control. Such control has obviously been a rather important element in the strategy of police and other authorities to restrict movements of certain persons, identify wanted persons, etc. As this possibility will be eliminated, it has obviously to be replaced by another one. And a candidate for this is enhanced use of surveillance through computerized methods, and a closer cooperation between the police of different nations. This cooperation is already emerging, and there are examples of computerized systems being planned to implement a scheme for coordinating computer systems of the police from different European nations.<sup>16</sup> This is a

16. Cf. the Schengen Agreement and the planned Schengen Information System (SIS), discussed for instance in *18 Tätigkeitsbericht, Der Hessische Datenschutzbeauftragte Professor Dr. Spiros Simitis, Wiesbaden 1989: 37-43.*

development which is a logical consequence of border control being reduced. But it will nevertheless emphasize the concerns related to surveillance and to the utilization of the data of electronic trails indicated above.

This European development obviously also will result in greater mobility. And this will imply that persons require goods and services at many different locations. They will require that the card for an Norwegian automatic teller also works in Italy. And the driver of the trailer booming along the German *Autobahn* would like that the toll road systems of France or Italy identify his vehicle by the same chip displayed in the front window.

It is rather easy to demonstrate that both consumers, private business and other interests shall profit from a standardization which would allow access to all computerized services. And there are, of course, already many indications of such standards emerging. Already several payment or credit cards are being accepted by automatic tellers or point-of-sales terminals in several countries. Therefore, there will also be a thrust towards a different form for authentication.

Today, each card is generally associated with an individual PIN-code, though some card systems will allow you to change the code yourself, making it possible to have only one code for several cards. This is not recommended by the card systems, as this may make the unauthorized use of the cards easier. But many people think it preferable to devise ways in which a dozen or so different codes can be remembered.

One could foresee several possible developments. One would be to have a universal third party card which gives access to all the different services, and which only is a means of authentication. Such a card could be based on the fingerprint of the owner, for instance storing the fingerprint in the card, the outlet for a service then having a facility of optically reading the fingerprint off the thumb of the person holding the card and comparing this with the data read from the card.

But there are several other candidates for improved ways of authentication – a central fingerprint file, other physiological recognition technologies (the retina pattern, the geometry of the hand), non-lethal radioactive isotopes, biometrical methods (dynamic signature, voice recognition, etc).

The technical choices are manyfold, but they all add up to a development towards a method for authentication which is more simple, more secure and easier for the consumer than the current systems. This may be symbolized with the thumb placed on a scanner – the fingerprint is unique, it is always available, it is never forgotten in the car or the home, and it is easy to use. A side effect will be that the different systems will have a compatible identifying element – rather than different PIN's, there will be only one thumb. Today, a major safeguard for utilizing the wealth of information of the electronic trails is the practical problem of integrating all the trivial data from different systems. It is expensive in practice, and there are very few situations where there is sufficient justification for taking the expense – perhaps a serious crime really is the only realistic example.

Consequently, the development towards a single method for authentication, combined with the enriched files of the near future, may make it more tempting to combine different systems in search of possible customers or whatever. But one should remember that the electronic trails are still left in different systems, and that the integration of trails from more than one system in the foreseeable future will be inhibited by costs and practical problems of compatibility.

## 5. Personal Power and Self-respect

Data protection is frequently characterized as the interest of the individual to control the flow of information relating to himself or herself. This implies control of the collection of data, its use and storage, and its communication to a third party. This understanding of data protection presumes that the data are being used for making decisions relating to the data subject. Consequently, the data protection issue is most acute in relations where one person may make a decision concerning another which has economic or other consequences for that other person. Such a relation is a relation where the decision maker has power with respect to the data subject.

There are certainly many of such power relations, but three may be rather typical. One, which has been the basis of much of the discussion in this paper, is the relation between the state and its citizens: it is obvious that governmental agencies make many decisions with direct impact on the economy and welfare of many individuals.

A second is the relation between employer and employee. Apart from the crucial decisions of hiring or firing a person, the employer makes a large number of other day-to-day decisions, experienced as important for the employee – from decisions on how a job situation is to be developed to decisions on the office to occupy, on the size of the desk or the make of the work station.

A third is the informal relation between an individual and the persons making up his personal, social context – his family, friends and co-workers. They are perhaps not in a position to make formal decisions which have an impact on the situation of the data subject. But if by ‘decisions’ we include the trivial, but important actions like smiling or grimacing, praising or criticizing, laughing at a joke or talking behind someone’s back, we see how important these quasi-decisions are for a persons happiness and wellbeing. In this sense, his intimate circle obviously exercises power with respect to the data subject in its center.

Data protection legislation, especially the European brand, is perhaps mostly concerned with formal power relations, which are evidently important, and also closely linked to administrative procedures and due process. But the third aspect of informal power relations may be the one which the individual experiences most intensively in all the trivial situations which make up a normal life. It is interesting to note, for instance, that some items of personal data give our inner circle of friends and foes more power than otherwise – data on how we have made fools of ourselves in certain situations or intimate details from our family life, our love life, our childhood, etc.

This may actually to some extent explain why certain types of personal data are experienced as sensitive or intimate; these are data items which may give others the power to ridicule or criticize, and trigger some of the mechanisms which make us subject to social sanctions.

We may also reflect on the way this type of data is used in interpersonal relationships: exchanged in confidence to strengthen mutual trust. By communicating the intimate, the secret and less flattering details of my own life, I give the other person some degree of power with respect to me and demonstrate my trust in that person by allowing him or her to gain this power. Thinking back to a date, one often will recall sweet nights spent in a mutual exchange of confidences.

This is emphasized in order to argue that data protection is also related to the

*self-respect* of individuals.<sup>17</sup> A lack of control of the communication and use of personal data with respect to oneself, implies that the data subject feels vulnerable in a personal way. There are people party to his or her confidential information, but which are not bound to the data subject by the mutual bonds of trust.

The computerized systems facilitating the collection and the use of personal data may have an impact on the self-image of persons, eroding away the self-confidence which is the basis of autonomous individuals. This effect would not be evident in the short-term perspective. But if the hypothesis is true, it will in the long-term change the perceived power relations between the individual and his or her social context. It will effect the quality of society as such.

This is far beyond the rational rules of the first generation data protection legislation. The major principle in this legislation is one of *relevance* of a data item with respect to the objective of the system collecting and storing that data item. If the data are relevant, then the collection and storage is permitted. The objective as such is not judged in the perspective of data protection legislation – it obviously has to be a lawful objective, but the question which objectives for private or public activities should be lawful, is qualified by other rules than those of the data protection legislation.

This results in a reductionism, where data protection often only is one of several interests taken into consideration when a decision is reached as to whether the system in question should be permitted. The objective of the system defines the perspective in which the assessment is taking place.

But this perspective may be too narrow. If the thrust of the argument above is valid, the extensive use and communication of personal data may erode the self-confidence of persons in our society, change their understanding of themselves and their relation to their family, friends and society. Such a change will also be a change of society into something different, perhaps even alien. And the possibility of such a major change may require some reflection on the social policies underlying our current data protection legislation.

---

17. I am indebted to research fellow Dag Elgesem at the Norwegian Research Center for Computers and Law for clarifying this aspect.





# Protecting Informational Privacy: Trends and Problems

*Stefano Rodotà*

The theoretical discussions and the complex experiences of recent years show that the notion of privacy is now extremely dynamic and that a close and constant inter-relationship has been established between changes brought about by information technologies (and also by reproductive technologies, by genetic engineering) and changes in the very concept of privacy. The definition of privacy as '*the right to be let alone*'<sup>1</sup> no longer has any general value, although it continues to cover an essential aspect of the problem and can still be applied to specific situations. In the information society, other definitions of privacy are beginning to prevail – functional definitions which, in different ways, refer to the individuals right to have access to, control, direct, and interrupt the flow of his own data.<sup>2</sup> Privacy, therefore, may be more precisely defined as the right to maintain control over one's own data.

It may be assumed that this tendency will continue in the future, and that rules and definitions will therefore follow this line. At the same time, there has been a gradual extension of the notion of the private sphere, which now includes situations and interests that were formerly excluded from the area covered by this particular area of juridical protection. Thus, the private sphere can be defined as the body of actions, behaviours, opinions, preferences and personal data over which the interested party intends to maintain exclusive control. Consequently, privacy can be identified with the 'protection of life-choices from public control and social disgrace',<sup>3</sup> in a sphere characterized by the '*liberté des choix existentielles*'.<sup>4</sup>

## 1. Re-defining Privacy and the Sphere of Privacy

Two tendencies are clearly taking shape. On the one hand, there is a re-definition of the concept of privacy, which, as well as the traditional power of exclusion, attributes increasing importance to the power of control. On the other hand, the object of the right of privacy is extending due to the expansion of the technical notion of the

1. S.D. Warren & L.D. Brandeis, 'The Right to Privacy', *Harvard Law Review* 4 (1890), 193.
2. S. Rodotà, 'The Social Challenge of Information Technology: 1984 and Beyond', *Colloque Oede*, Berlin, 1984; See in general W.A. Parent, 'Recent Works on the Concept of Privacy', *American Philosophical Review* 1983, 343.
3. L.M. Friedmann, *The Republic of Choice, Law, Authority and Culture*, Cambridge (Mass.), 1990, 184.
4. F. Rigaux, *La protection de la vie privée et des autres biens de la personnalité*, Bruxelles-Paris, 1990, 167.

private sphere, which covers an evergrowing number of juridically relevant situations. In this perspective, the term 'private' is not necessarily used to refer to areas to which particular protection is assigned for reasons of secrecy. The notion now tends to cover the body of personal activities and situations which can be communicated, both verbally and non-verbally, and which can therefore be turned into data. 'Private' here means *personal*; it does not necessarily mean secret at all.<sup>5</sup>

On the basis of this observation, it may be stated that the most important sequence in quantitative terms is now 'persondata-circulation-control', and no longer only 'person-data secrecy', around which the traditional notion of privacy was built. The individual who possesses the right of privacy can demand forms of 'controlled circulation', rather than interrupt the flow of his own data.

The extension of the area covered by privacy protection has led to a corresponding growth in the number of parties interested in such protection and in its social importance. We may, therefore, consider as no longer sufficient the cultural approach to the problem which had constructed the right of privacy on the basis of a dual identification: with the 19th century, seen as the 'golden age of privacy', and with the middle classes, considered as the natural (if not the only) parties interested in the protection of the private sphere.<sup>6</sup> The concern with privacy protection, in fact, has never been as widespread as it is now; it is presumably destined to grow in the future, and involves wider and wider sections of the population.

It should be added that all this is not merely the effect of the concern brought about by the many applications of information technology. It is also the result of the way in which communications technology as a whole helps to 'construct' the private sphere, thereby reducing the need for a whole series of established and daily social contacts (as the result of working at home, videoconferencing, teleshopping, telebanking, and so on), and therefore preventing the individual from exercising the various forms of social control that are made possible by performing actions 'in public', in a community. 'These technologies will also serve to isolate the individual from social controls that have in the past monitored behaviours and pressured for conformity'.<sup>7</sup>

The information technologies thus seem to confirm and reinforce a trend which in the past was characterized by the close link between the birth of the private sphere, in the modern sense, and the possibility of escaping forms of social control. This happened simultaneously with the movement of larger and larger numbers of people to urban centers, which rendered the strict social control exercised in village communities less easy; with the techniques of house building, which isolated areas destined to functions that were formerly carried out in public (toilet facilities, bedrooms); and with the division between workplace and home.<sup>8</sup> However, the increasing power of the individual to confine himself to his 'electronic fortress' risks giving nothing more than the illusion of the enrichment and the reinforcement of the private

5. L.M. Friedmann, *supra* note 3, at 181.

6. A.F. Westin, *Privacy and Freedom*, New York, 1967.

7. J.M. Katz, 'Public Policy Origins of Telecommunications Privacy and the Emerging Issues', *Information Age* 10 (1988), 173.

8. S. Rodotà, 'Privacy and Data Surveillance: Growing Public Concern', *OECD, Policy Issues in Data Protection and Privacy*, Paris, 1976, 132. See P. Ariès, 'Pour une histoire de la vie privée', P. Ariès & G. Duby (eds.), *Histoire de la vie privée*, 111, Paris, 1986, 7-19.

sphere. Rather than escaping from social control, the individual finds that his social links with other people are cut,<sup>9</sup> and that these links are difficult to re-establish solely on the basis of electronic communication.<sup>10</sup> In the 'global village', the impression of self-sufficiency increases, but so does the degree of separation from other people. The traditional forms of social control diminish, but their place is taken by more penetrating and all-encompassing controls, made possible by the electronic processing of data. These things are well known, but they are still confirmed all the time: we need only think of the recent controversy in the United States regarding the activities of a number of companies which built up records of tens of millions of consumers according to their preferences.

Technology helps to give rise to a private sphere that is richer, but more fragile, increasingly subject to risks: this leads to the need for a continuous development of legal protection, and for an expansion of the frontiers of the right of privacy. I will call this *'the first paradox of privacy'*: the term paradox is used to indicate a situation in which the movement towards privacy (apparently) contradicts itself or produces consequences that are (apparently) unexpected.

The stress on the aspect of circulation and control undoubtedly cannot lead us to neglect the traditional aspects of secrecy and of the exclusion from circulation of personal data as permanent features of the right of privacy. Here too, however, we should underline a significant development. The need for secrecy has expanded well beyond data regarding the private sphere of the individual, that is those data which the individual desires to exclude from all forms of circulation. From an examination of studies on this subject,<sup>11</sup> we can easily see that the basis of privacy is now undoubtedly still formed by data which reflect the traditional need for secrecy (those concerning health or sexual habits, for example). Other categories of data have, however, come to assume increasing importance within the notion of privacy, data which are protected principally to avoid discrimination against those to whom they refer. This is mainly a matter of data regarding political or trade union opinions, as well as data relating to race or religious beliefs.

The peculiarity of this situation is born out of the fact that political and trade-union opinions cannot be restricted solely to the private sphere. They are destined, at least in democratic countries, to characterize the 'public' sphere. They are amongst the opinions that the individual must be able to express in public, and they help to determine his 'public' identity.

The attribution of these data to the category of sensitive data, particularly protected from the risks of circulation, derives from their potential to be used for discriminatory ends. Therefore, for the very purpose of ensuring the fullness of the public sphere, a very definite 'private' status is attributed to such data, a status which is manifested above all in the fact that they may not be gathered by certain parties

9. See S.R. Hiltz & M. Turoff, *The Network Nation. Human Communication via Computer*, Reading (Mass.), 1978. In general, E. Goffmann, *Relations in Public*, New York, 1971.

10. S.R. Hiltz & M. Turoff, *supra* note 9.

11. Council of Europe, Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data (1981), Art. 6; Sweden, Datalag (1973), Art. 2a; Norway, *Lov om Personregistre* (1978), Art. 6; France, *Loi relative à l'informatique, aux fichiers et aux libertés* (1978), Art. 31; etc.

(employers, for example) and the fact that certain forms of collection and circulation are illegal. I will call this '*the second paradox of privacy*'.

It is precisely the consideration of the risks linked to the uses of data gathered, and not the natural propensity to secrecy of such data, that has led to the acknowledgement of the '*right of informational self-determination*' as a fundamental right of the citizen.<sup>12</sup> This acknowledgement fits in with a tendency towards the attribution of the rank of fundamental right to a series of important personal and collective positions in the sphere of information. We might even begin to talk in terms of a first draft of an '*Informational Constitution*' or of an '*Information Bill of Rights*', which includes the right to search for, receive, and distribute information,<sup>13</sup> the right to informational self-determination, and the right to informational privacy.

From a theoretical point of view, this position does not contradict a vision of privacy as a bundle of rights. The acknowledgement of a fundamental right does not exclude the concrete manifestation of this right in the form of the attribution to interested parties of an open series of powers. We need only think back to the events which in the United States led to the identification of rights '*in penumbra*',<sup>14</sup> and to the construction in Europe of a general right of personality.<sup>15</sup>

The recognition of privacy as a fundamental right, in a framework characterized by the individual's power to 'follow' personal data even when they have become available to another subject, has meant that particular importance is attached to the right of access, which becomes the basic rule for the regulation of relations between subjects who may be in conflict, by passing the criterion of the possession of data. The fundamental right of the person to whom the data refer prevails over the criterion of ownership, which is founded on the legitimacy of the gathering and processing of data regarding other people. The reinforcement of the individual right of privacy thus becomes an instrument to render the spheres of other subjects more transparent. It is no coincidence that the development of data protection legislation has been accompanied by the spread of Freedom of Information Acts.<sup>16</sup> I will call this '*the third paradox of privacy*' (although historically and conceptually, due to the way in which the right of access has evolved, it could well be classified as the first paradox).

The sphere within which informational privacy operates is thus characterized by the three paradoxes described above and by four trends which can be summarized as follows:

1. from the right to be left alone to the right to keep control over one's own data;
2. from privacy to the right of informational self-determination;

12. *Bundesverfassungsgericht* 15 December 1983, *Neue Juristische Wochenschrift* 1983, 419 (see also Gesetz zur Fortentwicklung der Datenverarbeitung und des Datenschutzes, 20 dezember 1990). See S. Simitis, 'Die informationelle Selbstbestimmung. Grundbedingung einer verfassungskonformen Informationsordnung', *Neue Juristische Wochenschrift* 1983, 398; H. Burkert, *Datenschutz und Informations- und Kommunikationstechnik: Eine Problemskizze*, Bonn, 1985.

13. Onu, *Déclaration universelle des droits de l'homme* (1948), Art. 19.

14. U.S. Supreme Court, *Griswold v. Connecticut*, 381 U.S. 384 (1965).

15. P. Schwerdtner, *Das Persönlichkeitsrecht in der deutschen Zivilordnung*, Berlin, 1977; E. Stein-dorff, *Persönlichkeitsrecht im Zivilverkehr*, Heidelberg, 1983; L. Solyom, *Die Persönlichkeitsrechte*, Köln, 1984.

16. The final point of this evolution are acts regulating both privacy and freedom of information, as the Freedom of Information and Protection of Privacy Act, Ontario (1987).

3. from privacy to non-discrimination;
4. from secrecy to control.

## 2. Privacy in a Public Society: Rights and Interests in Conflict

The analysis above clearly demonstrates the tendency to place the right of privacy amongst the instruments of safeguard of the personality, freeing it from an approach which links it to the right of ownership.<sup>17</sup> The power to maintain full control over one's own data, in fact, contributes in a decisive manner to the definition of the position of the individual in society. It is no coincidence that the reinforcement of privacy protection is accompanied by the acknowledgement or the consolidation of other rights of the personality such as the right of publicity<sup>18</sup> and the right of personal identity,<sup>19</sup> which concern the way a subject is presented 'to the eyes of society' through the body of data which refer to him.

Moreover, it is precisely the need to ensure full protection of the personality which reinforces the trend towards an all inclusive approach to privacy protection which involves public and private databanks, natural and legal persons, and manual and automated files. And the exceptions in this field are justified precisely by stressing the fact that there are uses of personal data which cannot damage the personality or the identity of other people, as happens when the use of data has strictly private ends<sup>20</sup> or when there is no risk concerning the use of manually-processed data for purposes of surveillance.<sup>21</sup>

These considerations, however, do not prevent personal data being seen also (or even above all) as a business asset. This is the approach favoured by those who gather, process and distribute personal data with commercial aims, thus giving rise to a phenomenon which, in terms of size and of the risks of powerful social control, raises problems that are no less important than those related to the large public databanks. It has been observed that on both sides of the Atlantic, privacy rules are evolving towards a dubious compromise in which big business and government are allowed to keep computerized information that remains hard to get for the public at large.<sup>22</sup>

A confirmation of this trend can be found in the case involving two software companies, Equifax Inc. and Lotus Development Corporation, which hold data on 120 million American consumers (names, addresses, income brackets, 'products or lifestyles categories'). Whilst there was no criticism of the fact that such an enormous amount of information was in the hands of two companies, there was a violent outcry when they announced that they intended to put a computer disk with

- 
17. Y. Pouillet, 'Le fondement de la protection des données nominatives: propriétés ou libertés', in *Nouvelles technologies et propriété*, Montréal, 1991, 175; F. Rigaux, *supra* note 4; J. Rubinfeld, 'The Right of Privacy', *Harvard Law Review* 102 (1988-89), 737.
  18. See S.H. Halpern, *The Law of Defamation, Privacy, Publicity and 'Moral Rights'*, Cincinnati, 1988, and *Computer und Recht* 1987, 602.
  19. G. Alpha & M. Bessone (eds.), *Il diritto all'identità personale*, Padova, 1981.
  20. Sweden, Datalag, sec. 2.4.
  21. D.H. Flaherty, *Protecting Privacy in Surveillance Societies*, Chapel Hill-London, 1989, 28.
  22. *The Economist*, 4 May 1991, 1.

the personal data they had gathered at the disposal of smaller companies. Equifax and Lotus subsequently announced that they had given up their project.<sup>23</sup>

The information society, in fact, now takes the form of a '*society of services*' with a high degree of standardization and growing international links. This leads to two consequences. The more the services are technologically sophisticated, the more the individual leaves a considerable amount of personal data in the hands of the supplier. The more the network of services expands, the greater the possibility of links between databanks and of the international circulation of the data gathered.

At this point, we are faced with the well-known alternative between the logic of the market and the creation of an institutional framework characterized by the imposition of forms of data protection; between the right of privacy as a constraint on the spontaneous play of forces and the right of privacy as the mere attribution of titles that are freely negotiable on the market;<sup>24</sup> between the inalienability of individual rights and the power to dispose of such rights through informed consent. It is not a matter of an abstract alternative: the recent drafts for EC directives provoked strong reactions from the big companies which claim that there will be excessive and unjustified constraints on their freedom of action.

From the alternative between extreme hypotheses, it is obviously possible to arrive at a series of intermediate solutions which combine different elements. We need only think of the various ways in which informed consent can be understood. It can be required in all cases or be reserved only for certain categories of data. It can always require previous notification to interested parties or can be necessary only for certain forms of data collection, processing, and distribution. It is essential, therefore, to have a framework of principles which characterizes the system of protection.

It seems to me that it is worth underlining the fact that the European Community, through two draft directives, has chosen to ensure citizens a 'high degree of protection' of their personal data.<sup>25</sup> The importance of this choice derives from the fact that the European Community is an 'economic' entity aimed at bringing about the right conditions for a market in which persons and goods can circulate freely. It is not, therefore, an institution which is deaf to the interests of business or to the logic of the market.

In the comparison between the interests at stake, particular importance is thus assumed by the need for data protection for all those who might be forced to suffer a 'loss of dignity' if their consent to the gathering, processing, and distribution of information regarding them were the condition for obtaining certain services.<sup>26</sup> This is not a matter of rejecting the '*paternalism*' of the legislator,<sup>27</sup> appealing to individual

23. *Privacy Journal*, January 1991, 1.

24. R. Posner, *The Economics of Justice*, Cambridge (Mass.), 1981. See S. Rodotà, *supra* note 2; R. Wacks, *Personal Information, Privacy and the Law*, Oxford, 1989, 28.

25. EC Commission, Proposal for a Council Directive concerning the protection of individuals in relation to the processing of personal data, Com (90) 314 def. SYN 287; Proposal for a Council Directive concerning the protection of personal data and privacy in the context of public digital telecommunications network, Com (90) 314 def. SYN 288.

26. A.F. Westin, 'Home Information Systems: the Privacy Debate', *Datamation* 1982, No. 4, 112.

27. See in general H. Kronman & R. Posner, 'Note on Paternalism', *The Economics of Contract*, Boston-Toronto, 1979.

freedom of choice. It is a matter of registering realistically the limits of individual consent, which are inevitable in the presence of such differences in power in market relations, and at the same time to determine the minimum standards for the effective protection of fundamental rights.

In order to bring about this result, the first step is the identification of situations in which the request for data on the part of certain subjects is always unlawful. This is the case, as laid down by many legislations, of employers, who may not gather information about the political and trade-union opinions of employees, who may not undertake tests regarding Aids, and who may not require genetic information (in the last two cases the prohibition is extended to insurance companies).<sup>28</sup>

General limitations on the use of databanks are, in any case, contained in a series of principles which, already present in 'first-generation' data protection legislation, have been further elaborated and reinforced in the 'second-generation' laws. Doubt was cast on the utility of the indication of principles which as a result of their vagueness gave rise to legislation that was 'porous', excessively loose, and ended up by permitting serious forms of surveillance and discrimination against citizens.<sup>29</sup> And it was also observed that some principles, with the change in historical and technological conditions, were actually no longer sufficient or were so difficult to apply that they led to a deceptive trustworthiness of the laws that contained them.<sup>30</sup> Requests were therefore made for a passage from the *omnibus* legislations of the first generation to more detailed and stringent forms of legislation, related to the different categories of data held and to the different technologies used.

This led to a closer analysis of these technologies, which was particularly extensive in the telecommunications sector due to the spread of ISDN (*Integrated Services Digital Network*). Much greater attention was therefore given to the problem of the social acceptability of new technologies, with relation to which unprecedented importance is beginning to be assumed by the consideration of cases in which a technology or a new service can be rejected or accepted with considerable restrictions. This may well be a change of no small importance compared to the previous phase, dominated by the substantial acceptance of any technological innovation, in relation to which the rules themselves, even the more restrictive rules, assumed a largely legitimizing character.

In this respect, it is worth calling to mind the great precautions which accompanied the acceptance of the service known as *Calling Line Identification* (CLI) or Caller ID or *Automatic Number Identification* (ANI), as demonstrated both by the EC draft directive and by some of the first US laws.<sup>31</sup> The admissibility of the service is subordinated to the right of the individual to decide on essential modes of use (in-

28. See N.A. Holtzman, *Proceed with Caution. Predicting Genetic Risks in the Recombinant DNA Era*, Baltimore-London, 1989, 193.

29. S. Simitis, 'Reviewing Privacy in an Information Society', *University of Pennsylvania Law Review* 135 (1987), 707; 'Zur Datenschutz-gesetzgebung: Vorgaben und Perspektiven', *Computer und Recht* 1987, 602.

30. G. Knaub, 'Protection des données', A. Cassese, A. Chapman & J. Weiler (eds.), *Human Rights and the European Community: the Substantive Law*, Baden-Baden; 1991, 375-378.

31. *Privacy Journal*, April 1989, 5; June 1989, 1; November 1989, 1; April 1991, 1-2. See Y. Poullet & F. Warrant, 'Nouveaux compléments au service téléphonique et protection des données: à la recherche d'un cadre conceptuel', *Droit de l'informatique & des télécoms* 1990, 19.



cluding the complete exclusion of the possibility of identification). The door is thus opened to reflection (which has so far been lacking) on 'dirty' electronic technologies (those which leave a notable wake of personal data) and 'clean' electronic technologies (to remain in the sphere of telecommunications, we might compare phonecards that use microprocessors with throwaway magnetic phonecards).

The importance assumed by the relationship between services carried out and data collected highlights the problem of the dissemination of data and of the instruments that can be used to limit or control such dissemination. This means that particular importance is assumed by techniques of 'prohibition' and, amongst the fundamental principles, by the principle of 'purpose'. The prohibition of certain types of data gathering can derive directly from the law or can be entrusted to the action of the interested party. The principle of purpose assumes great relevance in a situation in which the personal data of the user of a service are not sought for or requested by the supplier of the service, but are an almost 'natural' consequence of the supply of the service itself.<sup>32</sup> Consequently, it becomes essential to refer to this principle to determine the legitimate use of the data gathered, the amount of time they are kept, and the admissibility of their link up with other data contained in other files.

All this may lead to a considerable change in the institutional framework within which data protection operates. Here, a leading role was played for a long time by the principle of access, which subsequently became the cornerstone of all relations between individual citizens and those who possess data, well beyond the sphere identified by the right of privacy. Now the accent is placed with increasing intensity on the principle of purpose itself, which has also turned out to be an essential starting point to prevent forms of international data circulation that may frustrate the very protection provided by the right of access; to prohibit or restrict the link ups between data banks; and to regulate matching operations. It is in this area, in fact, that one of the most difficult and disturbing aspects of the current phase must be faced: the creation of personal and group profiles which may lead to strong forms of discrimination and of stringent control.

It is not sufficient, in fact, to prohibit administrative and judicial decisions made on the basis only of automated profiles.<sup>33</sup> The spread of the use of profiles may determine forms of discrimination against those who do not correspond to general models, accentuating the stigmatization of all forms of social deviance and the penalization of minority groups. There may be obstacles to the very development of the individual personality, which may be limited to historically determined profiles. By favouring behaviours that conform to the prevalent profiles, the production of new collective identities is rendered more difficult, and the dynamic nature of society, as well as democracy itself, are put at risk. In the face of these problems, there must be a strong affirmation of the 'right to leave traces' without being penalized in any way for doing so.

32. D.H. Flaherty, *Protecting Privacy in Two-Way Electronic Services*, White Plains (N.Y.), 1985; Y. Pouillet & G.P. Vandenberghe (eds.), *Telebanking, Teleshopping and the Law*, Deventer, 1988; K.G. Wilson, *Technologies of Control. The New Interactive Media for the Home*, Madison (Wis.), 1988. For telephone can accounting, see Congress of the United States. Office of Technology Assessment, *The Electronic Supervisor. New Technologies New Tensions*, Washington D. C., 1987, 61.

33. France, Loi relative à l'informatique, *supra* note 11, Art. 2; Italy, Legge 1 aprile 1981, n. 121, Art. 9.

The acknowledgement of the right of privacy as a fundamental right is accompanied by a body of exceptions which tend to determine social acceptability and compatibility with collective interests. This line, as well as being implicit in the logic of many legislations, is manifested explicitly in the very texts which proclaim the fundamental character of the right.<sup>34</sup> We are therefore faced with a body of exceptions which may become a serious obstacle to the full realization of data protection due to their great number and to the vagueness with which they are expressed.

However, it is precisely through an analysis of this problem that we can grasp the importance of the tendency to place the right of privacy amongst the fundamental rights and not to consider it merely as a bundle of rights. If it is considered in the sphere of fundamental rights, in fact, limitations on the right of privacy can only arise in the case of conflict with other rights of the same type, that is with fundamental rights.

The most widespread forms of limitation which sacrifice the safeguard of privacy in the presence of other interests that are temporarily or permanently considered to be prevalent, are well known and, in many cases, contained in data protection legislation itself. They concern, above all, interests of the State (internal or international security, police, the judicial system) or important individual and collective rights, above all the right to information (but also the collective dimension of the right to health).

Rather than going back to case histories that are extremely well known and that have been examined in great depth (even though there are many new factors relating to information technology itself), it would seem more useful at this point to look briefly at the way in which the relationship between different private spheres may emerge in view of selective disclosure of information. This means that privacy protection remains, though it is reduced with respect to certain subjects.

This is a matter which may be examined in relation to a number of specific sensitive data, such as those regarding health. It was mentioned above that the special protection assigned to these data is not justified only by the fact that they refer to particularly personal information but also, and sometimes above all, by the risk that their disclosure may lead to discrimination. If we take this observation as a starting point, we can go on to analyze more correctly a number of questions that have arisen from the subject of Aids and of genetic data.

There is no doubt that discrimination can be caused by knowledge on the part of an employer or an insurance company of information regarding a subject who is HIV-positive or who has certain genetic features. Such discrimination may take the form of dismissal, non-appointment, refusal to draw up an insurance contract, or the request for a particularly high insurance premium. This explains the tendency of many legislations to prohibit, except in certain cases, the disclosure of data concerning these subjects, thereby reinforcing privacy protection regarding this type of sensitive data.<sup>35</sup>

34. See in general Council of Europe, Convention for the Protection of Individuals, *supra* note 11, Art. 9.

35. N.A. Holtzman, *supra* note 28; H.L. Dalton & S. Burris, *Aids and the Law*, New Haven-London, 1987; R.M. Cook-Deegan, 'Public Policy Implications of the Human Gnome Project', Z. Bankowski & A.M. Capron (eds.), *Genetics, Ethics and Human Values*, Geneva, 1991, 62.

There are, however, cases in which there is no risk of discrimination and where there is, on the other hand, the risk of damage to other subjects who have not been notified of information such as the examples mentioned above. We may think, for example, of a subject who is not aware that his or her sexual partner is HIV-positive; or of cases in which the knowledge of genetic data may affect the decision to conceive a child with a person whose genetic features may cause risks for the baby.

The particular interrelationship between two private spheres and the absence of the element of discrimination leads us to believe that in these cases the interest of secrecy must give way, in the face of the interest of the other person, to the birth of a duty of disclosure in the direction of the latter. This approach to the problem may also affect the position of other subjects, above all of the doctor who comes into possession of these data as the result of his relationship with the patient. Can a doctor infringe professional secrecy when he knows that his patient is HIV-positive, has sexual relations, does not practice 'safe sex', and does not inform his partner of his condition? I believe that in such cases, when there is a real and serious risk for the health of a third party, we must favour the line aimed at overcoming professional secrecy.<sup>36</sup> In conclusion, it may be stated that in these cases there is a reduction of the power of the individual to exercise exclusive control over the circulation of his own data.

This passage to the area of duties of disclosure allows us to deal with another very particular aspect of the 'construction' of the private sphere. I am referring to the questions relating to predictive medicine, as exemplified by the possibilities of early diagnosis of diseases such as Huntington's disease (which develops towards the age of forty after the subject has led a completely normal life). Must the doctor, and above all the parents, inform the interested party of his condition?

Around these kinds of cases, which are highly controversial,<sup>37</sup> there has developed a discussion on the admissibility of a 'right not to know'.<sup>38</sup> If this right is recognized, the way of conceiving of privacy is also affected. The power to control my own data, which we have seen to be a characteristic of the most recent definition of the right of privacy, would in this case take the form of a *negative* power: that is, as the right to exclude from one's own private sphere a certain category of data. Privacy would therefore become the right to control the flow of one's own data in both directions, both 'outwards' and 'inwards'.

36. I. Kennedy, 'Legal Problems of Aids', *Council of Europe Colloque*, Strasbourg, 1990.

37. *Supra* note 35, and N. Wexler, 'Presymptomatic Testing for Huntington's Disease: Harbinger of the New Genetics', *Genetics*, at 80.

38. S. Rodotà, 'Legal and Moral Dilemmas Affecting Life and Death', *Council of Europe Colloque*, Glasgow, 1990.

### 3. Rules and Legislative Techniques, a Perspective

From the above considerations, we can draw a number of indications regarding the way in which privacy protection must be organized to ensure effective realization of the right. The elements which go to form this strategy should be the following:<sup>39</sup>

- a. a basic legislative order, formed essentially of principles, general clauses, and procedural rules;
- b. specific provisions, as far as possible contained in independent laws, regarding the activity of particular subjects or the regulation of particular categories of data;
- c. an independent authority, perhaps endowed with legislative powers to adapt the principles of the general clauses to new or particular situations. The need for such an authority is confirmed by the experience of those countries which have not provided for one, where protection entrusted solely to the magistrature has been seen to be insufficient;<sup>40</sup>
- d. the possibility to turn to the magistrature, to affirm in this area principles similar to those of a *Bill of Rights* or of *Due Process*, according to a line which treats the whole subject examined here in terms of civil rights;
- e. the provision of widespread powers of control, entrusted to private subjects, both individuals and groups, through the attribution of specific rights (such as the right of access).

The strategy outlined above corresponds to the tendencies to be observed in the majority of legislations currently in force. It tends to be wholly outside the phenomena related to information technology, and does not contest their legitimacy. It acts, in fact, as a definite legitimizing factor with regard to such phenomena.<sup>41</sup> More incisive intervention, capable of effectively limiting the forms of public and private surveillance of citizens, requires wider recourse to techniques of prohibition. This tendency, as was mentioned above, emerges in relation to the sector of telecommunications services and can be extended to other sectors.

In any case, the type of legislative technique used is of great importance: it must take into account the special nature of the subject to be regulated, which is extremely dynamic and characterized by continuous change. I have already stated that legislation should start out from general clauses that can be adapted to new situations through the interpretation of Judges and the legislative provisions of an independent authority. This, however, is not enough.

Legislation, in fact, should also contain elements which oblige it to adapt to

39. S. Rodotà, 'Protezione dei dati e circolazione delle informazioni', *Rivista critica del diritto privato* 1984, 767-768. For the recent trend on principles, see EC Commission, Proposal for a Council Directive SYN 287, *supra* note 25, Art. 5; and in particular section 14 of the Australian Privacy Act 1988 (G. Greenleaf, 'Trends in Australian Data Protection Law, *Computer Law and Practice* 1991, 109-110). On the principle of finality, see the Gesetz zur Fortentwicklung, *supra* note 12. In general, Flaherty, *supra* note 21, at 380.

40. Flaherty, *supra* note 21, at 381; and S. Simitis, *supra* note 29.

41. Flaherty, *supra* note 21, at 384. In general, on the crisis of legitimacy, H. Burkert, 'Public Sector Information and the Private Sector Information Market. In Search of a New Legitimacy of Information Handling', *EEC Colloque*, Luxembourg, 1990.

changed situations, following a line which has led to the affirmation in the Federal Republic of Germany that the legislator is obliged to bring laws up to date at regular intervals. It is a matter, for example, of writing 'sunset rules', rules which are limited to a certain timespan and which are then no longer valid if they are not renewed before the deadline specified. Moreover, the various provisions contained in the law should be structured in such a way as to consent different combinations, according to the situations to which they must be concretely applied. Will there be room, in the new generation of data protection, for 'Lego laws' of this kind?

# Consumers Caught between Information and Manipulation: The Case of Product Placement

*Frauke Henning-Bodewig*

In all Western societies, television and advertising – and especially their combination – have a powerful impact on the average consumer, an impact by no means restricted to children. Advertising on television is often highly persuasive, using the most recent knowledge from psychological research. The law, surprisingly, takes these new methods of influencing the consumer rarely into account. On the contrary, advertising is often seen merely in its most traditional context. Like in the economic theory of the ‘perfect market’ developed by Adam Smith<sup>1</sup> in the 18th century, the notion of advertising is often restricted to information about the quality and price of products. Persuasive advertising seemingly does not exist.

Even more surprisingly, this model of market perfection recently has had a powerful revival. The so-called *Economic Analysis of Law*, developed by Posner<sup>2</sup> in Chicago during the seventies and gaining increasing influence in Western Europe, is built on exactly the same assumptions. Here again, advertising is mainly seen as a means of conveying information as to price and quality, which will enable the individual consumer to make optimal decisions. Since the consumer is seen as a truly rational maximizer of his own interest, the information will lead, through Adam Smith’s ‘invisible hand,’ to a concentration of demand on the best offer and thereby to a steady maximization of welfare.

## 1. The Impact of Persuasive Advertising on the Consumer

A fundamental assumption of the Chicago school is consumer sovereignty. Since the consumer can be trusted to make rational choices, since he is totally ‘free to choose’,<sup>3</sup> any form of legal intervention by the government, no matter how apparently beneficial, is viewed with considerable reluctance.<sup>4</sup> This is also true for the field of advertising.<sup>5</sup> Misleading advertising is clearly not supported by Chicago School lawyers. They are confident, however, that a competitive market in combina-

- 
1. Adam Smith, *An Inquiry into the Nature and the Causes of the Wealth of Nations*, 1776.
  2. R. Posner, *Economic Analysis of Law*, Boston 1972, 2nd ed. 1977.
  3. So the title of a much influential book by Friedman, M./Friedman, R., New York 1980.
  4. See for instance Duggan, *The Economics of Consumer Protection*, Adelaide 1982.
  5. See Jordan/Rubin, An Economic Analysis of the Law of False Advertising, 8 *Journal of Legal Studies* 527 (1979).

tion with consumer sovereignty will suppress most cases of misleading advertising. Thus, there is little need for intervention by legislatures or courts.

Starting with the Chicago School's assumption, it is no wonder that the problem of consumer manipulation through persuasive advertising simply does not exist. Since consumers are not only free but also rational beings, they will either disregard useless persuasive advertising and consequently force advertisers to provide the wanted information, or accept and enjoy the persuasive advertising for the fun of it. Either way, there is no need to worry.

This assumption – which I have oversimplified here in order to bring out its main features – stands in sharp contrast to the social theories underlying the credo of consumer protectionists. Here, the individual is not seen as a sovereign, a rational decision maker, who is free to choose, but as the poor plaything of the diabolic strategies of industry. Needs are artificially created by persuasive advertising. The most decent (or not so decent) subconscious feelings are exploited. Decision making becomes increasingly irrational and in the end the consumer is by no means 'better off', as claimed by Posner, but 'deep in debt' or at least frustrated in not reaching the glamorous world advertising shows him. In short, the consumer is not 'free to choose' but a sort of Pavlovian dog, opening his money bag according to the tune of persuasive advertising techniques.<sup>6</sup>

These two extreme theories of consumer behaviour are obviously irreconcilable. Both have some convincing ideas, but both share the same flaw: no proof as to their most fundamental assumptions. For instance, there is no way to determine what are 'genuine' and what are 'artificial' needs. Does the consumer need (or wish) the so-called added value of trademarks, frequently created by persuasive advertising? There is evidence that consumers prefer, at least in certain areas, products with an 'image', but whether this preference is genuine or created by persuasive advertising is indeterminable. Furthermore, there is no clear answer as to how much advertising is beneficially informative and how much is only persuasive. Even the most suggestive advertising contains some information and even in theory it is difficult to draw a sharp line between informing and persuading.<sup>7</sup>

Only on one point there is plenty of evidence: informative advertising has considerably less influence on the consumer than persuasive advertising. In a market with a high degree of homogeneous products, informative advertising often makes no sense. On the contrary, recent empirical studies<sup>8</sup> show that advertising is most effective when it succeeds in 'emotionally conditioning' the consumer. One can hardly blame the advertising industry for taking this into account. At the same time, while the EC legislator plans to oblige Member States to admit comparative adver-

6. For an in-depth study of the 'law and economic' attitude towards the need of consumer protection as well as of the different approaches of consumer protectionists, see Henning-Bodewig/Kur, *Marke und Verbraucher*, vol. 1, 1988, 125 *et seq.*

7. J. Scherer, *Industrial Market Structure and Economic Performance*, Boston 1980.

8. See Ghadizef, *Werbewirkung durch emotionale Konditionierung*, Frankfurt 1987, who has demonstrated in an extensive empirical study the superiority of persuasive advertising over informative advertising.

tising because of its potential means as source of information,<sup>9</sup> the advertising industry sees its future in either persuasive advertising, which appeals to irrational feelings, or in so-called 'soft advertising', where the appeal is hidden by more subtle means of image-forming, such as videoclip-like commercials, public relations techniques, sponsoring, and product placement.

As a consequence, the law dealing with advertising should take these new developments into account and should in particular consider that advertisements are rarely 'information' but at best a mixture of information and persuasion.

## 2. Surreptitious Advertising on TV (Product Placement)

Some of these new techniques, like product placement, are characterized by camouflage of the advertising purpose. This is by no means a new idea: as long as a free press has existed, there have been more or less successful attempts to 'influence' journalists to write favourably about one's own product. The reason for this is apparent: since people expect the editors part of newspapers to be independent from, or at least not directly influenced by industry, they not only pay more attention to it, but also more readily believe positive editorial comments than any identical advertising claim coming openly from an advertiser.

Blurring the line between advertising and non-advertising on television is even more attractive. To begin with, an increasing number of TV watchers tend to avoid commercials by switching the channel, by 'zapping' them, by using a video recorder to fast forward through advertising blocks or by simply mentally 'switching off' during the commercial break.

All this annoying behaviour can be stopped by a simple trick: placing the advertising within the normal TV program. This leaves only the choice of either refraining from all TV viewing or taking the advertisements along with the program. On top of this, product placement on TV can use the powerful impact, that the programs have on consumer behaviour. It is therefore no wonder that product placement, employing both a persuasive medium like TV and a persuasive advertising technique like disguised advertising, is often considered the most effective modern technique of influencing the consumer.<sup>10</sup>

From the other side of the fence, it is also viewed as the most pernicious example of consumer manipulation, topped only by subliminal advertising techniques, where the presentation is so fast that the human eye does not even recognize it.

A second line of critique is more concerned with freedom of information and the public interest. Product placement deals are not possible without creating a certain pressure on program producers to consider the needs of the advertiser. As recog-

9. The German text is published in GRUR Int. 1991, 634. The draft proposal of a EC Directive on Comparative Advertising goes back to the very beginning of the idea of harmonization of the whole area of unfair competition law. It was left out in the final EC Directive on Misleading Advertising of 1984, mainly because of irreconcilable views on the usefulness of comparative advertising which is admitted in the UK, Ireland and Denmark, strictly forbidden in Luxemburg and Belgium and prohibited in principle in most other EC countries.

10. See, e.g., Burger, *Public Promotions*, 1986; according to him, product placement is a heaven-sent gift to the advertising industry.



nized by the expression 'Who pays the fiddler, sets the tune,' industry indirectly influences the content and concept of programs. Even people who tolerate a certain sell out of pure entertainment programs are worried about commercial pressure on editorial style programs, for instance programs involving informative elements. At least this is the case in Germany, where product placement was met with considerable resistance.

The opposing view – mainly maintained by product placement agencies but also by TV stations – concentrated on the argument that product placement is not advertising in the classical sense, but a new way of 'sales promoting communication' to which normal advertising principles do not apply. The underlying idea was to eliminate the legal problem by giving it a new sophisticated name, so that certain advertising restrictions, for instance for tobacco advertising,<sup>11</sup> could be elegantly ducked. Yet, not even the interested parties could deny that product placement is done with the intent to promote the supply of goods or services in return for payment, which, after all, is the traditional definition of advertising.

The defeat of the semantic ploy, however, does not automatically cause the demise of product placement. Product placers and their agencies stressed quite skillfully the difference between 'normal' advertising, editorial advertising in the press and product placement on TV. In a nutshell, their line of argument is stated as follows. Since TV has to provide a realistic view of modern life, real equipment has to be used, even if it is recognizable as originating from a certain enterprise. If TV-programs therefore necessarily must create a certain amount of publicity for some entrepreneur, why not grant it to the one who is willing to pay for it? For instance, if the Bavarian police drive BMW and any film showing Bavarian police consequently must use this car in order to reflect reality, why not accept money from BMW for it? And what harm is done if private eye 'Magnum' drives a Ferrari instead of a Mercedes, because Ferrari paid more for it?

This sounds convincing, but reality is somewhat different. In the first place, why should anybody pay for an advertising effect he will get anyway? No sensible businessman would do so. So if somebody pays for product placement, it will be to get an extra, normally not granted, advertising value. From there to directly influencing the storyboard is only a small, and logical, step.<sup>12</sup> If one accepts product placement, one has to accept this influence as well, conceivably up to the point, where the advertiser will hire and fire the leading stars of a series according to their compliance with the trademark image.

- 
11. In Germany, like in many other countries, tobacco advertising is altogether forbidden on TV and heavily restricted in all other media.
  12. This happens not only in pure entertainment programs, but also in 'serious' productions. For instance, the film *Paris, Texas* by Wim Wenders was 'sponsored' by a tobacco company which dictated every detail of the conditions under which the trademark was to be shown (how often, how long, in what context etc.). Part of this contract is published in the German journal 'die Feder', 1977, 17.

### 3. Product Placement and the EC Directive on Broadcasting Activities

#### 3.1 GENERAL OVERVIEW

The suspicion that advertisers are not behaving as well as the interested parties would like us to believe must also have dawned on the EC legislator. The 1989 Council Directive on TV Broadcasting Activities,<sup>13</sup> which tends to eliminate barriers to competition set up by differing national jurisdictions, contains the general principle that all broadcasts must comply with the law of the Member State from which it originates and that the other Member States shall ensure freedom of reception in their territory (Article 2). While the EC directive sets only the minimum standards of regulation (Article 3), Member States are free to apply stricter standards to their own broadcasters.

The directive restricts television advertising to 15 per cent to 20 per cent of the daily transmission time (Article 18). In principle, advertising shall be inserted between programs and in blocks. Program interruptions are allowed only under strict conditions. Television advertising, including sponsorship for certain products – tobacco and medical products available only by prescription – is forbidden without exception, while alcohol advertising is heavily restricted. Apart from these specific regulations for certain products, advertising shall in general respect certain basic human values (Article 12) and shall not be to the detriment of minors (Article 16).

Sponsored television programs are allowed if the content and scheduling is influenced ‘in no circumstances’ by the sponsor and if the sponsor is identified as such at the beginning and the end of the program. News and current affairs programs may not be sponsored.

#### 3.2 REGULATION OF PRODUCT PLACEMENT

Contrary to sponsoring, there is no specific provision on product placement. However, the general principle on the separation of program and advertising aims at suppressing practices like product placement. Article 12 of the EC Directive contains four principles:

- advertising must be readily recognizable as such;
- advertising must be kept quite separate from the normal program;
- advertising shall not use subliminal techniques;
- surreptitious advertising is prohibited.

This last requirement must be seen in connection with Article 1 (c) of the Directive, where surreptitious advertising is defined as any representation of goods, trademarks etc. in programs ‘intended by the broadcaster to serve advertising and might

13. Council Directive of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities, *Official Journal* No. L 298, 17 October 1989, 23.

mislead the public as to its nature'. Further, the representation is considered 'intentional' if it is done in return for payment.

Since the very idea of product placement is a paid-for integration of a product into the program, so that it is at first sight not recognizable as advertisement, product placement is in most cases surreptitious advertising, forbidden by the directive.

An equally strict standard has been adopted by the Council of Europe in the 1989 Convention on Transfrontier Television.<sup>14</sup> The Convention is, however, of a somewhat limited importance to the EC countries for which the EC directive sets the relevant standard.<sup>15</sup> Therefore, I will rather proceed with the discussion of how national law deals with such a problem as product placement.

#### 4. Legal Assessment of Product Placement in Germany

I hope the reader will forgive me for choosing my own law, the German law. It is not that I consider it to be so good but it has at least the following advantages. A media law that not only meets the requirements set up by the EC directive but repeats them almost word by word. A well developed unfair competition law under which for a long time editorial advertising in the press has been considered illegal. And Germany has the doubtful advantage of being the European country that has almost immediately taken up the American idea of product placement, which has led to several court decisions, ending last year with the first Supreme Court decision on product placement.

##### 4.1 MEDIA LAW

Until recently, broadcasting in Germany was exclusively in the hands of public broadcasting corporations. Only in 1987, through the State Treaty on Broadcasting,<sup>16</sup> private networks were permitted. For both public and private stations, the treaty contains detailed regulation of advertising. The general principle for the separation of program and advertising, in Article 3 2 for public and in Article 7 4 for private networks, corresponds essentially to the EC directive:

'Advertising on radio and TV is to be clearly separated from the remainder of the program and must be marked as such. It must not influence the contents of the remaining program.'

14. *GRUR Int.* 1990, 448.

15. Art. 27 of the Convention provides that a regulation by the EC legislator on the same subject is binding for EC Member States.

16. The text and a commentary on the State Treaty can be found in *Medienrecht. Rundfunk, Neue Medien, Presse, Technische Grundlagen, Internationales Recht, Bundesrepublik Deutschland, Österreich, Schweiz. Text, Rechtsprechung, Kommentierung*, bearbeitet von Wolf-Dieter Ring, Bd. II, Teil C-0, Staatsvertrag zu Neuordnung des Rundfunkwesens (Rundfunksstaatsvertrag) –Kommentierung von Reinhard Hartstein, Wolf-Dieter Ring und Johannes Kreile, München (loose-leaf ed.).

Product placement which is integrated within the program and which is not marked as advertising is clearly not in accordance with this principle. It is furthermore not in accordance with other principles like the requirements of block advertising and often exceeds the maximum amount of advertising time.

Violations, however, will not seriously trouble the experienced product placer. Infringements of the state treaty are usually answered with no more than a 'slap on the wrist' for the involved TV station.<sup>17</sup> Since private persons are not entitled to bring an action under media law, this hardly impresses anybody.

#### 4.2 UNFAIR COMPETITION LAW

The situation under unfair competition law<sup>18</sup> is completely different. According to Article 13 of the Act Against Unfair Competition, every competitor, defined widely, is entitled to file an action, as are commercial associations and consumer associations. Given its independence from the question of fault or damage, the action to cease-and-desist is regularly the main issue. It is enforceable by means of an interlocutory injunction, granted by highly specialized courts with a minimum of delay.

The Act Against Unfair Competition is dominated by two general clauses: Section 1, which forbids every infringement of 'honest practices,' and Section 3, which contains the prohibition on deceptive advertising. On the basis of these two general clauses, the courts have, through many thousands of cases, developed case groups similar to Anglo-American case law, whose flexibility permits the inclusion of new types of advertising and marketing techniques such as product placement.

There is a general agreement that advertising that is not recognizable as such can be deceptive and that an advertising method that works on deliberately producing misconceptions on the part of the consumer is contrary to 'honest practices'.<sup>19</sup>

Of even more practical importance, however, is the concept that the infringement of another law, for instance of media law, can at the same time be an infringement of Section 1, Unfair Competition Law, because it grants an illegal advantage against law abiding competitors. It is this link between unfair competition law and media law that enables private persons and associations to use competition law to prevent infringements of media law provisions, and, more specifically, it is increasingly being used to bring product placement cases to court.

- 
17. The ultimate sanction – revocation of the license to broadcast – is of course a serious threat. At least in one case it was used to 'persuade' a private network which had advertised the products of its sponsor during a game show to refrain from this practice. Usually, however, the administrative bodies in charge of the control of public and private TV companies restrict themselves to a mere complaint.
  18. For the origins and development of the Act Against Unfair Competition, see Beier, *The Development and Present Status of Unfair Competition Law in Germany – An Outline*, 4 *IIC* 77 (1973); Schricker, *Unfair Competition and Consumer Protection in Western Europe*, 4 *IIC* (1970).
  19. See the leading commentary on German unfair competition law, Baumbach/Hefermehl, *Wettbewerbsrecht*, München, 16th ed. 1990, para. 1, UWG Rdnr. 27 ff.

#### 4.3 THE FIRST SUPREME COURT DECISION ON PRODUCT PLACEMENT – ‘WHO SHOT BORO’?

The most famous of these cases, ending in the first Supreme Court decision of 22 February 1990,<sup>20</sup> concerned a TV detective series entitled ‘*Who shot Boro?*’. The viewers of this program could win valuable prizes by guessing the murderer’s identity. A private book publishing house contributed a considerable sum to the production of the program. In return, before and after the program, and in trailers, the TV company stated that a particular book, called ‘*The File of the Detective*’ and published by the said publishing company, would help to solve the case.

Another publisher of detective games found this less than amusing. So did the courts.

One of the most crucial points in the proceedings concerned the question whether the broadcasting company acted ‘in the course of business for purposes of competition’, as required by the Act against Unfair Competition. This is regularly a disputed point in actions against the media. Their constitutional mandate requires that the intent to promote competitive activity may not be assumed but rather must be proven positively.<sup>21</sup>

The broadcasting company denied this advertising purpose and claimed that it had only intended to ‘inform’ the public. This defense did not convince the Federal Supreme Court, however. Without much ado, it deemed the commercial intention to exist, given the fact that the broadcaster received a considerable contribution to the production costs.

The same fact, namely having taken money for the promotional references, also led the Supreme Court to the conclusion that there existed an infringement of the general clause on unfair competition in Section 1. According to the Court, the TV station had violated media law, particularly the obligation to separate advertising and programs, and to mark advertising as such and had thus obtained an illegal competitive advantage. Exceptions to these principles could only be made within strict limits, *i.e.*, only to the extent required by the freedom of broadcasting as guaranteed by the Constitution: if the advertising effect is a necessary and unintended side effect (of an action motivated by journalistic or artistic aims), which in the case at issue the TV station could not even claim.

The Supreme Court, furthermore, stressed the interests of the TV viewers not to be deceived by practices like product placement. At this point, it saw no reason to treat broadcasting companies any differently from the press, with respect to which

20. *GRUR Int.*, 1990, 84. An English version will be published 1992 in IIC as well as an article by Henning-Bodewig on Product Placement Under German Law.

21. As far as the advertiser and the person who directly profits from the publication is concerned, the courts frequently assume the purpose of competition, which in the case of a pressinformant has been criticized by the European Court of Human Rights (*see* ECHR March 25, 1985, *Barthold v. Federal Republic of Germany*) As regards the media, however, the courts have always been cautious with the application of the UWG. Even if a press article or a program on TV has a paramount advertising effect for a certain entrepreneur, in most cases it is assumed that the media itself acted without any purpose of competition but solely on journalistic or artistic purposes, *see, e.g.*, Federal Supreme Court *GRUR Int.*, 1986, 812 (*Gastro-Kritiker*).

the court's decisions have long held 'editorial advertising' to be a deception of the public.

To sum up the situation under German law. If a TV station wants to show any trademark in a normal program, if it wants to make any reference to books, discs etc., it is welcome to, but only on the basis of solely journalistic purposes and not on that of advertising purposes. Monetary gain for the showing or reference is thus precluded.<sup>22</sup>

#### 4.4 PRODUCT PLACEMENT IN CINEMA FILMS

Having recovered from the first shock, product placers announced that they would concentrate more on cinema films, recognizing that such films will eventually be shown on TV. It is true that media law applies only to broadcasters and to the press. However, the general principle that hidden advertising can deceive the viewer or reader and can therefore be against honest trade practices, is applicable to all media, also to cinema films. Consequently, the main question will be whether the public is likely to be misled by product placement in cinema films or if somewhat different standards have to be applied.<sup>23</sup> In Germany, only recently the first action against the producer of a cinema film showing advertisements for a dozen firms was filed. This may go up to the Supreme Court too, since neither party is inclined to give in.

### 5. Outlook

In Germany, media law and unfair competition law are not in favour of product placement. Whether other European countries are, or will apply an equally strict standard, is hard to forecast. As far as I could determine, legal discussion has only started in some countries, especially the Netherlands<sup>24</sup> and Belgium,<sup>25</sup> and there are relatively few court decisions involving the aspect of hidden advertising. This may partly be due to the fact that some EC countries have a much more effective self-regulatory system than Germany and that problems like the blurring of the line between program and advertising, therefore, are settled outside the courts.

In one way or another, the EC countries will have to suppress product placement in order to comply with the standard of the EC directive. And they can be certain that there will be a lot of work for them to do in the future. Product placement is too tempting an advertising technique to be left alone by advertisers. This is understandable from a purely commercial point of view. On the other hand, it should also be understandable that a society can not simply tolerate every technique to influence

22. The Supreme Court insofar affirmed the opinion of most legal scholars, *see, e.g.*, Henning-Bodewig, *Product Placement und Sponsoring*, *GRUR Int.*, 1988, 867.

23. For an indepth study see Henning-Bodewig, *Product Placement im Kino*, *ZUM* 1988, 263 et seq.

24. *See* H.E. Ruijsenaars, *Product Placement*, *Informatierecht/AMI* 1987, 123; Raad van State 6 June 1991, *Mediaforum* 1991, 64 (*De puntjes op de E*).

25. *See, e.g.*, the 1991 regulation of advertising and sponsoring for the Flemish community, *Mediaforum Bijlage* 1991, 89, and Voorhoof, *Recente wijzigingen van de Vlaamse Mediawetgeving*, *Mediaforum* 1991, 107; *Mediaforum* 1991, 59.

the consumer and that the law must at least draw a line where an influence cannot be recognized by consumers.

To trick a consumer's natural scepticism against advertising by fooling him into believing that he sees a normal film, watches a normal TV show, reads a normal editorial article, while in reality he is 'conditioned' according to the commercial purposes of the advertiser, goes far beyond any persuasion normally involved – and tolerated – in advertising.

# Advertising and Sponsoring

*Willem C. van Manen*

From several angles democratic and other societies are concerned about advertising, e.g. its tendency to deceive, decency, the environment, economic power, freedom of commerce. Such concerns have inspired extensive advertising regulation, partly in the form of 'self-regulation'. This justifies another concern, i.e., fears that the troubled waters of advertising, through their massive regulation, will seep through to and pollute the at least adjacent green pastures where full freedom of expression is supposed to reign. This source of concern will be discussed here, together with a number of advertising rules.

Is advertising an area adjacent to the domain of free speech or part of it? According to Article 7 para. 4 of the Dutch Constitution, as amended in 1983, advertising does not enjoy the freedom of expression provided for in the first three paragraphs of that article. According to the European Commission for Human Rights, however, it does, as far as Article 10 of the European Convention for the Protection of Human Rights and Fundamental Freedoms is concerned.<sup>1</sup> The position of the European Court for Human Rights is not yet quite certain.<sup>2</sup>

The question whether advertising enjoys freedom of expression is discussed in particular whenever a ban on advertising is imminent with regard to specific products such as tobacco, the sale of which is not prohibited. It would indeed be most interesting to follow events if the tobacco advertising ban presently contemplated by the EC Commission were to become law and would be challenged before the European Human Rights Court.<sup>3</sup> However, recent press reports have it that the ban may never be enacted as a result of opposition from EC Member States concerned about their earnings from tobacco sales.

The answer to the question whether advertising enjoys freedom of expression would seem to be: Yes and No. That in fact was the answer of the European Commission for Human Rights in the Scientology case: 'Yes' to the extent advertising or 'commercial speech' is also a means of imparting information, 'No' to the extent that it is generally accepted in the Western world that advertising is subjected to many restrictions which do not apply elsewhere because they would suffocate the freedom

- 
1. Opinion in the Scientology case, 7805 D&R 16, 68.
  2. Its controversial Markt Intern judgment (November 20, 1989, BIE 1990, 232) can be interpreted as being based on the same views as those of the Commission, but is not entirely clear in this respect.
  3. In Canada such a ban was declared null and without effect by the Quebec Superior Court on July 26, 1991, as a severe and disproportionate impairment of the principles inherent to a free and democratic society.



of political, religious, artistic, philosophical and all other forms of non-commercial speech.

The following examples may illustrate the reality of the danger that advertising rules are penetrating the domain of free speech.

## 1. Dutch Advertising Codes

The Dutch advertising community, very much in favour of advertising being accepted as part of the domain of free speech, has defined advertising as comprising not only the promotion of goods and services, but also the *propagation of ideas*, i.e., the whole domain of free speech. This definition also underlies the self-regulatory Dutch advertising codes and has done so ever since 1964. (As will appear in para. 7, the Dutch advertising community recently got excellent international company in this regard.) The Dutch Advertising Commission has in the past banned political messages on the basis of this definition, but this has been halted by an amendment to the Commission's rules: it can no longer ban advertisements in which ideas are propagated. The very notion that advertising comprises the propagation of ideas, however, obviously entails the danger of the intricate rules of advertising codes concerning deception, indecency and undermining the confidence in advertising being applied to non-commercial speech.<sup>4</sup>

## 2. Benelux Trademark Law

Benelux law provides for wide protection of trademarks, *inter alia* against any damage suffered by the trademark owner as a result of the use of a similar trademark by a third party, even if there is no risk of confusion. This rule is being interpreted by the Courts so as to protect the owner also against his trademark being shown in a derogatory context in the press or on film, and even against a physician referring to a branded medicine while prescribing a less expensive unbranded substitute.<sup>5</sup>

On the basis of the same trademark law comparative advertising is rendered virtually impossible in the Benelux. This may seem less disconcerting since comparative advertising is commercial speech. However, it would seem to be one of the types of commercial speech which qualify most for free speech protection. In this respect Benelux law may have to change: the EC Commission is proposing that comparative advertising be permitted as from 1993. It remains to be seen, however, whether the proposal will really pave the way for comparative advertising: it would have to include all relevant comparisons and this has already been described as 'the kiss of death' for the Commission's own proposal.<sup>6</sup>

4. It is also difficult to reconcile with Art. 20 of the Code of Conduct for advertising on radio and television which rules out messages of a religious or political nature during time reserved for advertising.

5. See *GRUR Int.*, 1986, at 25.

6. *The Economist* of May 18, 1991, at 75.

### 3. Dutch Media Law

The Dutch Media Act has advertising definitions of its own. First it defines in Article 1, para. 1, sub r, 'advertising messages' as – in summary – '*messages unmistakably aiming to induce the public to purchase a certain product or service*'. This definition envisages the permitted TV or radio 'commercials' broadcast in the time reserved for such messages. The criterion is the (unmistakable) aim of the message. Advertising messages, however, belong to the more general species of 'advertising expressions' and these are defined in Article 1, para. 1, sub s, as '*expressions resulting unmistakably in the public being induced to purchase a certain product or service*'. Here, the aim or purpose of the 'expression' is not the criterion, but its 'result' or effect. That is quite a difference: if, for instance, in a consumer program different products are compared, the result of the program is likely to be that the public will purchase the product that comes out best, but that is not the aim of the program.

The Media Act further provides in Article 52, para. 2 that the regular non-commercial programs may not contain 'advertising expressions' unless this is 'not avoidable' or expressly allowed. A decree based on the Act deals with advertising expressions that are '*not avoidable*' (Media Decree Art. 27) or '*avoidable but allowed*' (Art. 28-31).

From this decree it appears as one of its most striking features that the mere identification of an enterprise or a product by its tradename or trademark is already considered to constitute an 'advertising expression' (Art. 28, para. 2 sub a). Even the reviewing of books, records, films, plays etc. is an 'advertising expression' (Art. 28, para. 2, sub b). Stronger still: they are qualified as 'avoidable'. Fortunately, however, they are allowed, provided they are included in the program 'in the context of a balanced registration and presentation' and are 'reasonably proportionate' to the non-commercial aims of the program (Art. 28, para. 1, sub b).

All this would seem a rather elaborate way to reach a very obvious goal, i.e., allowing the media to inform the public about goods and services.

Advertising expressions 'belonging to the normal street scene and appearing unintentionally and without emphasis during a few seconds in a program' are deemed 'not avoidable' (Media Decree Art. 27). So, if a refinery goes up in flames and the company's trademark, visible through clouds of smoke, is intentionally and with emphasis shown on TV for more than a few seconds in a news program, the broadcaster technically violates the law.

If the name of a sports club or sporting event includes a tradename, it may appear in any program provided the name is not mentioned 'with emphasis' (Art. 30, para. 1, sub 3). TV programs consisting of sporting events may contain advertising expressions if they are not 'dominating'.

Obviously, such intricate – if not draconian – rules give rise to many questions. Therefore, the Commissariat for the Media, the body supervising compliance with the Media Act, has promulgated further rules concerning the interpretation and application of the Media Decree and the Media Act. Such rules of the Commissariat provide for instance for a sophisticated system of computing fines in case of violation. Another set of rules addresses the question under which circumstances advertisements are 'not dominating' in case sporting events being broadcast, deals in minute detail with 'advertising expressions' encountered in such events, and lays

down the general rule that they will not be considered to be dominating if they are shown 'not more frequently, no longer and no bigger than is necessary for a proper coverage' of the event.

Clearly, these rules of the Commissariat do not answer all questions and give rise to a few more. Fortunately, however, the Commissariat is assisted by a board of three experts and they appear to be reasonable persons capable of persuading the Commissariat – which is not bound to follow the advice of the experts – that it should not impose fines too readily, even if technically a violation of the law has occurred.

In one notable case the Commissariat did not follow the advice of the experts. This concerned the new name, PTT-Telecompetition, of the first division of the Dutch Soccer Association which is sponsored by PTT Telecom. The case gave rise to lengthy discussions concerning such questions as whether a soccer competition is a 'sporting match' and whether mention of the name 'PTT Telecompetition' is necessary for a 'balanced registration and presentation' and bears a 'reasonable proportion to the non-commercial aims' of an informative (sports) program. The objections of the Commissariat to the use of the name have been rejected by the Dutch Council of State.

All these regulations in and pursuant to the Media Act create the impression that the regulators, in their zealous efforts to suppress anything that smells of advertising in any program other than those specifically designated for advertising messages, tend to forget:

- a. that commerce is omnipresent so that many non-commercial programs will naturally often contain commercial elements;
- b. that they are regulating programs in the domain of the full freedom of speech.

#### 4. Germany

German advertising or unfair competition law is very thorough and very strict. Two fairly recent judgments of the European Court for Human Rights deal with it: *Barthold*<sup>7</sup> and *Markt Intern*.<sup>8</sup> In both cases the German courts had found that certain statements had violated unfair competition law. Their decisions demonstrate that in Germany unfair competition law decides the issue as soon as there is an element of competition in the case.

The *Barthold* case concerned an article in a Hamburg newspaper about the need of compulsory night duty for veterinary surgeons. The article consisted in part of an interview with the veterinary surgeon Barthold. Some of his statements the German courts considered to constitute unfair competition *vis-à-vis* Barthold's colleagues. The European Court found that the Federal Republic had violated Article 10 of the European Convention, because such competition effect as the article might have had was 'entirely secondary having regard to the principal content of the article and to the nature of the issue being put to the public at large'. The view of the German courts that competition law should apply as long as competition motives were not

7. Judgment of March 25, 1985, 7 *EHRR* 383.

8. Judgment of November 20, 1989, *BIE* 1990, 232.

completely overridden by other motives was rejected. Such reasoning, the Human Rights Court found, would discourage contributions to public debate and 'hamper the press in the performance of its task of purveyor of information and public watchdog'.

*Markt Intern* concerned an article, criticizing a mail-order firm, in a newsletter edited by an organization which supports traditional retailers in their competition struggle with mail-order and other big businesses. The German courts had condemned the article as an act of unfair competition. The European Human Rights Court found by the narrowest possible majority – i.e. by the casting vote of its President – found that the Federal Republic had not violated Article 10 of the Convention. The Court based its decision on the margin of appreciation which the contracting states enjoyed and which was 'essential in commercial matters and, in particular, in an area as complex and fluctuating as that of unfair competition'. It does not appear quite clearly from the judgment whether the European Court itself considered the case to be a matter of competition, nor what is meant exactly by observations such as that 'the article was written in a commercial context'. If the Court's emphasis on the margin of appreciation should mean that the Contracting States also enjoy that margin when deciding whether or not a statement has been made in the context of competition, that would be an additional reason for fundamental concern from the point of view of freedom of expression.

Hopefully, the effect of the judgment will be limited by the strong criticism voiced by eight of the judges of the Court in four dissenting opinions. Referring to the Court's vague use of such terms as 'commercial matters' and 'commercial context', the dissenters argued, i.a., that it 'is just as important to guarantee the freedom of expression in relation to the practices of a commercial undertaking as it is in relation to the conduct of head of government'.

## 5. Switzerland

The *Markt Intern* judgement of the European Court is likely to have met with approval in Switzerland where since March 1, 1988, the Unfair Competition Act also applies to articles in the press concerning enterprises and their goods and services.<sup>9</sup> That is not just a matter of competition law leaking to the domain of free speech, that is an avalanche. Possibly the first victim fell on May 17, 1991, when the Swiss Federal Court convicted a journalist for having published an article quoting the vice-president of the Association of Swiss Sewing Machine Dealers who had criticized a competitor.<sup>10</sup>

## 6. EC TV Directive

The center piece of the European Community TV Directive of October 3, 1989, *Chapter IV*, is devoted to advertising. Much of its content is not unfamiliar, at least

9. *GRUR Int.* 1990, at 214 et seq.

10. *Mediaforum*, 1991, at 83.

to Dutch observers, although they may frown upon the admission of 'teleshopping', which is not even covered by the Directive's definition of advertising.

An interesting provision with respect to the Netherlands is Article 17 which allows *sponsoring* of TV programs under certain conditions, i.a. that the name or the logo of the sponsor be shown at the end and/or beginning of the program. Dutch media law formally does not allow publicity of sponsors. Still, many Dutch TV programs produced by third parties – i.e. others than the broadcasting organizations themselves – are in fact sponsored according to well-informed circles. Until recently, this remained a secret to the public however because the sponsors could not be mentioned. Under Article 10 of the European Human Rights Convention the public is entitled to information about sponsors of TV programs. Disclosing the fact that a program is sponsored and identifying the sponsor would also seem imperative from a point of view of unfair competition and advertising law. The Dutch Government is now apparently considering to allow sponsoring and mentioning sponsor names has become common.

In the light of freedom of speech the Directive's definition of *surreptitious advertising* is welcome: according to that definition an item can only be called surreptitious advertising if it was the broadcaster's *intention* to advertise.<sup>11</sup>

However, the Directive also causes concern with a view to the freedom of expression. It is not confined to advertising but also deals with TV programs in general, viz. with regard to *European productions*, *protection of minors* and the *right of response*.

*Chapter III* intends to promote the broadcasting of European productions as defined in Article 6. Member States shall endeavour to see to it that broadcasters reserve for European productions most of their broadcasting time not taken up by information, sports, games, advertising and teletext. It is, for the time being, only an obligation to endeavour. French efforts to set down more binding and specific targets failed. However, the Directive does set down a specific minimum: the share of European productions may not fall below the 1988 level. If as a result of these protectionist provisions a broadcaster could be forced not to broadcast a production from non-European origin, this would seem to violate article 10 of the European Convention on Human Rights.

*Chapter V* of the Directive ordains what minors may not be confronted with – i.e. programs capable of harming their physical, mental or moral development – and *Chapter IV* deals with the right of response of victims of incorrect statements.

One wonders why an *economic* community should be concerned with such subjects. They would not appear to fall within the material scope of application of the EC Treaty and it is submitted that their regulation should therefore be left to the national legislatures as long as the treaty has not been amended.

Admittedly, this view is not very popular with experts on the law of the European Communities. Two of them, law professors, when asked where exactly the material scope of application of the EC Treaty ends, once replied: 'There, where the Council of Ministers says it ends.' That did not sound too convincing, nor very democratic. However, the European Community indeed is no democracy.

---

11. *Supra*, para. 3.

## 7. The European Convention on Transfrontier Television

The European Convention on Transfrontier Television commits the Parties to the same endeavours with regard to European productions as the EC Directive and it would be interesting to hear the Council of Europe explain that this is necessary in a democratic society within the meaning of Article 10 of its Human Rights Convention.

The Television Convention adds to the EC Directive's care for *das gesunde Euro-Empfinden* by providing in Article 7 that TV programs shall not be 'indecent'. It should be noted that this is *not* an advertising provision – as included in many advertising codes – but a rule applying to *all* programs. It also seems difficult to reconcile with the freedom to disseminate ideas that offend, shock or disturb any sector of the population, as the Human Rights Court put it in the *Handyside case*.<sup>12</sup> That this decency provision figures in many an advertising code is bad enough. That it has now been transferred to the domain of the full freedom of speech, is awful.

The Convention defines 'advertisement' so as to include *any public announcement to advance a cause or idea*, for which transmission time has been bought by the advertiser. Thus, the Convention subjects such non-commercial advertisements to the same regime as advertisements for goods or services. That is even more abominable than the similar definition of the Dutch advertising community, because the Council of Europe should in particular be aware of the different degrees of freedom enjoyed by commercial speech and other speech. It is sad to find in the Convention such striking examples of advertising regulations penetrating into free speech territory.

Both the Convention and the Directive aim at harmonizing of the law. That may be very well in the domain of industry, trade, transport and other economic fields, possibly even with the inclusion of advertising for goods and services. However, harmonization usually is very much a matter of compromising and compromises as a rule are not reached on the most progressive level. Therefore, efforts to harmonize laws relating to the freedom of expression should be watched with great suspicion.

## 8. Final Observations

Discussions of the danger of advertising rules penetrating the free speech domain are likely to prompt the question: 'Why not the reverse, i.e., freedom of expression invading advertising country?' In this era of a global tendency towards democracy that would seem to be a more logical route.

As a start advertising laws and codes could do away with provisions forbidding 'the undermining of the confidence in advertising' and paying tribute to 'generally accepted demands of good taste and decency' so that commercial advertising can also offend, shock or disturb sectors of the population. Further, comparative advertising should be allowed.

Rules opposing 'misleading advertising' will be more difficult to abolish as they are based on long standing concerns, both from the consumer's perspective and

12. Judgment of 7.12.1976, Series A no. 24, at 23.

that of the competitor. The regulators would, however, seem to have gone very far in spinning webs of ingenious, patronizing and humorless rules. Also, they seem to forget that 'misleading advertising' is a tautology because advertising misleads *per se*: it always paints a more favourable picture of products, services and their suppliers than they deserve.

While it is not realistic to advocate the idea that all rules opposing misleading advertising should be abolished, a recommendation to draft and apply them with prudence is more to the point. First of all these rules should never penetrate the domain of the full freedom of expression. Secondly, such rules should not be taken too seriously, except in one respect: there must never be any doubt that advertising is advertising. In other words: advertising should not be presented as non-commercial speech. If, however, advertising is clearly identified as such, the public will be able to digest an advertising message for what it is worth, i.e. a biased commercial message.

Greater freedom of expression for advertising would justify the granting of ample opportunity to consumer organizations and others to comment on goods and services offered to the public, e.g. every evening on TV with respect to advertisements broadcast earlier, hopefully in satirical form. Thus, advertising words would be countered by consumer words and words versus words, from a point of view of free speech, is preferable to the suppression of words.

## Chapter IV

# Intellectual Property and Information Technology

**Copyright, Publishers' Rights**

**EC Software Directive**

**Legal Hybrids**

**Standardization and Exclusivity**

**Economic Analysis of Law**





# Introduction

*P. Bernt Hugenholtz*

The fourth and final chapter of this book is devoted to a theme that might fill several volumes in itself: intellectual property and information technology. Indeed, numerous books and countless law review articles have already been written on this very subject, focussing primarily on the protection of computer software and other products of information technology. In this chapter, however, the perspective will be different from most previous literature.

The various papers presented here do not deal primarily with questions of 'protectability'. The classic question – are products of information technology protected? – is not at issue here. Quite the opposite problem is addressed: how does the present intellectual property system react to the influx of information technology? Is the current system flexible enough to accommodate computer programs, databases and other newcomers, without resulting in – economically harmful – over-protection? Or are we witnessing the imminent collapse of the copyright and patent universe, as we have inherited it from our Berne and Paris forebears? Will the present system disperse into a myriad of *sui generis* protection schemes? Or will a new comprehensive body of law emerge, protecting legal hybrids of various kinds?

The opposing trends of expansion and dispersal are omnipresent in the first four contributions to this chapter. In the first, *Willem Grosheide* presents a strong case for replacing the present, static and uniform copyright system by the dynamism and pluriformity of a 'tailor-made copyright'. Next, Grosheide explores the possibilities of granting a special neighbouring right to publishers.

In the second paper, *Jeff Keustermans* measures copyright's test of originality against the 'intellectual effort' requirement in chip protection law. Keustermans concludes there isn't much of a difference, especially if one compares copyright in computer programs to *sui generis* chip protection. The main reasons for the *sui generis* approach chosen by the United States – and forced upon so many other nations – was a fear prevalent in the 'classical' copyright industries of distorting the copyright system by allowing chip designs into the copyright domain.

The third contribution, by the editor of this chapter, focusses on the European Directive on software protection. The *use right* which is granted to the copyright owner is considered alien to general copyright principles. According to the author, the copyright regime prescribed by the Council 'not only tastes of copyright, but also of patent law, trade secret protection, neighbouring rights and *sui generis* protection'.

Situated – deservedly – at the center of this chapter, *Jerome Reichman's* brilliant contribution raises important and alarming questions. In Reichman's pessimistic

scenario we see information tools entering the copyright domain by posing them as works of literature or art, thus receiving long-term protection on ‘soft’ conditions. Other borderline cases inbetween the copyright and patent paradigms are granted *sui generis* protection or, if lobbies are less successful, no protection at all. The disruptive effects of the proliferating legal hybrids are a major threat to the intellectual property system as we know it, Reichman concludes. Reichman’s remedy is a unified, systemic response: the foundation of a novel category of intellectual property, recognizing the legal hybrids as an autonomous entity.

As the previous contributions clearly indicate, questions of economics are at the heart of the current intellectual property debate. In the last three contributions some of these questions are directly addressed. Both *Michael Lehmann* and *Jaap Spoor* tackle the difficult problem of standardization in intellectual property. In doing so, Lehmann offers us an insider’s view of the European software directive. According to Lehmann, the Directive’s provisions on interoperability strike an adequate balance between the – seemingly antagonistic – principles of standardization and product variety. From a broader perspective – copyright, patents and trademarks – Jaap Spoor demonstrates that problems of standardization are by no means novel to intellectual property law. In fact, ‘standardization has been a problem ever since language was thoroughly destandardized at the Tower of Babel construction site’. Spoor concludes ‘there seems to be no reason why standards should be treated differently from other subject matter protected by intellectual property rights’.

Finally, *Antoon Quaadvlieg* ties various economic strings together in a thoroughly researched overview of the economic analysis of law, as applied to the law of intellectual property. As Quaadvlieg demonstrates, the law and economics approach is a powerful instrument in analyzing the intellectual property system. However, Quaadvlieg warns, it cannot replace the role of justice. Still, ‘let us welcome economics as an incentive to innovation in intellectual property law’.

This chapter, in short, is about the integrity of the intellectual property system in the Information Age. Many of the questions discussed here are related to the problems of *information law* treated elsewhere in this book: convergence and divergence, information as a public good or as a property, standardization, et cetera. It’s all there and more.

# Copyright and Publishers' Rights: Exploitation of Information by a Proprietary Right

*F. Willem Grosheide*

In a letter to his publisher Funke on 16 August 1871, the famous Dutch writer Multatuli wrote: 'I have little reason to be content with Dutch publishers. Any publisher with some knowledge of the trade and of the way it is practiced in civilized countries, will be astonished at the attitude taken by our *éditeurs*, both in respect of the author and their own commercial interests'.

In exposing all kinds of major and minor anxieties inherent to the publishing process, Multatuli especially refers to the appalling fact that some Dutch publishers even went so far as bypassing the author when deciding to reprint one of his works, without giving him the opportunity to reconsider and to update his work.<sup>1</sup> This uncivilized behaviour was possible at this time, more than a decade before the Berne Convention became effective in 1886, and focuses attention on the essential partnership of an author and a publisher in respect of the dissemination of information, both in their own interests and in the interests of the public at large.

Authors, publishers and information: it is this not-so-holy trinity that has puzzled the world's copyright community ever since new communication technologies have upset existing legislation and traditional concepts of copyright and other intellectual property laws, in the same way that 'sex and drugs and rock 'n roll' upset traditional concepts before the advent of the permissive society. Indeed, the interests of authors and publishers are legitimate, because they generate information on behalf of society at large. But how should the interests of the producers and the consumers of information be weighed up against each other? What about the much-acclaimed bond between authors and publishers 'in the service of liberty',<sup>2</sup> now that, by stressing their role as entrepreneurs, not only with a social responsibility but also charged with making a profit, publishers are seeking a well-defined, more adequate protection for their own 'performances'? Will this lead to a conflict of interests within the information-producing community?

All this leaves us with the problem of how to accommodate the specific entrepreneurial claims to exclusive exploitation – *de jure* – of information by authors and publishers on the one hand, and society's wish for the free flow of information on the other? Is it possible to harmonise the various legitimate interests on the basis of

- 
1. W.F. Hermans, Schrijver en auteursrecht, in *Auteursrechtbeleid in de informatiemaatschappij*, The Hague 1987, at 157-158.
  2. D. Ladd, The utility of a publisher's right, in *IPA 1st International Copyright Symposium Heidelberg 1986*, Munich, 1986, 89.

some sort of legal 'permissiveness'? In answering this question, two options in particular will be examined:

- replacing the static uniformity that characterizes current national and international copyright law with a dynamic pluriformity, creating the possibility of tailor-made copyright law;
- broadening the scope of the so-called neighbouring rights by introducing a special neighbouring right for publishers, both within national and international law.

## 1. Copyright Law

### 1.1 RATIONALE, DOMAIN AND SUBJECT MATTER

This paper is based on the assumption that modern copyright law can be described as a means for regulating human communications in law, serving mainly to safeguard the exploitation of cultural information upon its dissemination.<sup>3</sup> If defined in this way, the basic rationale of copyright would appear to be predominantly *economic* – in civil law as well as in the common law tradition.<sup>4</sup> Even in a personality-based approach of copyright law, the pecuniary interests would seem to prevail. In other words, unless authors and publishers can obtain an income from works with a market appeal, they will be unable to perform, which would have a detrimental effect on society.

Side-by-side with this first assumption is the recognition that from the very beginning, copyright law has had a dual basis: copyright protects personal authorship as well as the investment of considerable skill and labour.<sup>5</sup> As Ginsburg has correctly pointed out, there are two kinds of copyright:

'[...] In high authorship works, such as novels and narrative histories, copyright protects the authorial presence within the work; in low authorship works, such as telephone directories and compilations of stock quotations, copyright protects the labour and resources invested in the work's creation'.<sup>6</sup>

3. F.W. Grosheide, *Auteursrecht op maat*, Deventer 1986, w. summary in English, 311-317; *idem*, Made to Measure Copyright, *Copyright World*, Issue 8, January/February 1990, 30.

4. F.W. Grosheide, Economische aspecten van intellectuele rechten, in het bijzonder van auteursrechten, in M. van Hoecke (ed.), *The Socio-economic Role of Intellectual Property Rights*, Brussels 1991, 67.

5. Grosheide, *supra* note 3, with reference to the protection of so-called impersonal writings under Dutch copyright law, the Nordic catalogue rule, the protection of so-called '*kleine Münze*' (small change) under German copyright law, the protection of skill and labour under British copyright law, and the 'sweat of the brow' protection under American copyright law. Cf. Th.C.J.A. van Engelen, The Misappropriation Doctrine in the Netherlands, 22 *IIC* 11 (1991). See Jane C. Ginsburg, Creation and commercial value: copyright protection of works of information, 90 *Columbia Law Review*, 1865, 1870: 'Copyright thus concerns both creation and commercial value'.

6. Ginsburg, *supra* note 5, at 1870.

That means – and this is the third assumption – that, as an integrated part of the system of intellectual property law (linked firmly to industrial property law and the law of unfair competition), copyright law serves the competitive process by its very nature: the communication between producers and consumers in a product-differentiated market.<sup>7</sup> As a result of the fact that competition law does not intend to protect products from imitation, but, on the contrary, encourages free imitation and competition between goods and services, the protection offered to all intellectual property rights is limited.

### *Inner and Outer Limits*

This still leaves unanswered the problem of how to distinguish between the various elements of intellectual property law, proceeding on the basis that designing different types of protection for various kinds of intellectual products is in the interests of an efficient and useful organization of the law. In this respect, I suggest a fourth assumption – that a double test should always be applied: the first test serves to relate a specific domain of intellectual property law to a specific subject matter (the outer limit), while the second test serves to apply the protection prerequisites within a specific category to an intellectual work that falls into that category (the inner limit).<sup>8</sup> This means that the outer limit of the authorship concept (as the underlying principle of copyright law) should be determined by whether cultural information has been disseminated, and that the inner limit should be determined by whether there is question of original authorship or the investment of skill and labour.

It should, however, be borne in mind in respect of the subject of copyright law that the status of cultural information has changed fundamentally as a result of inter-related developments in the fields of technology and cultural participation. The traditional subject of copyright law has emerged from the domain of the sacred and the academic and from the sphere of the artistic muses in which they had been found since the Middle Ages, into society as a whole. Gradually these works were produced less for their own sake and increasingly for some social activity (industrial design, advertising, character merchandising and so on).

Technology, moreover, changed the patterns of thought and behaviour, in particular in respect of art, to such an extent that copyright protection was proposed for products other than those of the traditional arts. Finally, the definition of culture in the social welfare state broadened considerably so that these days there is a broad definition of culture that can no longer be adequately described by referring to literature, science and art.

This means that the subject matter of copyright has become a blurred and relative concept. In addition, this development has not only created tension in demarcating the outer limit of copyright protection, but also put the work-of-authorship con-

7. See P.J. Kaufmann, *Passing off and Misappropriation*, *IIC studies*, Vol. 9, 16-26.

8. See for an extensive discussion of this suggestion Grosheide, *supra* note 3, Chapter III.

cept under pressure. It would seem appropriate in this respect to differentiate in applying legal regimes.<sup>9</sup>

### *Neighbouring rights*

A last general assumption concerns the relation between copyright law and neighbouring rights. The Berne Convention (as well as other copyright conventions) was designed to regulate the international protection granted to authors of literary and artistic works. At the time the Berne Convention was drawn up, the most important ways in which such works were made public were publishing, art exhibitions, concerts and theatrical performances.

As far as publishers are concerned, it is a well-known fact that modern copyright law has robbed publishers of their dominant position by giving the author reproduction and publication rights at the expense of the publisher. So from then on, a publisher's position was basically dependent on that of the author.

Two circumstances placed performing artists and producers outside the scope of copyright protection. Firstly, according to traditional theories of copyright law only 'creation', not 're-creation', had been considered to qualify for copyright protection. Secondly, legal thinking had not yet developed to such an extent that it was considered possible to grant copyright protection to purely ephemeral intellectual efforts such as 'performances'.<sup>10</sup>

This meant that practical problems and differences of principle stood in the way of copyright protection being granted to those 'intellectual workers' who are able to claim exclusive rights nowadays, and relegated them to other regions of the law. But modern theories dictate that only the practical barrier remains: the implementation of the Rome Convention in 1961 which placed the neighbouring rights under a regime of protection separate from, but related to that of copyright law. There is presently no dogmatic or systematic reason whatsoever to exclude the subject matter protected under the Rome Convention from full-scale copyright protec-

- 
9. The words 'regulation of the exploitation of disseminated cultural information' could substitute the formulation used in the Title and Article 1 of the Berne Convention of 1886: 'protection of literary and artistic works' or '(protection of) every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression'. I suggest that the combination of this new formula and the double test discussed in the main text, will lead to a more adequate work of authorship concept which takes account of the needs of modern copyright law. E.J. Dommering has underestimated the necessity and effectiveness of demarcating the different domains of intellectual property law on the basis of a precise definition of the subject matter in question. In *An introduction to Information Law: Works of Fact at the Crossroads of Freedom and Protection*, in E.J. Dommering and P.B. Hugenholtz (eds.), *Protecting Works of Fact*, Deventer 1991, 1-40.
  10. E.W. Ploman and L. Clark Hamilton, *Copyright: Intellectual Property in the Information Age*, London 1980, 66-67; S. Ricketson, *The Berne Convention for the Protection of Literary and Artistic Works 1886-1986*, Deventer 1987, 866-882.

tion. This would appear to be the essence of the so-called Part II protection for entrepreneurial copyrights under the British Copyright Act of 1988.<sup>11</sup>

## 1.2 CULTURAL INFORMATION

As indicated above, copyright protection traditionally concerns every product in the domain of literature, science and the arts. Recently Hugenholtz, on the basis of an analysis of the work-of-authorship concept and the concept of information, has affirmed that information is, in essence, the subject of copyright. 'Symptoms of the "informational" nature of the work concept', 'he wrote, 'are abundant. Works of authorship are immaterial products of the intellect; they need to be expressed to acquire protection and they are supposed to be either novel or original.'<sup>12</sup> Elsewhere, Hugenholtz observes that the only specific quality that copyright law can attribute to information is its human nature.<sup>13</sup> In particular, the question which information deserves copyright protection cannot be answered by the information theory.<sup>14</sup>

Hugenholtz correctly demonstrates the 'informational' nature of works of authorship, and rightly argues that the information theory can provide nothing more than that qualification. However, he is wrong in suggesting that no more can be said about the kind of information to be protected by copyright law. Indeed, the answer cannot be given by applying the information theory. According to that theory, not only works of authorship but also inventions, trademarks and trade secrets are 'informational' by nature. That means there is nothing distinctive in the qualification 'informational' in that respect.<sup>15</sup>

But the word 'information' can acquire distinctiveness in the context of copyright law as soon as it is used in its normal, everyday definition and is related to the specific intellectual efforts that are considered to comprise a part of the domain of culture in present day society. As is argued above in § 1.1, these days culture encompasses all sorts of intellectual efforts, ranging from creative works and the perform-

11. Cf. W.R. Cornish, *Intellectual property*, London 1989, 265-266, 275-276. This type of entrepreneurial copyright is criticized by A. Dietz, 10 Thesen zum Urheberrecht des Verlegers, *Börsenblatt* 3/10.1.1989, 112-115; *idem*, Die Verwandte Schutzrechte diessits und jenseits des Kanals, *CIER Symposium Neighboring Rights 1990* (forthcoming). See also J. Becker, Rechtliche Folgerungen aus der Kreativen Rolle des Verlegers, in *IPA 2nd International Copyright Symposium Paris 1990*, Paris 1990, 283-294, rejecting the theory that so-called 'Leistungen' with a merely or predominantly competitive character could qualify for Continental copyright protection.
12. P.B. Hugenholtz, *Auteursrecht op informatie*, Deventer 1989, w. summary in English, 179-183, 181. Hugenholtz defines information as 'any message that reduces the uncertainty of its receiver' (*ibid.* at 179). Information is therefore a subjective and relative notion which can become more or less objective by adding a standardized code and a well-defined repertory.
13. Hugenholtz, *supra* note 12, at 65.
14. Hugenholtz, *supra* note 12, at 66 (translation by FWG).
15. This is not the place to elaborate on this problem in detail. In any case, it does not seem appropriate to deal with this problem by again introducing new *sui generis* regimes of intellectual property law which will lead to incoherence of the system as a whole. See F.W. Grosheide, Le droit d'auteur face aux nouvelles technologies, in *Netherlands Reports to the Thirteenth International Congress of Comparative Law Montreal 1990*, The Hague 1990, 245-268. Another route has been proposed by J.H. Reichman, Computer Programs as Applied Scientific Know-how: Implications of Copyright Protection for Commercialized University Research, 42 *Vanderbilt Law Review* 639.



ing arts to broadcasting and sports. If cultural information is labelled as the subject of copyright protection, this type of information is placed outside the domain of, say, technology, to name an example.

However, it is clear that the proposed definition of the subject of copyright is not watertight, and that it leaves overlapping zones and fails to deal with intellectual efforts of a hybrid nature.

### *Informational works*

There is another aspect of the concept of information that should be referred to here. It is possible to specify a category works within the works of authorship which Ginsburg has called *informational works*, which is how she refers to 'personality-deprived' compilations of information such as directories, indexes and databases. As has been argued, these works of low authorship have deserved and received copyright protection right from the start of modern copyright in both the civil law and the common law tradition.

But it is also this area of copyright law that lays bare an immanent tension within the law itself – in the sense that the monopolizing effect of a copyright, which is after all a property right – raises questions with respect to its ability to foster competition and promote the free flow of information.<sup>16</sup>

To minimize this tension, ideas, scientific principles, mathematical formulas and information have always been considered 'unprotectable' in themselves. But it is an undeniable fact that protecting the copyright of informational works can lead to a form of monopolization of the information itself. This can be demonstrated by the recent *Feist* case.<sup>17</sup> In this case, the United States Supreme Court ruled that white pages telephone directories are not subject to copyright protection, and that the facts they contain may be copied at will. The decision unequivocally rejects the compiler's labour in gathering the facts as a basis for copyright protection. The Court emphasized that facts may always be copied, and may even be directly copied from another compilation:

'[C]opyright is not a tool by which a compilation author may keep others from using the facts or data he or she has collected. [...] Rather, the facts contained in existing works may be freely copied because copyright protects only the elements that owe their origin to the compiler – the selection, coordination, and arrangement of facts. [...] It may seem unfair that much of the fruit of the compiler's labour may be used by others without compensation. As Justice Brennan has correctly observed, however, this is not "some unforeseen by-product of a statutory scheme". It is, rather, "the essence of copyright", and a constitutional requirement. The primary objective of copyright is not to reward the labour of authors, but "[t]o promote the Progress of Science and useful Arts". Article

16. Cf. D.W.F. Verkade, *Intellectuele eigendom, mededinging en informatievrijheid*, Deventer 1990.

17. *Feist Publications, Inc. v. Rural Telephone Service, Inc.*, 111 U.S.Ct. 1282 (1991). Cf. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.* 489 U.S. 141 (1989), referred to by P.J. Kaufmann and N.M. Wijnberg, *Het Decca-arrest: bescherming van prestatie en imitatie*, *IER* 1990, 77.

1 para. 8, cl. 8. To this end, copyright assures authors the right to their original expressions, but encourages others to build freely upon the ideas and information conveyed by a work. [...] As applied to a factual compilation, [...] only the compiler's selection and arrangement may be protected; the raw facts may be copied at will. This result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art'.

It would seem to be too early, however, to conclude, on the basis of this decision that one of the traditional foundations of American copyright law, the protection of works of low authorship, has been completely obliterated.

In any case, this cannot be said of the protection of impersonal writings under Dutch copyright law. True, in the recent case of *Romme v. Van Dale*, the Dutch Supreme Court ruled that copyright protection must be denied to the key words listed in this Dutch dictionary, since there was no evidence of a personal, original character which would classify the list as a work of authorship. This would have been the case if the list had been the result of a selection bearing the personal imprint of its compiler.<sup>18</sup> It should be noted, however, that the protection of the list as an impersonal work was not at issue in this case, so that this case does not detract from earlier decisions in respect of this special regime.<sup>19</sup>

### 1.3 THE ECONOMIC VALUE OF INFORMATION

Information has an economic value which can make it the subject of commercial or non-commercial exploitation. If the exploiter can assure itself of sufficient exclusivity over that information, this can be very profitable, especially in respect of commercial exploitation. Such a *de jure* exclusivity can be achieved by asserting a property right such as copyright. The exclusivity inherent in a property right is, however, a form of monopoly and this affects both competition and the free flow of information.

As far as competition is concerned, Mackaay gives the following illuminating example of how a monopoly works:

'The power to create effective monopolies, even by law, is inversely related to the ease with which consumers can find substitutes. The type-setters union may have once had a powerful monopoly, but with the appearance of typesetting and subsequent "desk-top publishing", the monopoly has retained little worth. It is difficult to determine whether the force of the union's privileges had been an effective incentive in the development of computer type-setting or desk-top publishing, but in any event, the legal monopoly has not shut out competition'.<sup>20</sup>

18. Supreme Court of the Netherlands (Hoge Raad) 4 January 1991, *NJ* 1991, 608 (*R.J. Romme v. Van Dale Lexicografie B.V.*).

19. See the *Radio program* cases, Supreme Court of the Netherlands (Hoge Raad) 19 April 1953, *NJ* 1954, 211; Hoge Raad 27 January 1961, *NJ* 1962, 335; Hoge Raad 25 June 1965, *NJ* 1966, 115; Hoge Raad 25 June 1965, *NJ* 1966, 116.

20. E. Mackaay, Economic incentives in markets for information and innovation, 13 *Harvard Journal of Law & Public Policy*, (1990) 867, 889.

In analyzing the attribution of property rights from a legal and economic perspective, Mackaay concludes that in recognizing a property right for certain forms of information, the legislator complements what can be achieved through a simulated property right (practical exclusivity plus contracts with perpetual clauses) by adding the possibility of systematically ensuring exclusivity in respect of third parties. The criterion is that the added power should be available only where a simulated right might be viable, and that in all instances the interested parties must play an active role in enforcing that exclusivity. According to Mackaay, this criterion is complied with in the case of copyright, given the fact that it leaves ideas, scientific principles, and mathematical formulas unprotected as a matter of principle. This means that under those conditions copyright law represents no undue monopoly.<sup>21</sup>

It would seem likely that the same will apply to an exclusive proprietary right to be attributed to publishers. Therefore, the introduction of such a special right would only be justified if it were in the interests of both competition and the free flow of information under the conditions indicated by Verkade and Mackaay. Recently, Verkade has argued that the exercise of existing and the attribution of new intellectual property rights must be judged according to their conformity with the fundamental rights of freedom of information and freedom of expression.<sup>22</sup>

## 2. Publishers' Rights<sup>23</sup>

### 2.1 PUBLISHERS' ACTIVITIES

Publishing can be defined as the commercial exploitation, on a profit or non-profit basis, of copyright or non-copyright-related information by means of the generation, fixing and dissemination of information. Any natural or legal person who undertakes to organize these activities, and who is willing to bear the financial risk of publication, is a publisher. If defined in this way, publication is restricted to the information reproduced in symbols and characters only, because it excludes film and phonogram producers.

Publishing mainly concerns such things as the publication of general educational and scientific works, videograms, CD-ROM's, databanks and databases, periodicals, magazines and weekly and daily newspapers. Clearly, publishers are a

- 
21. Mackaay, *supra* note 15, at 903-904. Cf. A. Ströwel, L'analyse économique du droit d'auteur. Une revue critique des arguments invoqués, in Van Hoecke (ed.), *supra* note 4, 105-135, arguing that the economic analysis of copyright is incapable of demonstrating whether copyright enhances or diminishes prosperity.
  22. Verkade, *supra* note 15, at 45, with special reference to Article 10 of the European Convention on Human Rights. See also Hugenholtz, *supra* note 12, at 150-170; F.W. Grosheide, Auteursrecht, in F.W. Grosheide (ed.), *Hoofdstukken Mediarecht*, Alphen aan den Rijn 1991, 47-78.
  23. The following passage has been extensively derived from the reports of the Dutch Copyright Society Study Group on Publishers' Rights, which is chaired by the author. See *Rapport van de Studiecommissie Uitgeversrecht VvA*, Uitgeversrecht, 1988, of which an English-language summary has been made available by the Royal Dutch Publishers Association; *Vervolgrapport van de Studiecommissie Uitgeversrecht VvA*, Proeve van een wet op een uitgeversrecht, 1991. See also Dutch Publishers Seek Neighbouring Right, *Rights*, Vol. 4, No. 1 (Spring 1990), 2-5.

'mixed bunch' who have a common interest in protecting their own 'performance'. This 'performance' includes, in brief, the exploitation of primary rights and the rights derived therefrom, which have been assigned to a publisher, or which a publisher holds in its own right.<sup>24</sup>

This means that a publisher's main activities consist of:

- the generation of information;
- the fixing of information; and
- the dissemination of information.

The generation of information includes the collation and compilation of information, exploring the marketplace, introducing and assisting authors, setting up teams of authors, editing the work in detail, and ensuring the aesthetic typographic make-up and ensuring that texts, whether illustrated or not, are presented.

The fixing of information must be considered in the light of today's technological developments, so that it includes traditional printing methods as well as the new reproduction and communication technologies, which are sometimes called information services. The dissemination of information includes obtaining orders for and supplying information products, and the operation of distribution networks. It requires properly coordinated promotional activities, administration and the like.

It should be noted that in this context the term 'information' refers to all kinds of information, not only information protected under copyright law, and includes what Ginsburg describes as 'informational works'.

Taken together, these activities amount to what I will refer to as *a publishing 'performance'*. If defined in this way, a publishing performance is not itself a form of cultural information, but is *about* cultural information.

According to Clark, a modern publisher can be described as an 'entrepreneurial author', whose activities can no longer be identified simply with the physical product, i.e. the book. These days, publishers have to invest in information systems, digital libraries and interactive products. Consequently, 'protection should include more than just the physical form and format'.<sup>25</sup>

It should also be pointed out that the environment in which a publisher works has changed, beginning with the market place. It is possible to observe an increasing movement away from the sale of stock (primary exploitation). To an increasing extent, the various profit and non-profit organizations are favouring a derivative exploitation, resulting in a further restriction of publishers' primary exploitation. Take newspaper cuttings, unauthorized copying by universities, document delivery, and the public lending market as examples. Yet new technological developments require ever-larger investments, whilst the very same technological developments also facilitate piracy.

Consequently, the position of the primary producers of the product is becoming more and more vulnerable. In addition, the growing interest in information amplifies

24. Because it is such a specific field, publishers of sheet music have been left out. See A. Pool, Viewpoint of Music Publishers, in *IPA 2nd International Copyright Symposium Paris 1990*, *supra* note 11, 303-305.

25. C. Clark, Legal implications of the creative role of the publisher, 1991, unpublished.

the call for a *free flow of information*. Thus the status of copyright as a classic proprietary right is gradually being eroded away.

Finally, it should be pointed out that publishers often emphasize that they undertake their entrepreneurial activities in order to promote the growth of literature, science and the arts. In other words, the free flow of information cannot do without an economically stable publishing industry.<sup>26</sup>

## 2.2 THE PRESENT LEGAL STATUS OF PUBLISHERS

These days, no country protects publishers by granting them special proprietary rights, although some legislations devote special attention to publishers' interests.

Publishers' rights are laid down in the British Copyright Act (Sections 8, 9, 11, 17) with respect to any 'published edition of any one or more literary, or musical work'. The protection is restricted to photomechanical reproduction for a period of 25 years. In the French Copyright Act (Article 15), neighbouring rights are granted *inter alia* to the producers of phonograms and videograms. There is no mention of publishers however. In the German Copyright Act (Articles 70 and 71), compilers of scientific publications and editors of posthumous works and certain other works are granted protection for a limited number of neighbouring rights. Furthermore, the German Act on Unfair Competition (Article 1) does not close the door entirely on protection. The Swiss Act on Unfair Competition (Article 5) also offers publishers the opportunity to protect their products against unauthorized copying.<sup>27</sup>

How then can publishers protect their 'performance' in other jurisdictions? It would seem that a publisher's legal status varies according on national legislation and case law. Generally, however, there are three ways publishers can protect themselves: via contracts, copyright, or legislation on unfair competition. There are difficulties and inadequacies inherent in all three of these approaches, as can be demonstrated in the following analysis.

### *Contracts*

Under contract law, a publishing contract is the most important instrument on which a publisher can rely for protection. The basis of this protection is the right a publisher derives from the author, and this protection is therefore restricted to situations in which there is a relationship between the author and the publisher in respect of copyrightable subject matter. The real drawback of a publishing contract comes to light if a third party, whether it is another publisher, a university or a library, issues a secondary publication derived from the original. In such a situation, the publishing contract will provide a publisher with no legal instrument with which to protect his 'per-

26. See for a sometimes rather exalted example of this view the various issues of *Rights – Copyright and Related rights in the Service of Creativity*, published quarterly by IPA.

27. W. Soetenhorst, Ein verwandtes Schutzrecht für Verleger (Ansatzpunkte in Deutschland, Großbritannien und den Niederlanden), *GRUR Int.* 1989, 760. See for an extensive evaluation of the pros and cons of a special publishers' right: *IPA 2nd International Copyright Symposium Paris 1990*, *supra* note 11.

formance' against unauthorized use unless there has been a simultaneous copyright infringement. A publisher is only entitled to some protection of his own as a side-effect of the author's copyright protection. After all, a publishing contract serves to protect and exploit an author's copyright, and not to protect a publisher's 'performance'.<sup>28</sup>

### *Copyright protection*

Under Dutch copyright law and under the copyright law of most other countries, a publisher is entitled to protection for his own 'performance' in some situations, for example in his capacity of employer or as proprietor responsible for a compilation. As an employer, a publisher has a statutory (fictitious) copyright in respect of works made by the employees in his service (Article 7 of the Dutch Copyright Act). Furthermore, some works may enjoy typeface or layout protection, but it is likely that this protection will, in time, increasingly lose its relevance as a result of new electronic reproduction technologies such as scanning or electronic text manipulation.

### *Unfair competition*

Whether drafted as a general provision or tailored to a publisher's particular needs, legislation on unfair competition law cannot be considered to be a publisher's right, because a publisher has no exclusive right to his 'performance', and will only be protected if the rules of competition have been violated, and these are quite liberal.

This therefore leaves a publisher with no more than a fragmented regime of protection, and in a difficult legal position in the absence of a contractual relation with an author, whenever a publisher is faced with illegal copying with the aid of the new reproduction technologies, especially if it concerns public domain materials and factual information.

It will therefore come as no surprise that in the past ten years, there have been calls for the introduction, both in national and in international law, of a special proprietary right for publishers.

## 2.3 PROPOSALS OF THE DUTCH WORKING PARTY

In this respect, Dutch publishers are closest to such a solution, as they have succeeded in convincing the Dutch Copyright Society to support their claim, which has been formulated in the two working party reports referred to above. I shall now give a brief summary of the findings of these reports.

The working party rejected two alternatives for protection based solely on copyright law: recognizing a publisher's 'performance' as a work which qualifies for copyright protection and a statutory presumed assignment of rights, such as that

28. Cf. Hoge Raad 20 November 1987, *NJ* 1988, 311 (*Staat v. Den Ouden*).

granted by Dutch copyright law to film producers (Article 45a Dutch Copyright Act). The working party pointed out in respect of the first alternative that a publisher already enjoys copyright protection in those cases in which he is both publisher and author of a work, for instance, as proprietor responsible for a compilation or in the capacity of employer. According to the working party, neither of the publishing activities indicated in paragraph 2.1 (above) constitute a work within the present (static, FWG) definition of copyright law. As to the second alternative, although publishers' activities may to a large extent be comparable with those of film producers, publishers are rarely faced with the same multitude of copyright claims which, without the presumption of assignment, would make it impossible to market a 'clean' product.

The working party suggests that it is not the relationship between the producer and his author or his many authors which constitutes the substance of a publisher's right, but the need to protect the publisher's 'performance' against infringement. Therefore, the working party preferred a neighbouring right similar to that conferred by international conventions on producers of phonograms, on broadcasting organizations and performers.

A publisher's right should only serve to protect a publisher's own activities, whereas a publishing contract should remain the decisive instrument which establishes the relationship between a publisher and an author. Thus, the author's rights would not be affected.

The working party suggests that both the rationale behind the protection granted to phonogram producers and the type of protection it offers, should serve as a blueprint for formulating the new right. Fragmentation of the law on intellectual property can be avoided by trying to establish a connection with those neighbouring rights which, by their very nature, are related to copyright law. Moreover, if this was an independent right, legislators would not encounter the theoretical or dogmatic problems which would inevitably arise in the case of an approach based purely on copyright law.

The above concerns the protection of a publisher's 'performance' under national law, in this case Dutch law. Of course, the working party is in favour of extending protection across national boundaries. However, in the absence of an international convention on the protection of publishers' rights, the working party recommends that initiatives to that effect be taken to prevent a state refusing protection to foreign publications or requiring reciprocity as a condition for protection when adopting a system of non-copyright publishers' rights or a non-neighbouring right.<sup>29</sup>

#### 2.4 ALTERNATIVE ROUTES TO PUBLISHERS' RIGHTS

As I have indicated above in paragraph 3.2, there are at present two legal regimes under which a publisher *as such* can receive some sort of legal protection for his own 'performance': contract-based copyright law and the law on unfair competition.

---

29. J.A. Baumgarten, Viewpoint from the United States, in *IPA 2nd International Copyright Symposium Paris 1990*, *supra* note 11, at 265.

Neither of the two, however, gives a publisher an exclusive legal position in his own right.

Assuming there are convincing arguments to support publishers' arguments for a special proprietary right for their 'performances', it is first necessary to decide which legal instrument is most appropriate. Two options would seem appropriate here: an extended form of copyright or an approach based on neighbouring rights. Both options, by the very nature of the rights they grant, tend to monopolize the dissemination of information. As has been noted above, it is not so much this monopolizing power as the conditions under which this monopoly is exercised which must be taken into consideration. Once these conditions reflect that the interests of publishers and of society at large are balanced (e.g., the competitive process and the free flow of information), there will be no obstacles to publishers being granted proprietary rights.

If both an extended form of copyright and a system of neighbouring rights are examined, it will be clear that each has its pros and cons. Attributing copyrights to publishers has the advantage of bringing the publishers' right directly under the 'umbrella' of existing international conventions. From a dogmatic point of view, as has been argued in paragraph 2, there would appear to be no impediments to reconciling a publishers' right with the work-of-authorship concept of copyright law. However – and this can be seen as a disadvantage – this will require an evolutionary copyright concept, in which the prevailing unitary copyright system is substituted by a system that recognizes more than one type of copyright. Pluriformity instead of uniformity, so to say, to arrive at a *tailor-made copyright*, which leaves us with a lot of loose ends to sort out, both nationally and internationally.

Granting neighbouring rights has the drawback that there are no international conventions to fall back on. Moreover, on a national level, because legislation on neighbouring rights is modelled on the Rome and Geneva Conventions, it does not take publishers' interests into account. An advantage of such a solution would be that broadening the scope of neighbouring rights is very likely to be a far less laborious process than changing the prevailing concept of copyright.

### 3. Conclusion

What can be said as a general conclusion? Personally, I stick to Pijnenborg's recent evaluation of the state of affairs:

'It is a matter of further discussion and study whether this [publisher's] right should be specified as copyright, neighbouring right, "performance" right, producers' right, destination right, information law or otherwise; industrial-economic differences between the (industrialized) countries as well as differences in legal and/or political tradition may require a variety of solutions.'<sup>30</sup>

---

30. M.F.J. Pijnenborg, Introduction, in *IPA 2nd International Copyright Symposium Paris 1990*, *supra* note 11, at 250.





# The Intellectual Effort Requirement in Chip Protection Laws compared to the Originality Requirement in Copyright Law\*

Jozef A. Keustermans

‘Intellectual property and information technology’ is a topic which may be approached in several manners. In this text, one very specific issue will be dealt with: the relationship between the protection requirement in the chip protection laws and the protection requirement in the copyright laws. A double approach will be followed. First, some issues will be studied with respect to the copyrightability of topographies. In a second part, the specific differences and similarities between the *sui generis* protection for topographies and copyright law will be analyzed.

## 1. The Applicability of Copyright Law to Topographies

Copyright law originally provides protection to literary, scientific and artistic works.<sup>1</sup> A copyright generally gives the holder the exclusive right to reproduce copies of the work, to prepare derivative works, to distribute copies, to perform and to display the work.<sup>2</sup> Copyright laws protect against the misappropriation of one’s own expressions but do not proscribe the independent creation of an identical work. One cannot copyright an idea or principle.<sup>3</sup>

---

\* This paper is part of a report resulting from a research project financially supported by the Research Fund of the European Patent Organization. The European Patent Organization shall not be held liable for the views expressed in this paper.

1. Universal Copyright Convention, as revised at Paris on July 24, 1971, Article 1; Berne Convention for the Protection of Literary and Artistic Works, as revised at Paris on July 24, 1971, Article 2. S. Stewart, *International Copyright and Neighboring Rights* (1983); A. Bogsch, *The Law of Copyright Under the Universal Copyright Convention* 35 (1972); *Guide to the Berne Convention for the Protection of Literary and Artistic Works* 12 (WIPO Ed. 1978); M. Nimmer, *Nimmer on Copyright*; F. van Isacker, *Kritische synthese van het Belgische auteursrecht* 10 (1985); A. Berenboom, *Le droit d’auteur* 37-51 (1984); See also H. Pearson, *Computer Contracts, An International Guide to Agreements and Software Protection* 265 (1985); Kindermann, ‘Computer Software and Copyright Conventions’, 3 *EIPR* 6, 10 (1981); Kindermann, ‘The International Copyright of Computer Software’, *Copyright* 201 (1988); Keplinger, ‘Authorship in the Information Age, Protection for Computer Programs Under the Berne and Universal Copyright Convention’, *Copyright* 119, 127 (1985); B. Niblett, *Legal Protection of Computer Programs* 92 (1980); Gilbert, ‘International Copyright Law Applied to Computer Programs in the U.S. and France’, 14 *Loy U Chi LJ* 105, 110 (1982).
2. E.g., 17 U.S.C. para. 106.
3. E.g., 17 U.S.C. para. 102 (b).

In general, to qualify for protection a work must possess a minimal degree of originality.<sup>4</sup> Inventiveness is not required. The most profound discussion concerning the protection of chips under copyright law has taken place in the United States, where it is generally accepted that mask works can fulfill the requirement of originality as provided for in the U.S. Copyright Act. The originality displayed in a mask work is not dissimilar to the originality in a layout of a test answer sheet for use with an automatic grading device. Such answer sheet layouts are considered to be sufficiently original to obtain copyright protection.<sup>5</sup> In fact, the layout design of integrated circuits does embody original creative intellectual efforts and the expression of these efforts in particular drawings, layouts, masks and chip designs is not strictly determined by the function to be performed by the chip. Generally the mask works represent a choice among varying alternatives.<sup>6</sup>

Prior to the passage of the Semiconductor Chip Protection Act of 1984, the U.S. Copyright Office constantly refused to register claims to copyright in semiconductor designs, on the ground that they were primarily useful articles with no separable non-utilitarian features.<sup>7</sup> In 1977, Intel Corp. brought a suit seeking to compel the registration of a design of a chip. The case was dismissed without prejudice and without disposing of the option of registrability.<sup>8</sup>

However, the Copyright Office did accept schematic diagrams, mylar sheets and photo masks for registration as 'technical drawings'. The effect of copyright on the mask works only, is considered to be quite limited, because pirates can copy the chip itself without copying the mask works and the final chip configuration represents an integration of several individual mask works.<sup>9</sup> Moreover, the U.S. Copyright Act provides copyright protection for the design of useful articles only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.<sup>10</sup>

The U.S. Copyright Office has found that mask works are useful articles, which are defined in the U.S. Copyright Act as articles having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information.<sup>11</sup> In the past a two-step analysis was used to deny copyright protection to a wire-

4. *E.g.*, 17 U.S.C., para. 102 (a).

5. *See, e.g.,* *Harcourt Brace and World, Inc. v. Graphic Controls Corp.*, 329 F. Supp. 517 (S.D.N.Y. 1971).

6. *See Copyright Protection for Imprinted Design Patterns on Semiconductor Chips*, hearing before the Subcommittee on Courts, Civil Liberties and the Adm. of Justice of the Comm. on the Judiciary House of Repr., 96th Cong., 1st Sess., on H.R. 1007 (16 April 1979), at 6 (Statement of Jon Baumgarten, General Counsel, U.S. Copyright Office) [Hereinafter referred to as 1979 House Hearing]; Brown, 'The Semiconductor Industry, Chip Products, and Trends', 2 *Computer Law*, June 1985, at 30, 31; Keeney, 'Copyright Protection for Semiconductor Chip Design', 2 *Copyright, Entertainment & Sports L.* 175 (1983).

7. 1979 House Hearing, *supra* note 6, at 13 (Statement of Jon Baumgarten, General Counsel, U.S. Copyright Office); Ammer, 'The Semiconductor Chip Protection Act of 1984', 17 *L. & Pol'y Int'l Bus.* 395, 401 (1985).

8. *Intel Corp. v. Ringer*, No. C77-2848 (N.D. Cal. 1978).

9. *See* J. Keustermans, I. Arckens, *International Computer Law*, Chapter 9 (Matthew Bender, 1988-...), and *infra*, note 17 and accompanying text.

10. 17 U.S.C., para. 101; *See* Keeney, *supra* note 6 at 168-177.

11. *Id.*

spoked hubcap. First, the court found that hubcaps were not merely ornamental but were useful articles as defined in the Act. Secondly, it found that the hubcap at issue had no non-utilitarian features that could exist independently of its utilitarian aspects.<sup>12</sup> Since chips are not ornamental articles and since the layouts imprinted on the chip are functional and consequently cannot be separated from the chip's utilitarian function, no protection as useful article was available under the respective U.S. Copyright Act provisions. The question arises, however, why this would be an objection to copyright protection for mask works, while it has not been for computer programs.

### *No protection for ideas per se*

Another major issue is based on the copyright axiom that one may copyright an expression of an idea, but never the idea itself. The idea must remain available for public use. Therefore, if only one or only a very limited number of possible expressions of an idea are possible, copyright cannot be extended to those expressions.<sup>13</sup> In practice this criterium can be difficult to apply. The line between expression and idea is sometimes very vague.

In the United States, the idea-expression distinction has been recognized by the Supreme Court in the landmark case of *Baker v. Selden*.<sup>14</sup> The Supreme Court held that the blank forms in a book, used to illustrate an accounting system, were the only method to implement the described system and were therefore not copyrightable. Other courts have held that copyright in an illustration only protects the illustration and not the object, idea or system shown therein. Accordingly, courts decided that one may not copy copyrighted architectural blueprints or pictures of a house or bridge, but that one may build the house or bridge shown on the illustration, provided that one does not copy such illustration.<sup>15</sup>

Similarly, according to the Copyright Office, copyright in a chip layout cannot prevent competitors from using that design to make their own chips, provided they do not make copies of the masks itself.<sup>16</sup> The main issue here seems to be whether a three-dimensional chip can be considered a copy or reproduction of two-dimensional mask works.

The idea-expression doctrine bars copyright protection where there is only one method of exploiting an idea in a chip, *i.e.*, when the idea is not expressible in a plu-

12. *Norris Industries v. I.T.T. Corp.*, 696 F.2d 918 (11th Cir. 1983). See also Chesser, 'Semiconductor Chip Protection: Changing Roles for Copyright and Competition', 71 *Virg. L. Rev.* 249, 276 (1985).

13. See 3 M. Nimmer, *supra* note 1, at para. 13.03[A].

14. 101 U.S. 99 (1879); See also 17 U.S.C. para. 102 (b).

15. See *Muller v. Triborough Bridge Auth.*, 43 F.Supp. 298 (S.D.N.Y. 1942); *Imperial Homes Corp. v. Lamont*, 458 F.2d. 895 (5th Cir. 1972); 1979 House Hearing, *supra* note 6, at 56 (Testimony of James M. Early, Director, Fairchild Camera & Instrument Corp.); 'A Symposium on the Semiconductor Chip Protection Act of 1984', 3 *Computer L. Rep.* 520, 523 (1985).

16. Keeney, *supra* note 6, at 179; *A Bill to Amend Title 17 of the United States Code to Protect Semiconductor Chips and Masks Against Unauthorized Duplication, and for Other Purposes: Hearing on S. 1201 before the Subcomm. on Patents, Copyrights and Trademarks of the Comm. on the Judiciary United States Senate, 98th Cong., 1st Sess., at 3* (Testimony of Copyright Office) [Hereinafter referred to as *Hearings*].

rality of different manners. While the accounting form in *Baker v. Selden* is the only method to implement the described system, several chip functions can be accomplished with visually different, although functionally equivalent designs. Only when this is impossible, the idea-expression doctrine bars copyright protection.<sup>17</sup>

The availability of copyright protection for mask works in the United States was considered to be 'sufficiently doubtful' to discourage investment and innovation. Although only very few commentators believed mask works could be covered under the existing U.S. copyright law, some chip manufacturers have instituted suits; but no U.S. court has ever ordered copyright protection under the U.S. Copyright Act.<sup>18</sup>

## 2. Copyright Law Compared to *Sui Generis* Protection

### 2.1 ORIGINALITY

A study of the legislative history of the U.S. Semiconductor Chip Protection Act and other *sui generis* laws has indicated that the originality or independent creation required under those laws is in fact the (at that time) customary U.S. copyright standard of originality: the mask work or topography is original if it is the independent creation of an author who did not copy it.<sup>19</sup>

On 27 March 1991, the U.S. copyright standard of originality has been clarified by the U.S. Supreme Court in *Feist Publications, Inc., v. Rural Telephone Service Company Inc.*, which dealt with the copyrightability of factual compilations (telephone directories). The Court states: 'Originality requires only that the author makes the selection or arrangement independently (*i.e.*, without copying that selection or arrangement from another work), and that it displays some minimal level of creativity.' The Supreme Court adds: 'Presumably, the vast majority of compilations

- 
17. Chesser, *supra* note 12, at 274-275. The idea-expression doctrine is also implemented in most *sui generis* statutes protecting integrated circuits, *e.g.*, 17 U.S.C. para. 902(b). See also J. Keustermans, I. Arckens, *supra* note 9, at para. 10.05 [A].
  18. *House of Representatives, Report No. 98-781*, 98th Cong., 2d Sess. 15 (1984), reprinted in *U.S. Code Cong. & Adm. News* 5750 (1984) [Hereinafter referred to as *House Report*]; see also *Copyright Protection for Semiconductor Chips, Hearing on H.R. 1028 before the Subcomm. on Courts, Civil Liberties and the Administration of Justice of the House Judiciary Comm.*, 98th Cong., 1st Sess. 29 (1983) (Testimony of Mr. Dunlap, Corporate Counsel and Secretary, Intel Corp.) [Hereinafter referred to as 1983 House Hearing]; Senate Memorandum, 130 *Cong. Rec.* S12913, S12918 (Daily ed., October 3, 1984); Comment, 'Copyright for Integrated Circuit Designs: Will the 1976 Act Protect Against Chip Pirates?', 24 *S.Tex.L.J.* 817, 845-850 (1983); Russell, 'Efforts are On to Limit Reverse-Engineering of ICs', *Electronic News*, September 20, 1983, at 59; *Intersil Inc. v. Teledyne Corp.*, C-82-4187-WHO (N.D. Cal. 1982), settled, in part because of the uncertainty of the law (1983 House Hearing, *supra* this note, at 214 (Statement of Dr. C.K. Layton, Intersil, Inc.)); *Zilog v. Nippon Electric Corp., et al.*, C-83-1241-WHO (N.D. Cal. 1983), also settled.
  19. Laurie, 'The First Year's Experience Under the Chip Protection Act or 'Where are the Pirates Now That We Need Them?', 3 *Computer Law*, February 1986, at 11; M. Nimmer, *supra* note 1, at para. 18.03[B]; *House Report, supra* note 18, at 17; P. Rosenberg, *Patent Law Fundamentals*, para. 5.03[6][b][v].

will pass this test, but not all will'.<sup>20</sup> In view hereof, this 'minimal level of creativity' seems to be an easy to take threshold for other works of authorship than works which must be considered as 'factual compilations'.

One can argue that as soon as a work is not a compilation of existing facts (*i.e.*, a writing down or listing of facts), but something 'new' in the sense that it did not exist before it was 'created', (*e.g.*, a book, a computer program, a plan of a house to be constructed, etc.), a minimal level of creativity will be present *per se*. The relevance (if any) of the Supreme Court decision for this kind of 'per se creative' works (as opposed to works that 'list/copy the reality') should become clear in the future.

In any case, while the originality standard has been clarified, it has not been brought in line with the originality requirement of most civil law countries requiring that, to some extent, the personality of the author be reflected in the work.

The requirement of the *sui generis* laws seems to be in line with the originality standard (as clarified) of the U.S. Copyright law. Also in accordance with the general principles of copyright law, two identical or substantially similar topographies developed independently will both enjoy protection. This conclusion is supported by Section 905 of the U.S. Semiconductor Chip Protection Act which vests the owner of a mask work protected under the Act with the exclusive right to do and to authorize the reproduction of the mask work by optical, electronic or any other means.

This exclusive right to reproduce the mask work is 'generally similar' to that of Section 106(1) of the U.S. Copyright Act.<sup>21</sup> Indeed, similar to the copyright concept of liability, the U.S. Semiconductor Chip Protection Act seems to require copying as a condition to liability for infringement. This means that an independently created mask work that is substantially similar to a prior mask work will not be an infringement of the owner's exclusive rights. The legal concept of 'substantial similarity' is the same as under the U.S. Copyright Act.<sup>22</sup> The WIPO Chip Protection Treaty<sup>23</sup> expressly adopted a provision in this sense: 'The holder of the right may not exercise his right in respect of an identical original layout-design (topography) that was independently created by a third party.'<sup>24</sup>

Compared to the 'civil law' standard of originality, requiring that the personality of the author be reflected in the work, the originality or independent creation requirement of the *sui generis* laws is lower. No indication is present in any preparatory legislative documents with respect to any reflection of personality of the creator of a topography.

20. See *Feist Publications, Inc. v. Rural Telephone Service Company Inc.*, No. 89-1909, March 27, 1991, reprinted in Dommering, E.J., & P.B. Hugenholtz (eds.), *Protecting Works of Facts*, Kluwer Deventer 1991, 97.

21. *House Report*, *supra* note 18, at 20.

22. M. Nimmer, *supra* note 1, at para. 18.06[A]; *House Report*, *supra* note 18, at 20.

23. See J. Keustermans, I. Arckens, *supra* note 9, Chapter 14.

24. Treaty on Intellectual Property in Respect of Integrated Circuits, done at Washington, D.C., on 26 May 1989, *Indust. Prop.* 217 (1989), Article 6(2)(c).

*No protection for staple, commonplace, or familiar topographies*

However, the *sui generis* laws all contain another requirement which causes some ambiguity. In order to be eligible for protection, topographies and mask works may not consist of designs that are staple, commonplace, or familiar in the semiconductor industry, or variations of such designs, combined in a way that, considered as a whole, does not fulfill the conditions for protection. Although this language probably does not require any meaningful departure from the U.S. copyright originality standard,<sup>25</sup> the level of creativity seems to be a little higher than the U.S. copyright standard: a given design can come short of the second requirement because it is staple, commonplace, or familiar in the semiconductor industry, but still be an independent creation (showing a 'minimal level of creativity') and thus original according to the U.S. copyright standard.

With respect to those countries which have adopted the higher originality standard (*i.e.*, originality reflecting the personality of the author), it may be argued that this second requirement does not cause the conditions for chip protection to be higher than the conditions for copyright protection in those countries. Topographies that are staple, commonplace, etc. will not fulfill the condition of an originality reflecting the personality of the author or creator. In those countries, the conditions for *sui generis* protection are lower than the general copyright law standard of originality.

Certain special features of the *sui generis* laws are discussed hereafter and contain further indications that might help with the interpretation of the originality/independent creation requirement.

## 2.2 IDEA/EXPRESSION DICHOTOMY

Article 8 of the EC Directive<sup>26</sup> provides that protection shall not extend to 'any concept, process, system, technique or encoded information embodied in the topography other than the topography itself.' This provision originates from the U.S. Semiconductor Chip Protection Act of 1984, which excludes from protection 'any idea, procedure, process, system, method of operation, concept, principle, or discovery, ...'.<sup>27</sup> The enumeration in the U.S. Semiconductor Chip Protection Act is identical to the one contained in the U.S. Copyright Act.<sup>28</sup>

With respect to this section of the U.S. Copyright Act the 1976 House Report notes that, as far as computer programs are concerned, the list of non-protectable subject matters was intended in part to prevent any extension of copyright in computer programs to the processes or methods embodied in the program. The broader purpose was to restate 'that the basic dichotomy between expression and idea re-

25. M. Nimmer, *supra* note 1, at para. 18.03[B].

26. Council Directive of 16 December 1986 on the Legal Protection of Semiconductor Products (87/54/EEC), *Official Journal*, 27 January 1987, No. 24/36.

27. 17 U.S.C., para. 902(c).

28. 17 U.S.C., para. 102(b).

mains unchanged'.<sup>29</sup> This idea/expression doctrine has been established in case law related to copyright law since many years, and, indeed, has caused many interpretation issues with respect to computer programs.

The legislative history of the U.S. Semiconductor Chip Protection Act<sup>30</sup> clearly indicates the incorporation in the Act of the customary copyright principle that when similarity of expression results from the fact that a concept is capable of expression in only one or a few ways, duplication of the expression is not infringement, either because it results in a similarity not deemed 'substantial similarity,' or because such functionally dictated expressions are not copyrightable.<sup>31</sup>

The same principle has been developed more or less expressly in most other copyright law systems.<sup>32</sup>

Also, in an early version, Article 2 of the WIPO Treaty excluded from protection layout-designs that 'are exclusively dictated by the functions of the integrated circuit to which they apply'.<sup>33</sup> An exclusive right for such a layout-design would practically extend to the technical function of the integrated circuit, which is not the purpose of the protection of layout-designs. Certain delegations have seen this limitation as too broad, as function considerations are at the basis of almost any layout-design. In a later version protection was made subject to the condition that the layout-design is not one of only a limited number of ways of expressing the function that it performs.<sup>34</sup> No trace of any of this may be found in the version of the Treaty as it was finally adopted in 1989.<sup>35</sup>

The adoption of the idea/expression dichotomy in the *sui generis* laws should prevent that patent-type monopolies might be created over functional features of semiconductor chips, without the requirements of the patent law having first been satisfied.<sup>36</sup>

### 2.3 REVERSE ENGINEERING

Under most *sui generis* laws it is not an infringement to copy a mask work solely for the purpose of teaching, analyzing, or evaluating the concepts or techniques embodied in the topography or the circuitry, logic flow, or organization of the com-

29. House Report, No. 1476, 94th Cong., 2d Sess. 57, reprinted in 1976 *U.S. Code Cong. & Ad. News* 5659, 5670.

30. *Senate Report* No. 98-425, 98th Cong., 2d Sess., 16-17 [Hereinafter referred to as *Senate Report*].

31. *See Atari, Inc. v. North American Philips Consumer Electronic Corp.*, 672 F.2d 607, 616 (7th Cir., cert. denied, 103 S.Ct. 170 (1982)): '... similarity of expression ... which necessarily results from the fact that the common idea is only capable of expression in more or less stereotyped form will preclude a finding of actionable similarity. ...'; *Plains Cotton Cooperative Ass'n v. Goodpasture Computer Service, Inc.*, 807 F.2d 1256 (5th Cir. 1987), cert. denied, (not yet published), where the Court of Appeals of the Fifth Circuit determined that the structure, sequence and organization of a computer program was dictated by utilization considerations as opposed to original authorship; see also *Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972, 979 (2d Cir. 1980): 'Scenes a faire' are uncopyrightable because it is virtually impossible to write about some themes without using them.

32. See, generally, M. Nimmer, P. Geller, *International Copyright Law and Practice* (1988).

33. WIPO Document IPIC/CE/III/2, February 12, 1987, at 15.

34. WIPO Document IPIC/CE/III/11, April 30, 1987, at 29.

35. See J. Keustermans, I. Arckens, *supra* note 9, Chapter 14.

36. *Senate Report*, *supra* note 30, at 16-17.



ponents used in the mask work or topography.<sup>37</sup> Further, in general, the person who reproduced and analyzed the original chip, may incorporate the results of such analysis or evaluation in a mask work or topography which fulfills the conditions for protection under the *sui generis* laws. The legislators hereby codified the established industry practice of 'reverse engineering' whereby a second chip designer is allowed to reproduce and use the design of a protected chip for purposes of research and development so as to design a second chip with the same electrical and physical performance characteristics as the protected chip.<sup>38</sup> The U.S. legislator believed that this practice fosters fair competition and provides a frequently needed 'second source' for chip products.

The legislators intended to permit making improvements on, or at least alternatives to, an existing chip and incorporating substantial but not identical parts of its design the second chip. If the second chip is the product of substantial study and analysis, and not the mere result of plagiarism accomplished without such study and analysis, the creation of a second mask work or topography, which layout is, in substantial part, similar to the layout of the protected mask work or topography, is permitted. It seems difficult to reconcile this permissible 'in substantial part similarity' with the 'substantial similarity' concept as used in determining illegal copying.<sup>39</sup> Therefore, besides the originality or independent creation requirement, the existence of a 'paper trail,' which normally is absent in cases of slavish copying, is an important factor in determining who is a pirate and who is a reverse engineer.

In *Brooktree Corp. v. Advanced Micro Devices Inc.*, the court noted that both parties agreed that if the defendant could produce an adequate paper trail establishing reverse engineering, the appropriate standard for infringement was that the two mask works were 'substantially identical,' and that if no independent creation was established, the appropriate standard for infringement was that the two mask works were 'substantially similar.' The court denied injunctive relief to the plaintiff as it felt that the plaintiff was unlikely to overcome the defendant's evidence, which was based on a paper trail, that the mask work had been reverse engineered. It is difficult to follow the court and contrary to the legislative history of the Act, where the court stated that copying only 27 to 35 percent of the chip area is not enough to support a charge that the mask work was misappropriated.<sup>40</sup>

Before the enactment of the U.S. Semiconductor Chip Protection Act, the use of the terminology 'reverse engineering' with respect to copyright law was highly unusual if not inexisting. However, the issue whether or not acts that would now be

37. 17 U.S.C., para. 906(a); Directive, *supra* note 26, Art. 5.3.

38. *I.e.*, the so-called 'form, fit and function' compatibility. See *House Report*, *supra* note 19, at 22.

39. See *supra* in this paper under para. 2.1.

40. *Brooktree Corp. v. Advanced Micro Devices, Inc.*, DC S.Cal, No 88-1750-E(cm), December 13, 1988. Finally, in the fall of 1990, the jury decided that Advanced Micro Devices had infringed Brooktree's mask works and patents, and awarded damages of \$26.5 million. The court also granted an injunction prohibiting Advanced Micro Devices from further making, using or selling the infringing products. See also generally Fisher, 'Beyond Fair Use: Reverse Engineering and the Semiconductor Chip Protection Act of 1984', 3 *Computer Law* 9 (1986); Hart, 'High Technology 'Reverse Engineering': the Dual Standard', *EIPR* 139 (1987); Raskind, 'Reverse Engineering, Unfair Competition, and Fair Use', 70 *Minn. L. Rev.* 385 (1985).

referred to as 'reverse engineering' were permitted under copyright law, indeed existed. Since the first proposal of a European Directive for the Legal Protection of Computer Programs,<sup>41</sup> the reverse engineering issue with respect to computer programs protected by copyright law has been the subject of intensive legal and political debates.<sup>42</sup>

### *Fair use*

In the United States, the preparatory documents of the U.S. Semiconductor Chip Protection Act contain some reference to the U.S. copyright law in respect of the reverse engineering issue. The House Memorandum<sup>43</sup> states: '[T]he privileges created by this Act, such as the reverse engineering right, may not be restricted by reference to the narrower privileges that obtain under copyright, such as fair use.' 'Fair use' is essentially a defense to a charge of copyright infringement.

The U.S. Copyright Act provides that the fair use of a copyrighted work, including such use by reproduction or by various other means, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.<sup>44</sup> According to Professor Nimmer, the reverse engineering defense, as far as it permits reproduction for the purpose of teaching, analyzing, or evaluating the concepts or techniques, is very much in the nature of a fair use defense.<sup>45</sup> However, Professor Nimmer continues to state that the permitted incorporation of the results of such conduct in an original mask work, would go beyond what would ordinarily be permitted under fair use in the copyright meaning of the term.

41. *Official Journal* C 91/4 (1989).

42. See, e.g., Davis III, 'The EC Council Directive on Legal Protection of Software – To Protect or not to – That is the Question', in *Information Technology: Trading with Europe – West and East* (C.L.A. Munich 1990); Allott, 'The EC software directive and the reverse engineering policy', *Managing Intellectual Property*, November 1990, at 4; Stern, 'NEC v. Intel – A New U.S. Approach to Reverse Engineering of Software?', *Software Protection*, November 1989, at 10; Meijboom, 'Softwarebescherming in 'Europa 1992'', *B.I.E.* 35 (1990); Huet, 'Le reverse engineering, ou ingénierie inverse, et l'accès aux interfaces dans la protection des logiciels en Europe: questions de droit d'auteur et de droit de la concurrence', *Rec. Dalloz Sirey* A-17 (Chronique 1990); Vandenberghe, 'Auteursrechtelijke bescherming van computerprogramma's: een onbevredigend voorstel van richtlijn', *Informatierecht/AMI* 111 (1989); Schnell, Freska, 'On the Threshold of 1992 Europe Debates Software Protection – Report on the International Symposium on Reverse Engineering in West Berlin, March 1989', *6 Computer & High Techn. L.J.* 59 (1990); Dommering, 'Reverse engineering: een softwarepuzzel', *Computerrecht* 105 (1990); Scott, 'Compulsory Licensing of Intellectual Property in International Transactions', *EIPR* 319 (1989); Cornish, 'Inter-operable Systems and Copyright', *EIPR* 391 (1989); Lake, Harwood II, Olson, 'Seeking Compatibility or Avoiding Development Costs? A Reply on Software Copyright in the EC', *EIPR* 431 (1989).

43. House Memorandum, 130 *Cong. Rec.* E4432, E4433 (Daily ed. October 10, 1984).

44. 17 U.S.C., para. 107.

45. M. Nimmer, *supra* note 1, at para. 18.06[D].

### 3. Conclusion

In view of the fact that there seem to be serious similarities, if not identical characteristics, between copyright law applied to computer software and *sui generis* chip protection laws, the question may be raised why a *sui generis* protection system had to be installed. In the late seventies, the United States had plans to provide copyright protection for chips. Those plans have been abandoned in the early eighties.<sup>46</sup> Representatives of other, more classical 'industries' for which copyright protection is important, such as the movie and book publishing industry, expressed their concerns.

They stressed that, inherent in the early proposals to grant protection to chip designs under copyright law, a danger existed that, by tailoring fundamental copyright principles to accommodate the unique nature of the use of chip designs in the manufacturing process, the legislation would create unintended consequences and blur or distort the way in which copyright was applied to those other categories of copyrightable works.<sup>47</sup>

However, it should be noted, first, that the *sui generis* laws incorporated certain essential characteristics of the copyright laws, and second, that the same remark may be made (and has been made) with respect to the application of copyright laws to computer programs.<sup>48</sup>

Besides the possible distortion of copyright law, other arguments may have been at the basis of the *sui generis* protection system: by setting up a *sui generis* protection system, the United States has achieved that U.S. chips enjoy protection in many other nations ... something that might not have happened at the same speed if the U.S. would have opted for copyright protection for mask works.

---

46. See *House Report*, *supra* note 18, at 5-11.

47. Kastenmeier, Remington, 'The Semiconductor Chip Protection Act of 1984: A Swamp on Firm Ground?', 70 *Minn. L. Rev.* 417, 442 (1985); Ladd, 'To Cope with the World Uphcaval in Copyright', *Copyright* 289, 291 (1983).

48. See G. Vandenberghe, *Softwarebescherming* (1984).

# Convergence and Divergence in Intellectual Property Law: The Case of the Software Directive

*P. Bernt Hugenholtz*

In analyzing the development of intellectual property law 'towards the 21st century' one can discern two opposing trends: convergence and divergence. Both terms will ring a bell with those who are familiar with telecommunications law.<sup>1</sup>

In the field of telecommunications, convergence refers to the trend towards integration of previously unrelated market segments. A good example of convergence in the telecommunications market is the use of cable television systems for data transmission purposes.

The opposite trend is called divergence or unbundling. An example in telecommunications is the breaking up of monolithic national PTT's into different independent companies providing local services, long-distance services, value added services, etcetera.

Similar trends can be distinguished in the present development of intellectual property law.

First: *convergence*. Even though the landscape of intellectual property remains uneven, there undoubtedly exists a trend towards integration.<sup>2</sup> Due to the application of copyright law to products of information technology, criteria previously unknown in the world of copyright, such as absolute novelty and non-obviousness, are creeping into the copyright system. On the other side of the spectrum we see patent law gradually dropping its requirement of 'technicality' in order to open the doors for patent protection of information products and services.<sup>3</sup>

On a more abstract level, the trend towards convergence becomes clear when one realizes that all subject matter of intellectual property is made from the same material: (immaterial) *information*.<sup>4</sup>

---

1. See J.C. Arnbak, J.J. van Cuilenburg and E.J. Dommering, *Verbinding en ontvlechting in de communicatie*, Amsterdam 1990.

2. See F.-K. Beier, The Future of Intellectual Property in Europe, 22 *IIC* 157, 161 (1991): '[...] the areas of industrial property law on the one hand and copyright law on the other, formerly so neatly separated, show a noticeable tendency to overlap and grow together, and for this the term "intellectual property" is particularly appropriate since it renders delimitations redundant'.

3. See Alfred P. Meijboom, The Question of Software Patentability in Europe, in H.W.K. Kaspersen and A. Oskamp (eds.), *Amongst Friends in Computers and Law*, Deventer-Boston 1990, 47-59. Compare the recent proposal for a 'service patent': H.B. Cohausz, Patents for Services, [1991] 5 *EIPR*, 155-156.

4. See P.B. Hugenholtz, *Auteursrecht op informatie*, Deventer 1989, 20.

Secondly: *divergence*. Apparently in conflict with the trend towards convergence, we see a host of newcomers entering the intellectual property arena, each claiming – and in many cases receiving – special intellectual property rights protection. This trend is easily discernible in the vast growth of neighbouring and *sui generis* rights awarded to – to name just a few – producers of phonograms, broadcasting organizations, integrated circuit lay out designers, etcetera. Perhaps, in the near future, to this rapidly growing list we should add book and database publishers, promoters of sporting events, biotechnology engineers, and others.

In addition, one can observe a trend towards divergence *within* existing intellectual property schemes. Increasingly, special ‘tailor-made’ regimes for specific categories of subject matter are created within the framework of existing laws. The copyright in computer programs as laid down in the European software directive illustrates this trend towards internal divergence.

Both trends combined, convergence and divergence, generate a third important trend: the increasing *cumulation* of intellectual property rights. Computer programs, again, provide the perfect example. In the old days, cumulative protection by copyright and patent law would have been unthinkable. With the admission of computer programs to the realms of copyright and patent law, we are now getting used to the idea.

The case of copyright protection for computer programs, as implemented in the recent European Council Directive on the legal protection of computer programs,<sup>5</sup> demonstrates the trends described above. The copyright in computer programs is, in effect, an amalgam (or mutant) of various existing intellectual property rights. This copyright not only tastes of copyright, but also of patent law, trade secret protection, neighbouring rights and *sui generis* protection.

## 1. The Paradox of Originality

The originality requirement, in its continental (*droit d'auteur*) connotation of ‘personal character’, is intended to reward the idiosyncrasies of the author who creates in complete artistic freedom. Originality in this sense does not favour practical or efficient technical creation. On the contrary, functionality and efficiency are clear contra-indications. In other words: well-written, efficient programs are less ‘original’ than sloppy ones.

In order to avoid the counterproductive results (in terms of incentive) of applying the continental test of originality to computer programs, courts and legal scholars are forced to reinterpret the originality requirement. As a result of this re-thinking process, originality in computer programs (and in other technical or functional creations) has come to mean a lot of different things: intellectual effort

---

5. Council Directive on the legal protection of computer programs of 14 May 1991, O.J. 1991, L 122/42.

(skill and labour),<sup>6</sup> 'freedom of choice',<sup>7</sup> (statistical) uniqueness,<sup>8</sup> non-obviousness,<sup>9</sup> 'Überdurchschnittlichkeit',<sup>10</sup> or simply 'not copied'.<sup>11</sup>

In this process of reinterpretation, the concept of originality in computer programs has lost much of its continental connotations of esthetic value and artistic merit. The originality requirement applied to computer programs tastes more of patent law (inventive step) or design protection (novelty) than of *droit d'auteur*. The official recitals of the Council Directive clearly illustrate this development. When determining whether or not a computer program is an original work 'no tests as to the qualitative or aesthetic merits of the program should be applied'.

## 2. The Ambiguities of the Idea/Expression Dichotomy

According to the textbook cliché, copyright does not protect 'ideas'. Only the original 'expression' of the idea is protected. This so-called idea/expression dichotomy is at the heart of American copyright doctrine. It is part of European doctrine as well, albeit the terminology is somewhat different. In Europe, textbooks tell us copyright protects *form*, not *content*. The idea/expression or form/content dichotomy is omnipresent in the Council Directive, of which Article 1, para. 2 reads as follows:

'Protection in accordance with this Directive shall apply to the expression in any form of a computer program. Ideas and principles which underlie any element of a computer program, including those which underlie its interfaces, are not protected by copyright under this Directive...'

A few more examples of the ideas and principles which are considered uncopyrightable are given in the official recitals:

'Whereas, in accordance with this principle of copyright, to the extent that logic, algorithms and programming languages comprise ideas and principles, those ideas and principles are not protected under this Directive....'<sup>12</sup>

Unfortunately, the Directive does not tell us precisely what should be considered (protected) 'expression'. Is the 'expression' limited to the program code layer? Even

6. See F.W. Grosheide, *Auteursrecht op maat*, Deventer 1986, 305.

7. G. Kollé and E. Ulmer, Der Urheberrechtsschutz von Computerprogrammen, *GRUR Int* 1982, 489; D.W.F. Verkade, *Juridische bescherming van programmatuur*, 2nd ed., Alphen aan den Rijn 1986, 35. See also President District Court of Haarlem 17 October 1986, *AMI* 1987, 9. The 'freedom of choice' doctrine is criticized by A.A. Quaedvlieg, *Auteursrecht op techniek*, Zwolle 1987, 27.

8. M. Kummer, *Das urheberrechtlich schützbare Werk*, Bern 1968.

9. *Lotus Development Corp. v. Paperback Software International et al.*, 740 F.Supp. 37 (D.Mass. 1990) at 58-59.

10. Bundesgerichtshof 9 May 1985 ('Inkasso-Programma'), *GRUR Int.*, 1985, 1041. The 'Inkasso-Programm' doctrine has been upheld in Bundesgerichtshof 4 October 1990, *ZUM* 1991, 246 ('Betriebssystem'). See the critical comment by M. Lehmann, *Computer und Recht* 1991, 150-151.

11. Cf. the Dutch copyright in 'all writings'; see Dick van Engelen, The Misappropriation Doctrine in the Netherlands, 22 *IIC* 11 (1991).

12. Council Directive, *supra* note 5, at 43.

though the recitals are rather ambiguous,<sup>13</sup> the words quoted above strongly suggest this. If so, the copyright protection offered by the Directive would be a rather *thin* one. A copyright limited in scope to the program code layer would provide protection only against reproduction and adaptation of the 'literal' elements of the program.

A thin copyright would not protect the so-called *non-literal* elements of the program, such as the sequence, structure and organization, the 'look and feel' and other aspects of the user interface. In this context, it is important to note that the coding of a computer program is, by and large, a process involving little or no intellectual effort. The true economic value of the program is hidden inside. In some cases, the value lies in certain inventive logical solutions or algorithms. However, as is the case with writing computer code, the logical design of computer programs has, increasingly, become a more or less automatic, non-creative endeavour. The true value of a computer program, one must conclude, is not in its code or in its logic, but in its function. In the case of many application programs, this function is primarily reflected in the *user interface*.

### 3. Protecting the User Interface

Protection of the user interface of a computer program has not, until now, been the subject of heated debates in European copyright circles. Perhaps this lack of interest is due to the fact that the European software market is not homogeneous. The European Community consists of a number of different language regions. Possibly, these regions are, in themselves, not large enough to attract the interests of software 'clone' manufacturers.

The *Lotus Development Corp. v. Paperback Software International* decision of the US District Court of Massachusetts<sup>14</sup> provides ample proof of the importance of the user interface protection issue. In his very lengthy opinion (spanning almost 50 printed pages), J. Keeton held that the principle specifications of the user interface of the well-known Lotus 1-2-3 spreadsheet program were protected under copyright. According to J. Keeton, Lotus 1-2-3's menu command structure, including its choice of command terms, the structure and order of these terms, their presentation on the screen, and the so-called 'long prompts' were to be considered 'original'. Defendant's VP-planner computer program, which was especially made to be functionally compatible with the Lotus 1-2-3 program, was, therefore, considered an infringement, even though the logic and structure of the VP-planner program were completely different.

---

13. According to the recitals, the term 'computer programs' shall include 'preparatory design work leading to the development of a computer program provided that the nature of the preparatory work is such that a computer program can result from it at a later stage'. Broadly interpreted, this statement would imply a set of functional specifications could qualify as a 'computer program'.

14. *Lotus Development Corp. v. Paperback Software International et al.*, 740 F.Supp. 37 (D.Mass. 1990).

As previous commentators have noted,<sup>15</sup> the protection granted to the Lotus 1-2-3 program by J. Keeton is much like a patent in a copyright dress.

#### 4. The 'Use Right': An Anomaly in Copyright Law

The Council Directive codifies another striking feature of the copyright in computer programs: an exclusive right to *use* the software. According to Article 4(a) of the Directive, the restricted acts include:

'... the permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole. Insofar as loading, displaying, running, transmission or storage of the computer program necessitates such reproduction, such acts shall be subject to authorization of the rightholder.'

According to Article 5, para. 1, no authorization for these acts is needed 'where they are necessary for the use of the computer program by the lawful acquirer in accordance with its intended purpose ...'.

This (limited) 'use right', which is in keeping with the trade practice of imposing user licenses on software consumers, is alien to generally accepted copyright principles. Copyrighted books may be read and re-read without permission of the copyright owners, even by those who have not lawfully acquired a copy of the book. The same can be said of the acts of viewing videotaped movies in private or listening to concerts. Is the 'stow-away' in the Concertgebouw a copyright infringer? Of course not.

The exclusive rights of copyright (right of reproduction, right of public performance, et cetera) solely regard acts of (active) *communication*. Copyright does not, and should not, restrict the *reception* (consumption) of information. In the case of computer programs, obviously, it does.

This is especially true for the provisions of the Council Directive regarding the analysis (Article 5, para. 3) and decompilation (Article 6) of computer programs. Not even the lawful owner of a copy of a program is allowed to decompile, unless he has no alternative for acquiring the information necessary to obtain interoperability. Lawful owners not engaged in the business of developing interoperable systems must content themselves with the rather useless right to 'observe, study or test' the software without decompiling it. Clearly, the 'right to know' does not apply to software users.<sup>16</sup>

The provisions of the Council Directive concerning use, analysis and decompilation are, yet again, symptoms of the pluriform nature of the copyright in computer programs. Alien to general copyright principles, they reflect notions better known elsewhere in intellectual property law: in patent law and in trade secret (know-how) protection.

15. D. Lee Antton and G.M. Hoffman, Copyright Protection as a Way of Protecting Innovation: The Impact of Lotus v. *Paperback Software*, [1990] 9 *EIPR* 339, 342; P. Waters and P.G. Leonard, The Lessons of Recent EC Developments for Protection of Computer Software under Australian Law, [1991] 4 *EIPR* 124, 126.

16. See E.J. Dommering, Reverse Engineering: a Software Puzzle, in H.W.K. Kaspersen and A. Oskamp (eds.), *Amongst Friends in Computers and Law*, Deventer-Boston 1990, 33-45.





# Legal Hybrids between the Patent and Copyright Paradigms

*Jerome H. Reichman*<sup>1</sup>

In appraising the social welfare implications of intellectual property rights, the legal and economic literature assumes that the classical patent and copyright models still drive the world's intellectual property system, in keeping with the bipolar structure enshrined in the Paris and Berne Conventions at the end of the nineteenth century. This study disputes that assumption. The questions it asks are whether the real objects of intellectual property protection still conform empirically to the nineteenth century models, and to the extent they do not, what accounts for the growing array of deviant phenomena this study brings to the forefront of attention.

Few experts seriously doubt that systemic anomalies abound. This study contends that the world's intellectual property system has been overwhelmed by new technologies that fit imperfectly within the classical patent and copyright systems. These technologies increasingly define the context in which the most economically significant innovation will occur for the foreseeable future, a context in which it becomes ever harder to separate basic from applied research. As each new technology encounters pre-existing constraints on the classical intellectual property models, it generates pressures for more makeshift legal adjustments, founded on doubtful economic and conceptual premises, in order to shelter creators and investors from free competition.

If this thesis proves correct, it means that the economic premises underlying the dominant legal paradigms increasingly yield socially questionable results. Taken one by one, a welter of hybrid legal solutions provide some protection to a broadening array of industrial innovations that manifest relatively little distance from the prior art. Viewed collectively, the net result is a patchwork quilt of improvised pro-

---

1. This paper contains selected extracts from a larger work in progress; most footnotes have been omitted for reasons of space. A preliminary version of this paper was presented to the Computer Science and Telecommunications Board, National Research Council, National Academy of Sciences, at its Intellectual Property Issues in Software Forum, Washington, D.C., November 30, 1989. Later versions were presented to the Institute of Private Law, University of Rome, Italy, April 1991; to the Information Law Toward the 21st Century Conference, University of Amsterdam, June 1991; and to the 10th Annual Meeting of the Association for the Advancement of Teaching and Research in Intellectual Property (ATRIP), Salamanca, Spain, 7-9 October 1991. Research for this study was supported by grants from the German Marshall Fund of the United States, the Kapor Family Foundation, the Vanderbilt University Research Council, and Dean John J. Costonis. The author wishes to thank his donors for their unflagging support, the kind hosts who allowed him to air these findings, and above all, his colleagues – Randall Davis, Mitchell Kapor, and Pamela Samuelson – whose collective contributions permeate every page.

tective devices tending to perpetuate chronic states of over- or underprotection that are harmful to both innovation and competition in the long term.

## 1. Bipolar Structure of the International Intellectual Property System

States adopt intellectual property laws in the belief that a privileged, monopolistic domain operating on the margins of the free-market economy promotes long-term cultural and technological progress better than a regime of unbridled competition. Ordinary tangible goods that acquire value by satisfying known human needs in more or less standardized ways cannot escape the price-setting function of the competitive market. In contrast, intellectual goods acquire value by deviating from standard solutions to known human needs in ways that yield more efficient outcomes or that capture the public's fancy. Because intellectual goods define relevant market segments in terms of the novelty they purvey, their creators invent their own markets by stimulating demand for goods that did not previously exist.

### 1.1 NATURE AND LIMITS OF THE DOMINANT INTELLECTUAL PROPERTY PARADIGMS

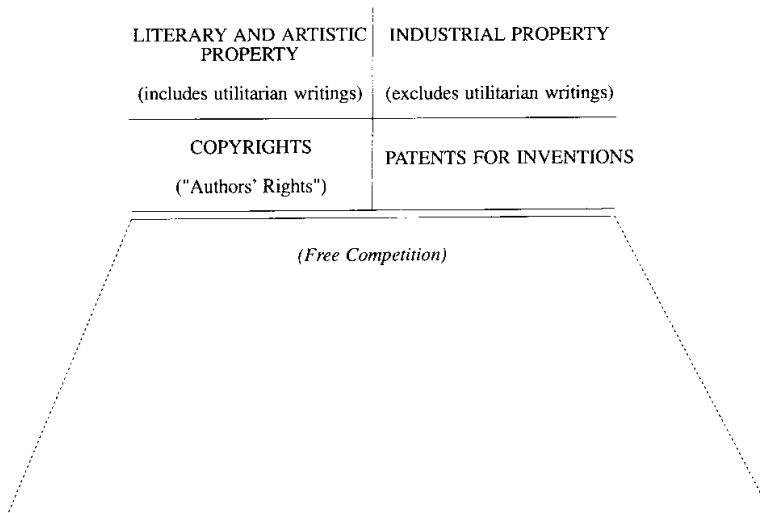
Although the role of intellectual property rights in post-industrial economies has become so vital that it figures on the current agenda for multilateral trade negotiations, the term 'intellectual property' was not coined until the late nineteenth century. Only when Kohler and Picard perceived that copyright, patent and trademark laws had more in common with each other than with the older forms of property known to Roman law was it recognized that a new class of rights in intangible creations had arisen. Their use of the term 'intellectual property' thus coincided with the drive for international regulation of both artistic and industrial property, a movement destined to produce a highly articulated and universally recognized legal discourse in little more than a century.

To be sure, intellectual property rights remain firmly rooted in territorial law, for reasons that have become increasingly anachronistic over time. As a result, authors, inventors and trademark proprietors seldom benefit from general norms of public and private international law applicable to older, more tangible forms of property. Nevertheless, the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886), as progressively developed and supplemented by other international agreements, have established a worldwide constitutional framework that directly or indirectly configures the various domestic systems on which it rests.

#### *The patent and copyright subsystems*

These Great Conventions purport to subdivide the international intellectual property system into two hermetically sealed compartments that face each other across a common line of demarcation. *Figure 1*, entitled 'Bipolar Structure of the International Intellectual Property System', represents this pristine division.

Figure 1. *Bipolar Structure of the International Intellectual Property System*



The origins of this bipolar structure can be traced to cornerstone provisions of the Great Conventions extant since their inception and to corresponding state practices recognized by most developed intellectual property systems. On the one hand, copyright laws entitle all literary and artistic works falling within the designated subject matter categories to a generous but relatively soft form of protection against copying only that lasts for a long period of time. On the other hand, the patent paradigm and variants thereof classically grant inventors a hard and truly monopolistic form of protection on strict formal and substantive conditions for a relatively short period of time.

### *The line of demarcation*

Because the domestic patent and copyright regimes afford fundamentally different types of protection, the line of demarcation between the Paris and Berne Conventions becomes of paramount importance. A line that appears unclear or poorly defended will tempt entrepreneurs to circumvent the strict prerequisites of patent law, with its basic requirements of novelty, utility and non-obviousness, in order to shelter industrial creations within the more receptive and generous embrace of copyright law.

A body of historical evidence pertaining to industrial design makes it logical to characterize this line of demarcation in terms of a discredited dichotomy between 'art' and 'utility'. However, the international conventions did not expressly sanction this interpretation or others, equally intractable, that appeal to philosophical or even political biases. Rather, the Great Conventions took a more empirical approach, adopted for mundane economic purposes, that turned on the definition of 'industrial property' in Article 1(3) of the Paris Convention.

This definition deliberately left nothing to the discretion of the Member States. It dictates that 'Industrial property shall be understood in the broadest sense and shall apply not only to industry and commerce proper, but likewise to agricultural and extractive industries and to all manufactured or natural products, for example, wines, grain, tobacco leaf, fruit, cattle, minerals, mineral waters, beer, flowers, and flour'. In effect, this provision casts 'industrial property' in terms of every conceivable product available for sale on the general products market in order 'to avoid excluding ... activities or products which would otherwise run the risk of not being assimilated to those of industry proper'.<sup>2</sup> Its sole major exclusion is for those literary and artistic works subject to domestic copyright laws that were later covered by Article 2(1) of the Berne Convention and by Article I of the Universal Copyright Convention (U.C.C.).

Apart from the rule of national treatment, states members of the Paris Union are seldom required to take any particular action with regard to any of the product categories listed in this broad definition of industrial property. Industrial property, as defined in Article 1(3), thus constitutes the true subject matter of protection under the Paris Convention and not the legal institutions, such as patents and trademarks, through which its protection may or may not be perfected. At the same time, the definition of industrial property functionally determines the jurisdictional reach of the Paris Convention in relation to the international copyright conventions. In effect, this line of demarcation appears to turn not strictly on the 'art versus utility' criterion, but rather on the distinction between 'products' of industrial and commercial activity 'in the broadest sense' that are sold on the general products market, and literary and artistic 'productions' that are not.

*Figure 1* reflects this line of demarcation, and it also shows the manner in which the dominant subsystems meet each other face to face across this common frontier. The clarity of this juncture is enhanced by noting that domestic and international industrial property laws exclude technical writings as such from eligibility as patentable subject matter. Conversely, technical and utilitarian writings normally fall within the jurisdiction of national and international copyright laws, at least to the extent that they are not embodied in industrial products.

That this line of demarcation has tended to become less airtight and unequivocal in actual state practice than the nineteenth century draftsmen had foreseen cannot be denied. The old puzzle of industrial art (i.e., commercial designs) and the new puzzle of industrial literature (i.e., computer programs), for example, conjure up endless ambiguities. For present purposes, nonetheless, it suffices to establish, *first*, that 'industrial property' and 'literary and artistic works' appear entirely to occupy the classical intellectual property universe at the international level; and *second*, that the basic legal subsystems operating within that universe of discourse were historically separated by a line of demarcation tied to the general products market. As will be seen from the next section, this bipolar structure rested upon a shrewd economic calculus.

---

2. G. Bodenhausen, *Guide to the Application of the Paris Convention for the Protection of Industrial Property* (as revised at Stockholm in 1967), at 25 (1968).

## 1.2 NEGATIVE ECONOMIC PREMISES UNDERLYING THE DOMINANT LEGAL PARADIGMS

Economists are increasingly convinced that the exceptions to the rules of competition that intellectual property law carves out for authors and inventors at any given level of innovation actually stimulate competition in the long run by eliciting the production of scarce intangible goods that elevate the market – and competition – to ever higher levels. Succinctly stated, this body of law grants creators a bundle of exclusive rights devised to overcome the ‘public good’ problem arising from the indivisible and inexhaustible nature of intellectual creations. These exclusive rights *substitute a statutory period of artificial lead time for the negligible period of natural lead time that competition in intellectual achievements otherwise tends to produce.*

Whether, and under what conditions, such a system actually delivers a relatively efficient market for intellectual goods remains controversial, and little would be served by rehashing the abundant literature this enduring controversy still elicits. Of primary concern here, instead, are certain *negative economic premises* that appear to underlie the dominant legal paradigms but that have attracted less attention from scholars and publicists. To understand why the classical intellectual property system has begun to break down, it becomes imperative to grasp the nature and role of these negative premises and to test the accuracy of the behavioral assumptions on which they rest.

*Figure 2. Positive Modalities and Negative Economic Premises of the Dominant Legal Paradigms*

INVENTIONS Patents for Inventions (Applied Scientific Discoveries)	ART Literary and Artistic Work (Personal Intellectual Creations)
BASIC PREREQUISITE: Inventive step (Nonobviousness)	BASIC PREREQUISITE: Independent creation (Originality)
MODALITY: Hard protection on hard conditions for short period of time	MODALITY: Soft protection on soft conditions for long period of time
NEGATIVE PREMISES	NEGATIVE PREMISES
1. Nonpatented innovations remain subject to price competition, and are free to imitate if disclosed.	1. Noncopyrightable productions or components thereof remain subject to price competition, and are free to imitate if disclosed.
2. Undisclosed unpatentable innovations are free to reverse engineer but not to steal.	2. Nonprotectable ideas underlying clusters of independent creation are free to use but not to steal (built-in reverse engineering).
3. Patented inventions are not infringed by nonequivalent innovation.	3. Cultural policy not applicable to general products market
4. Unfair competition law may not repress product imitation in the absence of confusion.	4. Unfair competition law not to limit users' rights in the absence of confusion

*Patents for inventions*

*Figure 2* encapsulates 'Positive Modalities and Negative Economic Premises of the Dominant Legal Paradigms'. Turning first to the 'inventions' side of the diagram, *the strict substantive prerequisites of the patent paradigm negatively regulate the general products market by ensuring that non-patentable innovation remains subject to price competition on that market.* The competitors' rights freely to imitate any unpatented products once distributed to the public thus constitute a normative premise of the free-market economy, one that presumably benefits consumers by gearing prices to production efficiencies and to incremental technical progress.

Historically, however, the right to imitate conventional engineering products and the ability to do so did not go hand in hand. Otherwise, unpatented tangible products would have remained as vulnerable to instant duplication as intangible intellectual creations are by their very nature; and the ensuing lack of appropriability would have diminished incentives to invest in ordinary product development. In reality, the manufacturer of any new product or process benefits from certain advantages that flow from his having been first on the market. Third parties who seek to compete effectively will have to reverse engineer the originator's product or process, establish autonomous modes of production, develop lines of distribution, and establish their own reputations as producers of quality goods. Because this task of catching up to the originator's head start costs money and takes time, it presumably endowed traditional innovators with a *period of natural lead time* that enabled them to gain a foothold in the market.

The innovator's natural lead time is defended by trade secret laws that prohibit the misappropriation of undisclosed know-how and by competition laws that protect confidential information and the goodwill associated with trade names and marks. By the same token, the competitor's right to shorten the innovator's natural lead time by lawful forms of reverse engineering stimulates investment in research and development looking to future innovation, and it ensures that routine innovation will proceed at a healthy pace. For this reason, the United States Supreme Court recently endowed the competitor's right to reverse engineer unpatented, non-copy-rightable innovation with constitutional underpinnings.<sup>3</sup>

The liberal economic system recognized only two fundamental exceptions to the general norms of competition as summarized above. One was for patentable inventions that took a major step beyond the pre-existing prior art. By providing a relatively short period of artificial lead time under strict formal and substantive prerequisites, the patent paradigm rewards inventors for making discoveries; induces them to disclose discoveries once made; and facilitates the efficient allocation of resources to industrial exploitation of these discoveries. The second major exception was for literary and artistic works subject to the very different and far more generous modalities of the copyright paradigm.

---

3. See *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 498 U.S. 141 (1989).

*Literary and artistic works*

The mature copyright paradigm is predicated on the very absence of the natural lead time that underlies the patent paradigm. This follows because authors necessarily embody their intangible personal expression in tangible mediums of expression, and the distribution of these material supports to the public at large negates any further possibility of concealing artistic know-how in the manner of trade secrets. Because every artistic work thus *bears its authors' personal intellectual creation on its face*, would-be competitors who obtain any tangible embodiment of that expression can duplicate it without incurring the investment of time or money inherent in the process of reverse engineering industrial innovation. Third parties who rapidly duplicate a successful literary or artistic work can reduce the author's natural lead time to zero, or even minus zero if they possess sufficient market power, simply by selling the same artistic production at a price below the marginal cost to the publisher of disseminating the original work.

The copyright system thus *deals with intellectual goods not protectable as trade secrets that require no reverse engineering to appropriate*. The system responds by supplying artificial lead time to all independent creations without regard to merit and without requiring originators to preselect works thought to be worth the costs of formal registration or administrative examination. Wary of unreliable value judgments about art and unable to predict which of even the most successful authors' future works will capture or recapture the public's fancy, the copyright laws embrace all literary and artistic works simply by virtue of their being creations and leave the assessment of both merit and pecuniary worth entirely to the market.

In practice, the exclusive rights of copyright law provide a pecuniary reward only to those authors and artists who successfully explore the public's taste. By securing a winner-take-all return for those relatively few creators able to capture the public's fancy, the copyright incentive overcomes high risk aversion otherwise apt to discourage investment in the dissemination of cultural goods. By preventing second comers from prematurely siphoning off the fruits of any lucky strike that happens to result, the exclusive rights also permit creators to defray the costs of past failures. Unlike the patent law, however, copyright law never prevents third parties from independently creating works of authorship similar to those already on the market. Nor does copyright law invest authors with any generally recognized right to control the end use of protected works as such. On the contrary, by encouraging third parties to make free and abundant use of nonprotectible matter underlying the protected expression, *copyright laws foster a built-in process of 'reverse engineering' that enables numerous copyrightable works to cluster around common themes or ideas*.

If the exclusive rights given to authors thus stimulate the production and dissemination of literary and artistic works under free-market conditions, the copyright paradigm also promotes certain cultural policies that are inconsistent with the efficient allocation of resources on the market for such works. For example, incentive theory will not adequately explain the long period of protection, which enables living authors and their immediate heirs to partake of revenues generated many years after the creation of their works, nor such paternalistic measures as the right to terminate transfers under the United States Copyright Act of 1976. Moreover, incen-



tive theory cannot explain the moral rights that prevent those who have paid to commercialize an author's work from doing so in a manner that could prejudice the author's honour or reputation.

Even as regards purely economic exploitation, Professor Goldstein observes that the exclusive right to prepare derivative works permits authors 'to capture the full value that consumers attach to their works and not just the minimum sum that ... would ... support their investment'.<sup>4</sup> This occurs in part to reduce the disseminators' risk aversion and in part because copyright law aims to protect the author's personality interest by preventing unauthorized exploitation of his or her expression on every market segment where it may acquire commercial value.

The incentive theory of copyright protection thus underestimates the extent to which all industrialized countries, to varying degrees, have deliberately subordinated efficiency to cultural policy goals in the specialized market for literary and artistic works. By the same token, the most fundamental of all the negative economic premises underlying the mature copyright paradigm is that the very *cultural policies* that sometimes override incentive theory on the market for artistic works *should not disrupt competition in the general products market as regulated by the mature patent paradigm*. That explains why legislators deny copyright protection to 'any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated or embodied' in original works of authorship.<sup>5</sup> It also explains why courts traditionally afford factual and functional works only 'thin' protection against literal reproduction and why they will not allow the exclusive reproduction rights of copyright law indirectly to prevent third-party use of unprotectible utilitarian matter.

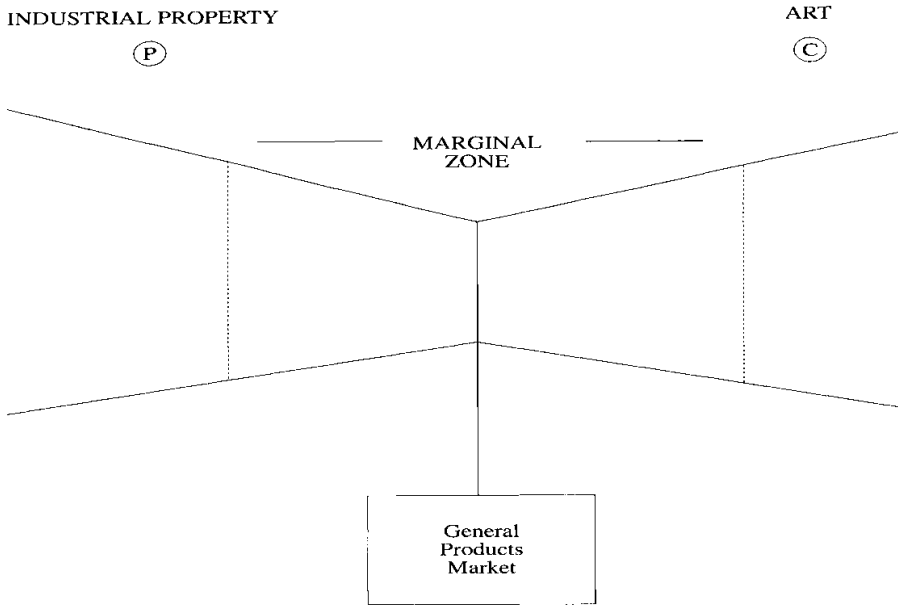
## 2. Between Art and Inventions: The Proliferating Legal Hybrids

This study has so far attempted to shed some light on how the world's intellectual property system carves up its universe of discourse and on the behavioural assumptions it makes concerning the standard objects of protection. In considering the extent to which late twentieth century intellectual property law still conforms to its nineteenth century foundations, it is helpful to visualize the constitutional framework of the Great Conventions as operating within two broad spheres or spectrums of protective activity that are geared, respectively, to 'artistic' and 'industrial' property. This subdivision is represented graphically in *Figure 3*, entitled 'Objects of Protection in Relation to Scope of Protection: The Thickness Syndrome'.

4. P. Goldstein, *Copyright: Principles, Law and Practice*, Vol. 1, para. 1.1, at 7 (1989-....).

5. 17 U.S.C., para. 102(b) (1988) [U.S.A.].

*Figure 3. Objects of Protection in Relation to Scope of Protection: The Thickness Syndrome*



*Figure 3* portrays the two spheres as meeting at the line of demarcation identified earlier in this paper, namely, at the general products market, which the patent paradigm nominally governs. The broad ends of the two spectrums represent the locus of classical objects of intellectual property protection, namely, traditional works of art and literature, on the one hand, and patents for inventive but conventionally engineered applications of science to industry, on the other. That the spectrums appear broader at their outer ends signifies that even the standard objects of protection – if otherwise qualified – do not uniformly obtain the maximum scope of protection available under the dominant legal paradigms. Studies suggest, for example, that courts provide pioneer inventions with a broader or ‘thicker’ range of equivalents in infringement actions than patents covering improvements in an already crowded field. Likewise, in copyright law, factual and functional works historically received relatively ‘thin’ protection as compared with more expressive literary and artistic works.

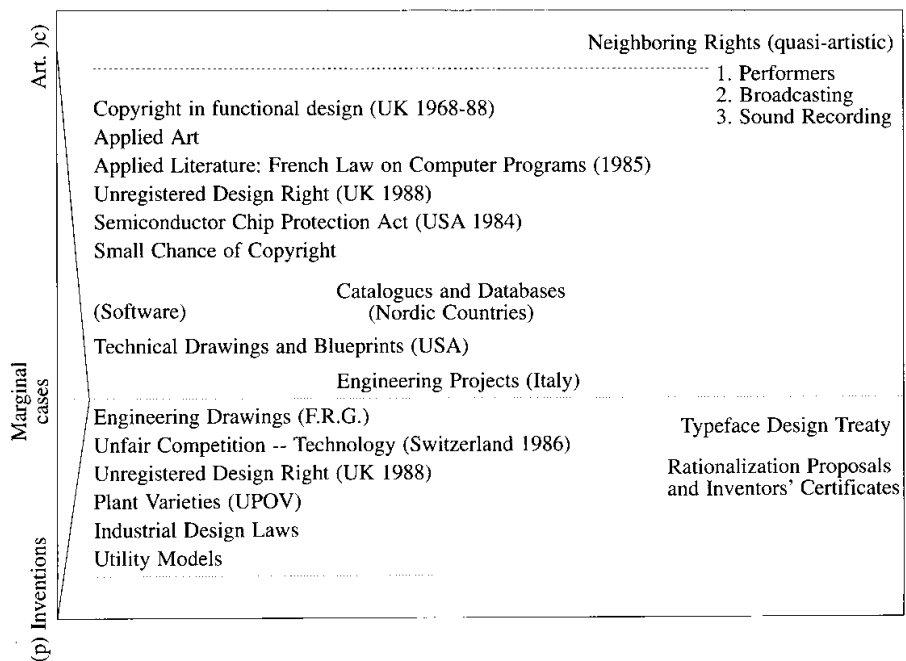
Experience further suggests that a particularly thin scope of protection is a characteristic feature of all the intellectual property regimes whose objects of protection deviate from true ‘inventions’ or from the ‘works of art or literature in the ordinary and historical sense’ that fall within the standard patent and copyright subsystems. The basis for this observation, and its implications for a unified field approach, remain to be demonstrated throughout the rest of this paper. For present purposes, these rough empirical axioms concerning what may be called a ‘thickness syndrome’ provide a clue to ascertaining the most probable systemic locus of the deviant phenomena of primary interest to this study.

It will be recalled that the bipolar structure of the Paris and Berne Conventions, as outlined above, purports to exhaust the classical intellectual property universe.

Under the standard operating assumptions, the patent and copyright subsystems meet face to face at a common line of demarcation, as shown in *Figure 1*, with nothing in between. The possible existence of a 'thickness syndrome' operating within the dominant paradigms therefore makes it plausible to expect deviant or marginal intellectual property models to occupy the narrow ends of the spectrums shown in *Figure 3*, where the scope of protection was arbitrarily posited to attain its weakest levels.

To facilitate further analysis, *Figure 4*, entitled 'Pressure on the Dominant Paradigms: Selected Legal Hybrids', is constructed so as to represent these postulates. *Figure 4* thus provisionally incorporates a number of deviant intellectual property models about to be investigated below into the open spectrums of *Figure 3*, in conformity with the 'thickness syndrome' postulated above. A distribution of the deviant phenomena in this manner (assuming any are actually found to exist) would then portray the relative distance separating deviant objects of protection from the prototypical objects of protection and the relative proximity of the former to the line of demarcation running between artistic and industrial property law.

*Figure 4. Pressure on the Dominant Paradigms: Selected Legal Hybrids*



The juxtaposition of *Figure 4* upon *Figure 3* visually represents a working hypothesis about a putative marginal zone between the patent and copyright paradigms that has yet to be verified. To forge even further ahead of the story for a moment, the

reader is advised that the survey of deviant models undertaken below will, ultimately, require a rectification of this working hypothesis and its graphic representation. Even before conducting the survey, however, a glance at the contents of *Figure 4* suffices to suggest what all experienced practitioners intuitively know: namely, that *the real universe of world intellectual property law is inhabited by constellations of deviant protective modalities that violate its key operating assumptions, especially the negative economic premises set out above.*

As will be seen, some of these misfits or mutants are truly new and readily identifiable with today's important new technologies. Others, however, are almost as old as the world's intellectual property system itself. Whether the latest deviants represent a response to empirical phenomena that are truly new or are merely variants of responses to earlier phenomena that had long challenged the systemic integrity of the classical foundation remains to be assessed.

## 2.1 MARGINAL CASES IN THE SPECTRUM OF INDUSTRIAL AND QUASI-INDUSTRIAL PROPERTY

### *Utility models*

If patents for invention require a true inventive step usually determined by a board of qualified patent examiners, utility models constituted an early and significant deviation from the norm. These laws confer patent-like protection on three-dimensional functional designs without requiring an examination of the prior art and without imposing a strict standard of non-obviousness. Because utility model laws were characteristically expected to protect functional improvements attained by means of three-dimensional shapes, they could not protect processes and did not apply to most electronic circuit designs.

The pristine purpose of early utility model laws was to confer protection upon the external configurations of certain handtools and other everyday implements. Functional improvements in handtool design, including agricultural implements, often entailed elements of form or shape that did not reach the inventive height needed to qualify for patent protection. The utility model laws secured protection for these and certain other categories of innovation, predominantly local in character, whose creative contribution fell chronically short of the inventive height that the mature patent paradigm historically required.

Like ornamental designs of useful articles, functional handtool designs were embodied in products sold on the open market, which made their protection in trade secret laws impracticable. Legislative decisions to protect utility models thus implicitly recognized that non-aesthetic handtool designs remained as vulnerable to appropriation by third parties as ornamental designs, which some countries protected under *sui generis* design laws. Both functional and appearance designs evolve through incremental innovation, while in either case the physical support bears the product of the designer's skilled efforts on its face. Because most ornamental design laws exclude functionally determined designs by definition, however, utility model

laws aimed to plug a gap in the intellectual property universe that has widened inordinately with the advent of important new technologies.

Utility model laws require a qualitatively significant degree of innovation in exchange for a relatively short-term immunity from competition. These laws thus operate with a stricter discipline than that of the *sui generis* design laws, a phenomenon usually ascribed to the functionality of the designs they protect. While utility model laws nominally confer a bundle of exclusive rights comparable to that of patent law, they provide a narrow scope of protection in keeping with 'the limited character of the invention' and the immediate availability of protection once registration takes place.

Utility model laws follow the principle of exhaustion, in common with most developed patent systems. Once a protected handtool was sold on the open market, manufacturers normally retained no further control over the uses to which their innovative functional designs were put. Utility model laws thus required innovative toolmakers to exact the reward for their products in the monopoly prices applicable at the time of first sale. By the same token, these laws normally precluded manufacturers from asserting any claim to the value added to other products by those who purchased and used the tools that embodied protected functional designs. The legal protection of handtool designs thus implicitly recognized that users of the tools add significant value to their own products, an enterprise in which the toolmaker contributed little beyond the efficiencies that entitled him or her to protection in the first instance.

Over the years, utility model laws have degenerated into petty patent laws, of particular interest to developing countries, that are less strictly tied to three-dimensional functional shapes. Recent amendments to the German law stop just short of ratifying this trend while allowing even some electronic circuit designs to qualify for protection. Commentators have accordingly criticized the utility model regime for undermining the integrity of the patent system and for weakening the free-market principles that patent law is supposed to reinforce. Viewed in relation to later marginal cases that have challenged the systemic integrity of world intellectual property law, however, the true defect of these laws was that they arbitrarily enabled only certain categories of industrial designers to protect functional product configurations while ignoring the more general need to protect unpatentable, non-copy-rightable embodiments of know-how that could not otherwise qualify for trade secret protection. In other words, utility model laws are hard to justify in terms of classical economic or intellectual property theory; and these sporadic legislative attempts to mitigate the strict prerequisites of patent law presaged a larger malaise that fully revealed itself only in the last quarter of the twentieth century.

Although utility model laws are not a cure for the family of problems that the drive to protect important new technologies has generated, this venerable institution contains valuable lessons for those seeking to break out of the current impasse. In this perspective, utility model laws represent a form of intellectual property protection specifically devised for innovative tool designs that seems indirectly to have allowed the market to determine value without discouraging competitors from making further improvements and without entitling innovators to the values that users add on their own. These laws, addressing what may be termed 'the small change of patent law', thus contrast dramatically with recent developments affect-

ing ‘the small-change of copyright law’, as recently expanded to cover electronic information tools.

### *Industrial designs*

Because industrial design partakes of both art and industry, it sits astride the Berne and Paris Conventions, in apparent disregard of the historical line of demarcation running between them. Empirically, ornamental designs of useful articles (or ‘appearance designs’ as they are called today) seldom behave like the subject matter that either of the dominant paradigms typically governs.

Viewed as industrial property, for example, appearance designs seek protection under design patent laws or *sui generis* design laws that usually operate on modified patent principles. In practice, relatively few designs meet the formal and substantive prerequisites these laws impose. Viewed as works of applied art, in contrast, appearance designs seeking copyright protection become embodied in mass-produced useful articles of every kind. With the notable exception of France, courts and legislators in most industrialized countries limit copyright protection of three-dimensional appearance designs in order to defend the capacity of their industrial property systems to mediate between innovation and competition on the general products market. Trapped between the patent and copyright paradigms, yet ill-served by both, design protection laws constitute a legal hybrid whose cyclical path through history continues to destabilize the world’s intellectual property system despite some two hundred years of regulatory action.

This cyclical pattern reflects recurring bouts of over- and underprotection in all legal environments. Initially, a condition of underprotection stemmed from the assimilation of industrial designs to the full patent paradigm of the Paris Convention. Few appearance designs satisfied the test of inventive height characteristic of this paradigm because most designers strive to produce recognizable variations on known models or style trends and seldom take major steps beyond the prior art.

The rigidity of the patent system eventually led the design industries in many countries to seek copyright protection by emphasizing the artistic skills that are but one ingredient of most successful product configurations. Treating designs of useful articles as copyrightable works of art, however, subverts the key negative economic premises underlying the larger framework of world intellectual property law. Exclusive rights conferred on commercial designs *qua* works of art enable manufacturers to control exploitation of the material supports in which these designs subsequently become embodied *qua* products, a result that undermines the workings of the patent system. It is precisely the capacity of applied art to compete in both the market for artistic works and in the general products market that aggravates the design problem; no facile invocation of general principles of copyright law will make this *two-market conundrum* disappear.

The propensity of industrial design to elicit protective responses that violate cardinal economic premises underlying both the patent and copyright paradigms explains the resistance to the ‘unity of art doctrine’ codified in France and the destabilizing impact that doctrine continues to exert on the world’s intellectual property system. Given this two-market conundrum, the economically undesirable

repercussions that ensue from treating commercial designs as copyrightable works of applied art will vary with the extent to which domestic intellectual property systems succumb to manufacturers' claims to legal recognition as 'authors and artists'. As copyright protection for designs of useful articles expands, the disruptive effects on the general products market trigger countervailing pressures to restrict the scope of protection acquired in the name of art. As protection in copyright law correspondingly contracts, pressures for recognition of industrial art as a legally protectible form of industrial property increase once again, and this normally leads to legislative reforms of *sui generis* design protection laws. Because these laws are traditionally built on modified patent principles, however, they disfavour small- and medium-sized entrepreneurs who contribute the bulk of today's design innovation.

In the past, most commentators tended to view industrial design as a marginal case that did not challenge the general soundness of the world's intellectual property framework. In retrospect, it appears more accurate to view both ornamental design laws and utility model laws as precursors of the many legal hybrids that world intellectual property law would struggle to accommodate in the last half of the twentieth century.

### *Plant varieties (UPOV)*

Under the Plant Patent Act of 1930, asexually propagated plants became the first form of life to be recognized as patentable subject matter in the United States. However, plant patents have not provided adequate and effective protection for new plant varieties, owing in part to the rigid formal and substantive prerequisites of the mature patent paradigm. As a result, this form of innovation remained singularly vulnerable to appropriation by competitors who need only obtain an exemplar of each new variety, such as genetically improved seeds that can be replicated naturally, in order to copy it. Except for certain hybrid varieties, which cannot be reused as seed, breeders are seldom able to fall back upon trade secret protection to remedy their lack of lead time.

The evidence suggests that this state of chronic underprotection resulted in insufficient investment in plant innovation, at least in the private sector. Congress accordingly adopted the Plant Variety Protection Act of 1970 (PVPA), in keeping with developments abroad that culminated in the International Union for the Protection of New Varieties of Plants (UPOV), founded in 1961. Plant breeders rights (PBRs) under the PVPA are accorded to new varieties that possess stability, uniformity or homogeneity, and that, above all, are clearly distinguishable from existing varieties. A basic criterion of novelty must therefore be met, but the statute does not require non-obviousness, and this constitutes the principle divergence from patent law.

Protection under the PVPA lasts for a minimum period of fifteen years, with a longer period available for innovative varieties of trees and vines. The scope of protection, however, is limited by two cardinal exemptions. First, a farmers' exemption 'gives users the right to retain part of the harvest for subsequent planting as seed'. Second, a research exemption 'permits breeders to use a protected variety in subsequent breeding and to apply for protection of the outcome so long as repeated use of the protected variety is not required'.

The research exemption, which is controversial, can be understood as a break on the doctrine of equivalents operating in patent law or on the derivative work right familiar from copyright law. Professor Lesser observed that this exemption may undercompensate plant breeders by depriving them of multiple royalties accruing from a chain of derivative inventions that depend on a component of the original discovery.<sup>6</sup> Such a shortfall could become particularly serious under regimes that make samples available before the patent issues, as would occur under the European Patent Convention.

Tension between the full patent approach, which tends to recognize a broader range of equivalents, and the PVPA (or UPOV approach) is further heightened because of the long-term implications of either solution for biotechnology in general. Some scholars suggest, for example, that a provision for multicellular organisms modelled on the PVPA would resolve the problems arising from strict application of the patent paradigm to costly biotechnological innovation that yields major commercial and societal gains without necessarily meeting the requirement of an inventive step. These tensions have already inspired legislative proposals to lower the non-obviousness standard applicable to biogenetic engineering in general; and they underlie the burgeoning literature that demands copyright protection for biogenetic innovation.

### *Unregistered design right*

Although the United Kingdom protected appearance designs under the Registered Designs Act of 1949 (RDA), that Act – built on modified patent principles – still excludes functionally determined designs. Paradoxically, producers of integrated circuit designs excluded from the RDA might have claimed *copyright protection* under anomalous decisions that British courts handed down in the period 1968–1988. These decisions treated three-dimensional product designs as copyrightable works of art simply because they had first been depicted in two-dimensional blueprints or technical drawings. Under the Semiconductor Products (Protection of Topography) Regulations, which took effect in 1987, the United Kingdom suppressed copyright protection of integrated circuit designs in favour of an improvised *sui generis* approach based on modified copyright principles. One year later, in the Copyright, Designs and Patents Act of 1988, the United Kingdom extended the principle of copyright-like protection (derived from semi-conductor chip protection laws) to unregistered designs generally, whether functional or aesthetic, without regard to their ornamental aspects and without specifically requiring either novelty or non-obviousness.

The precise standard of ‘originality’ needed to qualify for unregistered design protection in the United Kingdom remains uncertain and controversial pending judicial interpretation. The proprietary right arises automatically upon fixation, as in copyright law, and there is no registration or deposit requirements nor any records of prior art that competitors need to search. Protection extends to literal copying only

6. Lesser, Sector Issues II: Seeds and Plants, in W.E. Siebeck, ed. *Strengthening Protection of Intellectual Property in Developing Countries, A Survey of the Literature* III (1990), at 66.



and not to derivative works. A 'must fit' exception allows spare parts to be duplicated in order 'to fit into, onto, or around an existing piece of machinery'. According to Fellner, this exclusion should apply to interfaces only, and not to the rest of the part.<sup>7</sup> A 'must match' exception allows replacements of component parts that fit into an overall shape, such as car body panels. Certain safeguards against misuse are also built into the statute, especially with a view to deterring frivolous threats of legal action.

Protection lasts for a period of ten years from the time the design is first marketed or fifteen years from the time of fixation, whichever is greater. However, compulsory licences become available during the last five-year term, with a view to enhancing competition. Neither the compulsory licence nor the 'must fit' and 'must match' exceptions were available under the Topography Regulations. However, the reverse engineering provision characteristic of these Regulations (and of semiconductor chip laws generally) was not included in the unregistered design right. In Fellner's view, a compulsory licensee's true ability to compete with the originator, as envisioned by the unregistered design statute, could depend on whether the former 'can insist on getting [the latter's] associated know-how'.<sup>8</sup>

One major goal of the unregistered design law was to relieve the pressure on copyright law resulting from the prior tendency of British courts to protect three-dimensional functional designs as artistic works derived from two-dimensional technical drawings. After 1988, two-dimensional depictions will no longer automatically entitle the objects portrayed to protection as artistic works.

Despite this rectification, the unregistered design law magnifies the anomalies inherent in utility model laws by protecting both functional and ornamental designs under standards potentially as soft as those of copyright law. In so doing, the new law cures some of the anomalies inherent in the protection of integrated circuit designs by extending the principles first embodied in the United States Semiconductor Chip Protection Act of 1984 to functional designs in general. Otherwise, laws protecting integrated circuit designs beg the question of why a legislature has singled out one class of functional designs but left the others to free competition. Even so, the drafters of the unregistered design right fail to explain why product designs, but not, say, biogenetic innovation, should be exempt from the rigors of patent law and the free market to which it leads. These legislative responses to sectoral protectionist demands are thus crafted with the tinkerer's mentality and without any unifying goal or concept in mind.

The unregistered design law nevertheless constitutes a tentative step in the direction of a new and broader regulatory scheme for industrial property, based on a modified copyright approach, that could deal directly with embodiments of technological know-how in tangible mediums of expression. Together with the French law on computer programs of 1985 and the United States Semiconductor Chip Protection Act of 1984, it serves to break the stranglehold of the dominant intellectual property paradigms. In this respect, all three laws provide new models for the elaboration of future solutions, and they will enrich the pool of empirical data concerning the operational feasibility of non-traditional regimes in general.

7. Fellner, *The New United Kingdom Industrial Design Law*, 19 *U. Baltimore Law Review*, at 379.

8. Fellner, *supra*, note 7, at 384.

*Unfair competition as a technology law*

Switzerland recently amended its unfair competition law with the aim of protecting investment in unpatentable technologies that are vulnerable to easy duplication. Article 5(c) of this law protects innovative products embodying the results of intellectual labour, effort, skill or investment against competitors who employ 'technical methods of reproduction' to avoid the steps otherwise required to manufacture similar products. The new law permits competitors to use an innovator's ideas and know-how in the process of recreating or reverse engineering an identical product. It prohibits them from copying or duplicating the completed products as a whole. Although the statute places no express limit on the period of protection, it reportedly lapses when 'the investment of the owner has been amortized' so that 'the copying of the products by a third party no longer distorts competition'.<sup>9</sup>

The Swiss provision, which follows the late Professor Troller's lead, constitutes a general purpose reverse-engineering law that aims to protect the innovator's lead time against what is perceived to be commercial parasitism in the form of slavish duplication. Despite numerous defects, this experimental regime is important because it authorizes judicial recourse to a modified misappropriation doctrine when the dominant intellectual property paradigms fail to provide high-technology innovators with sufficient lead time in which to recoup the costs of research and development. It thus affords an alternative to the current tendency of Anglo-American courts to use copyright law as a roving misappropriation regime, and it also constitutes a possible basis for an international anti-piracy norm to be incorporated into Article 10*bis* of the Paris Convention and, perhaps, into a GATT side-code as well.

## 2.2 MARGINAL CASES IN THE SPECTRUM OF ARTISTIC AND QUASI-ARTISTIC PROPERTY

*Technical drawings, blueprints, and engineering projects*

Turning to the literary and artistic property side of the ledger, technical drawings, blueprints and engineering projects constitute some of the oldest and most instructive marginal cases in the intellectual property universe. As *Figure 4* indicates, these marginal cases seem to fall in a cluster situated on or near the historical line of demarcation running between the dominant paradigms.

Engineering projects that embody technical know-how in the form of 'writings' or of two-dimensional drawings have an inherently dualistic nature. On the one hand, they convey information, like a literary work, or they portray the appearance of a useful article, like a two-dimensional work of applied art. On the other hand, the information conveyed in words or lines instructs the engineers who execute the project or who build models of the useful article thus portrayed.

Because of their dualistic nature, engineering projects and blueprints bear an historical affinity to industrial art (*i.e.*, commercial designs) and, more recently, to

9. Probst, Protection of Integrated Circuits in Switzerland, 4 *E.I.P.R.* 108, at 109-110 (1988).

industrial literature (i.e., computer programs). However, engineering projects and blueprints normally contain even less personal expression than industrial art, and they are not routinely embodied in products that are reproduced in series and distributed on the general products market. At the same time, third parties who obtain a copy of the drawings or of a written project description, or who simply have an opportunity to view the finished engineering project, can easily profit from the unpatentable technical know-how they embody. Once such projects are either disclosed or realized, in short, originators have no opportunity to preserve their know-how in trade secret law.

Three different national approaches to this problem merit special attention. In the Federal Republic of Germany, courts initially elevated the requirement of a 'personal intellectual creation' to limit copyright protection to novel or exceptional project designs of a non-architectural character. More recent decisions have focused on the three-dimensional embodiment of a useful article or project portrayed in a two-dimensional technical drawing. Provided that such drawings do not portray architectural works, which enjoy full protection either in two- or three-dimensional form, the three-dimensional realization is said not to embody the 'special' expressive character that, in two-dimensional form, attracted copyright protection in the first instance. This solution prevents a two-dimensional drawing from protecting, say, a refrigerator or an automobile spare part portrayed in the drawing, as occurred for a time in the United Kingdom; but its rather loose adjustment of the idea/expression distinction is hardly persuasive.

In the United States, copyright protection of technical drawings has long been assured. But in a major decision dating back to 1879, the Supreme Court left third parties free to reverse engineer any three-dimensional utilitarian objects initially portrayed in words or drawings, even though a reproduction or copy made from the three-dimensional end product to achieve this goal would otherwise constitute a technical violation of the exclusive reproduction right. For example, third parties may not copy the technical drawing of a bridge, even when the bridge itself remains uncopyrightable; but they may imitate the bridge from the model actually built, even though this entails an unauthorized reproduction of the same design portrayed in the technical drawing. Similarly, a competitor remains free to reverse-engineer a boiler design from the boiler itself, even though he could not copy the originator's blueprints portraying the same design.

Italy, in contrast, has long provided a hybrid neighbouring right that permits originators of novel engineering projects to obtain a reasonable royalty from their use by third-parties, but subjects that use to a compulsory licence that the originator cannot oppose. Article 99 of the Italian Copyright Act conditions this right to equitable remuneration on formal prerequisites of notice and registration, conditions that are confined to the neighbouring rights provisions collocated in Part II of the Act. The originator's right to remuneration lasts for twenty years from the date of deposit.

In evaluating these different national solutions to a common marginal case, it should be observed that engineering projects are merely sets of statements or instructions used to bring about a certain utilitarian or industrial result. They thus anticipate the problem of computer programs, in which the same sort of instructions will be fed into a computer to bring about the same sort of results that are now per-

formed manually by those who carry out the steps indicated in given engineering projects. It seems significant, therefore, that while such projects managed to attract copyright protection from such an early period, courts and legislators struggled to override or modify standard copyright doctrines so as to reach outcomes more consistent with the industrial character of the 'writings' and technical 'drawings' in question.

### *Copyright protection of small-change literary productions*

At first glance, the factual and functional works known as 'the small-change of copyright law' appear to present fewer systemic anomalies than ornamental designs of useful articles, which never secured a firm foothold in the international copyright conventions. To be sure, catalogues, directories, rule books, instruction manuals and printed forms often exhibited the same chronically low levels of creative authorship that characterize the bulk of commercial designs. Their barebones nature thus conflicts with the emphasis on personal expression that traditionally drives the mature copyright paradigm.

At the same time, because writings that convey utilitarian information were not embodied in products sold on the general products market, their admission to copyright law exerted less immediate pressure on the frontier with patent law than was true of ornamental designs. Such pressure would, of course, have arisen if copyright law had admitted facts or ideas as such, or if the exclusive reproduction rights indirectly denied access to factual or utilitarian features that were otherwise ineligible. But once courts and legislators took steps to counter these vices, no *sui generis* laws were needed to deal with a two-market conundrum for the reason that industrial literature had yet to be invented!

Low authorship factual and functional writings also bear at least a topographical resemblance to more creative informational works of a technical or scientific character. To exclude small-change literary productions from copyright law on either subject-matter or authorship grounds thus appeared to entail another derogation from the principle of non-discrimination, one that seemed harder to justify in the absence of direct industrial exploitation. Needless to add, such an exclusion would also have discouraged the gathering and dissemination of commercially valuable information by leaving it at the mercy of third-party duplicators who added no value of their own. The resulting state of chronic underprotection could, moreover, give way to countervailing bouts of overprotection if courts tried to bridge the gap in intellectual property law with expansive applications of unfair competition law.

The historical solution adopted in the Berne Union countries thus allowed most small-change literary productions to qualify for copyright law *qua* writings, on the theory that they conveyed information, while excluding (except in France) most small-change artistic productions *qua* products. At the same time, courts in leading Berne Union countries recognized that the factual or utilitarian nature of these low-authorship works required special measures to limit the systemic contradictions they might breed. While the legal stratagems of choice varied from one jurisdiction to another (and sometimes even within the same jurisdiction at different times), the overall tendency was to limit the scope of protection for borderline literary produc-

tions to slavish imitation. In the United States, for example, the 'thin copyright' doctrine that the Supreme Court recently proclaimed in *Feist Publications, Inc. v. Rural Telephone Service Inc.*,<sup>10</sup> merely confirmed at the highest level what one astute district court had earlier discovered to be an 'open secret'.

In retrospect, however, the admission of small-change literary productions to copyright law was a makeweight solution that harboured two serious flaws. First, the advent of computer programs, which entered copyright law in the 1980s on analogy to both scientific works and the small-change, eventually enabled publishers to embody 'two-dimensional' compilations of instructions or data in chips and microelectronic processors that make computers perform functional tasks. The disembodied sets of instructions that initially attract copyright protection as writings thus become embodied in products that compete on the market for machine tools. A hybrid subcategory of industrial literature has accordingly emerged that repropose all the problems familiar from industrial art, including the two-market conundrum heretofore presumed inapplicable to small-change literary productions.

Even without these complicating developments, decisions favouring copyright protection of low-authorship literary productions always underestimated the utilitarian and increasingly industrial applications to which packaged information was already being put even before the advent of computer programs. Although one has technically conveyed information in the manner of a literary work, the body of information thus conveyed often constitutes a highly utilitarian business tool not unlike other tools that third parties need to use in connection with myriad products and processes. However, the protection of tool designs turned historically on the altogether different legal logic of industrial property law, and not the generous modalities of the mature copyright paradigm.

The extension of copyright protection to computer programs and other electronic information tools in the 1980s broke with the 'utility model' solution of the past, and the resulting uncertainties cast doubt on the future ability of copyright law satisfactorily to mediate between public and private interests. For example, judicial application of copyright laws to electronic information processing should logically have conformed to the 'thin copyright' tradition historically afforded small-change factual and functional works in most countries. In reality, some American decisions concerning computer programs may have protected ideas, processes and other ineligible matter by grafting an overly broad reading of the exclusive reproduction rights, especially the right to prepare derivative works, onto the sibylline definition of computer programs added to Section 101 of the Copyright Act in 1980.

By persuading courts to overextend the exclusive right to prepare derivative works, copyright owners can assert proprietary claims to any subsequent innovations that to some extent exploit recognizable aggregates of the original data and instruction sets, even though the matter claimed to infringe contains virtually no personal expression and fulfills purely functional objectives. Carried to an extreme, the very process of standardization needed for the progress of artificial intelligence could enable early generations of programmers to lodge derivative work claims

---

10. *Feist Publications v. Rural Telephone Service, Inc.*, 111 S.Ct. 1212 (1991).

against those who use the prior art as components or building blocks in the most advanced posterior achievements.

To the extent that the highest judicial authorities both here and abroad fail to halt a reckless protectionist trend, manufacturers of electronic information tools stand to obtain patent-like protection on soft conditions for a very long period of time, even though innovation in information science occurs through 'sequential and cumulative improvements'.<sup>11</sup> If these restraints on trade, which cannot be squared with the traditional justifications for a copyright system, are blindly carried over to computer-generated productions and outputs of artificial intelligence machines, it will compound the resulting social disutilities. In the long run, overprotection on this scale will suffocate the very incremental innovation it was summoned to promote, and it seems destined to harm even the oligopolistic firms that lobbied so hard to obtain it.

When electronic information tools are viewed as copyrightable literary works, in short, the broad reproduction and adaptation rights of copyright law conflict with the traditional rights of both competitors and users under basic principles of industrial property law. The tool concept of industrial property law thus sheds considerable light on the uncertain status of small-change literary productions even in the pre-digital world of copyright law. A benign tolerance of these 'works' in that halcyon period violated cardinal principles of artistic property law by protecting functional tools masquerading as literary works. In this respect, copyright protection of computer programs as literary works merely converted yesterday's 'small-change' anomalies into the 'big bucks' anomalies of today. The difference is that electronic information processing constitutes the engine of twenty-first century economic development, and powerful lobbies are no longer satisfied with the 'thin' protection meted out in the past.

#### *Sui generalis protection of small-change literary productions*

In weighing the suitability of copyright protection for low-authorship factual works, commentators pit the competitor's wholesale appropriation of factual content against the compiler's lack of original expression, and they also stress a competitor's need to use the compiler's data to publish additional compilations of a more specialized character. From one angle, a considerable investment of time and money does not give rise to a work that bears the stamp of an author's personality. From another, free-riding threatens to discourage the collection and dissemination of valuable information.

Faced with this dilemma, the Nordic legislatures have provided short-term, copyright-like protection for non-copyrightable compilations, without apparently undermining copyright protection for those compilations that do satisfy the normal threshold requirements. The Nordic 'catalogue rule', while differing slightly from country to country, covers 'catalogues, tables and similar compilations in which a large number of particulars have been summarized', including databases. According

11. Karjala, Copyright, Computer Software and the New Protectionism, 28 *Jurimetrics J.* 33, 34-36, 62-96 (1987).

to Professor Karnell, eligibility under this neighbouring rights regime turns on the compiler's industrious effort and investment rather than on the quantum of creativity manifested through personal expression or in original works of authorship.<sup>12</sup> The catalogue rule prohibits slavish reproduction or duplication in whole or in part, and its protection lasts for a period of ten years from the year of first publication.

Under the Nordic regimes, the extent to which third parties can use recognizable segments of the first compilation in preparing different compilations of their own remains unsettled, but the weight of authority appears to tilt in favour of competitors. In contrast, the Commission of the European Communities has reportedly proposed a modified version of the Nordic catalogue rule that provides stronger protection for derivative works.

### *Applied literature: the French law on computer programs*

In 1985, France decided to subject computer programs to a modified copyright regime, in defiance of the 'unity of literature' gospel preached by the United States. The French law formally included computer programs in the list of copyrightable subject matter on a par with other literary and artistic works. This ensured that the international copyright conventions would apply. It then proceeded to recognize numerous derogations from general principles of copyright law that strongly resemble an improvised *sui generis* solution.

The French law on computer programs that was hurried into law in 1985 lacked a certain elegance, and it suffered particularly from inattention to the scope of protection issues that have emerged in the United States. This law nonetheless constituted an important advance because it recognized the inherent linkage between industrial art and industrial literature. In so doing, it conceded by implication that full copyright protection of industrial designs under the French regime of total cumulation amounts to overkill.

Unfortunately, the capacity of the 1985 law to provide useful data for a more general solution to the current crisis has been compromised by the European Community's Directive on Software. The Directive mandates a unity of literature approach closer to that of the United States, while deviating significantly from a number of traditional authors' rights' doctrines. The Directive on software thus presents many characteristics of a hybrid regime, and these deviant features may become more pronounced as it is implemented by the various domestic legal systems.

### *Integrated circuit designs*

The Semiconductor Chip Protection Act of 1984 (SCPA) has added another level of proprietary rights to an overloaded intellectual property scaffold. This *sui generis*

---

12. Karnell, The Nordic Catalogue Rule, in E.J. Dommering & P.B. Hugenholtz, eds., *Protecting Works of Fact*, at 68, 70 (stating that the aim is 'to protect enterprises that have spent capital and work on the production of a product of the kind from plagiarism and ensuing unfair competition by means of unwarranted reproductions').

Act provides ten years of copyright-like protection to ‘mask works’, that is, to the surface images of integrated circuit designs that are embodied in semiconductor chip products. The SCPA combines a threshold prerequisite of originality (in the sense of independent creation) with a loose novelty requirement, and it presupposes fixation of the ‘mask work’ in a semiconductor chip product by authority of the owner. Protection extends to the series of related images encoded in the chip, but not to ‘any idea, procedure, process, system, method of operation, concept, principle, or discovery’.

Independent creation remains a perfect defense to an infringement action under the SCPA, just as occurs in copyright law. However, one of the statute’s most innovative features was its adoption of a ‘substantial identity’ test for infringement, rather than the ‘substantial similarity’ test of copyright law. The substantial similarity test protects an author’s market interest, rooted in personal expression, and it applies to derivative works exploited on secondary market segments. In contrast, the substantial identity test ‘protects against the literal copying of a mask work and against the misappropriation of a material portion of a mask work’. It thus seems better suited to a functional milieu in which personal expression is not a factor.

The SCPA aimed to provide manufacturers of integrated circuit designs with a degree of lead time that was otherwise lacking due to the ease with which layout designs could be duplicated. At the same time, the SCPA did not preempt state trade secret laws, which come into play before a mask work is either registered or commercially exploited – that is, during the period when protection under the SCPA has not yet ripened. One could argue that the chip act, with its exclusion of circuit designs ‘that are staple, commonplace or familiar in the semiconductor industry’, merely provided a statutory form of pseudo or ‘portable’ trade secret protection for a single class of functional designs whose know-how was too easily appropriated by technological means.

This suspicion is reinforced by Section 906 of the SCPA, which expressly allowed third parties ‘to reproduce the mask work solely for the purpose of teaching, analyzing, or evaluating the concepts or techniques embodied in the mask work or the circuitry, logic flow, or organization of components used in the mask work’ and to incorporate the results in an otherwise independently created circuit design. In other words, reverse engineering by lawful means as opposed to slavish duplication constitutes as perfect a defense to an infringement action under the SCPA as to an action for the misappropriation of trade secrets in general.

The modified copyright approach adopted by the chip act makes it of considerable interest, even if this legislative response to sectoral protectionist demands adds to the clutter of ad hoc initiatives currently underway without clarifying the underlying conceptual framework. Despite the formal accoutrements of intellectual property laws, such measures look like thinly disguised trade barriers that benefit some industries but not others for reasons that defy reasoned analysis.

### *Unregistered design right*

The United Kingdom’s unregistered design right, enacted in 1988, deserves to be mentioned on the copyright side of the ledger insofar as it purports to protect both



aesthetic and functional designs on modified copyright principles. This law and its implications were discussed earlier in this study.

### *Applied art*

Applied art poses the same problems on the copyright side of the ledger as are posed by industrial designs on the patent side of the ledger. The difficulties of sustaining two such different methods of protecting essentially the same type of innovation are discussed in connection with industrial designs above.

### *Copyright protection of functional designs*

As previously mentioned, there was a period between 1968 and 1988 in which United Kingdom courts afforded copyright protection to three-dimensional functional designs that were nominally derived from two-dimensional engineering drawings or blueprints. A House of Lord's decision in the *British Leyland* case of 1986 attenuated this trend by removing automobile spare parts from copyright law. The Copyright, Designs and Patents Act of 1988 repudiated it altogether.

The extension of full copyright protection to wholly functional product designs devoid of personal expression constituted one of the most anomalous of all the mutants uncovered in this survey. Professor Cornish suggests that it reflects a judicial penchant for using copyright law as a 'roving misappropriation law' in countries that do not allow unfair competition law to fulfill the same purpose.<sup>13</sup> Yet, this expedient becomes economically untenable over time because copyright law implements cultural policies that restrain competition far more than a general purpose misappropriation law would be likely to do.

The United Kingdom's unregistered design right of 1988, discussed earlier in this study, ended the overprotection of functional designs in copyright law. Unfortunately, it adds to the clutter of ad hoc sectoral initiatives without addressing the hard conceptual questions that need to be answered in order to achieve a universally valid response to the present crisis.

## 2.3 QUASI-ARTISTIC RIGHTS ALLIED TO COPYRIGHT LAW

The foregoing discussion has deliberately omitted longstanding neighbouring rights laws, on the border with copyright law, that protect performers' renditions, broadcasts, and sound recordings.

Despite their dependence on new technologies, these neighbouring rights laws have nothing to do with stimulating technological innovation as such. The attention they continue to receive in that connection constitutes a false start that merely deflects attention away from the real nature of the current crisis.

---

13. W.R. Cornish, *Intellectual Property: Patents, Copyrights, Trademarks and Allied Rights*, at 306-307 (2nd ed. 1989).

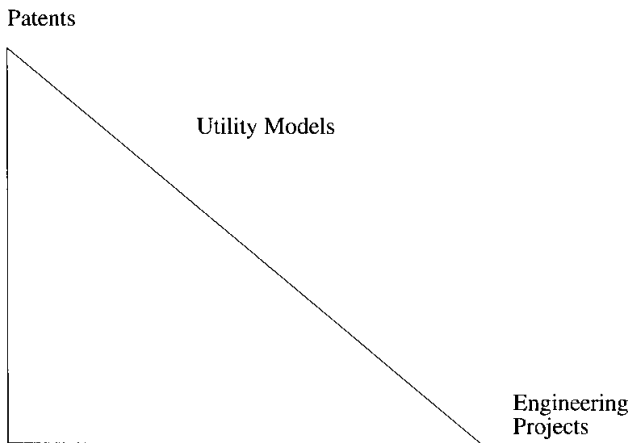
### 3. Toward a Third Intellectual Property Paradigm

#### 3.1 THE LEGAL HYBRIDS AS AN AUTONOMOUS ENTITY

##### *A different economic calculus*

All of the marginal cases identified above in some respects violate the negative economic premises of their respective master paradigms. On the patents side of *Figure 4*, for example, *all of the hybrid legal institutions protect innovation that normally fails the non-obviousness test of eligibility*. To the extent that economists justify industrial property protection in terms of the great technical superiority it encourages and rewards, that claim breaks down empirically as one moves into the marginal zone. In this zone, there is a palpable diminution in the strictness of the threshold prerequisites as one moves downwards from the ‘thick’ to the ‘thin’ end of the industrial property spectrum. This is illustrated in *Figure 5*, entitled ‘Descending Standards of Eligibility for Industrial Property Rights’, which is merely a specification of *Figure 4*.

*Figure 5. Descending Standards of Eligibility for Industrial Property Rights*



Furthermore, while older utility model laws pretended to require non-obviousness, some hybrid institutions on the industrial property side of the ledger abandon even the pretense of a qualitative standard of achievement. The level of creativity required for the United Kingdom’s unregistered design right or for Switzerland’s unfair competition law could conceivably fall below even the novelty requirement of the plant protection acts. Yet, a less than novelty standard, wherever it materializes, approximates the copyright standard applicable to literary and artistic works.

On the artistic property side of *Figure 4*, meanwhile, most of the hybrid institutions tend to disrupt competition affecting non-artistic goods that are distributed on

the general products market, in violation of the cardinal negative premise limiting application of the copyright paradigm to cultural goods. This distortion typically occurs because creations falling within the marginal zone are susceptible of a 'dualist' form of existence. When put forward as disembodied, two-dimensional representations of utilitarian ideas or of other functional or factual matter, they mimic the form of literary or artistic productions. The principle forbidding discrimination on the basis of merit then nudges them into copyright law. When the same matter is subsequently embodied in three-dimensional products, the manufacturer extends copyright protection to market segments on which industrial, rather than cultural exploitation occurs.

The anti-competitive effects likely to ensue from this creeping generalization of the 'two-market conundrum' are potentially far more significant than those that the older marginal cases might have engendered fifty to a hundred years ago. In the nineteenth century, for example, industrial design was truly marginal in the economic sense, because industrial objects reproduced in series still competed on the basis of technical yields, not style; moreover, electronic information processing had yet to be invented. Today, instead, industrial design drives the products market and computer programs constitute the engine of economic development. Yet, because every product has a functional design that could fall within, say, an unregistered design law and because every computer program is potentially copyrightable, *the cumulative effect of the marginal cases is to suspend the operation of the normal rules of competition at the very core of the post-industrial economy.*

It may be doubted that nineteenth century notions of unrestricted competition adequately meet the needs of a post-industrial economy in which the most valuable commercial products often consist of costly, intangible bundles of information that third parties can duplicate without incurring the time and expense of reverse engineering. This proposition will be explored later in this paper, although it is worth noting that the United States Supreme Court seems to have relied on the nineteenth century view in major recent decisions touching the free-rider problem. Yet, what the foregoing survey shows, if nothing else, is that application of the nineteenth century competitive model, as adjusted by its classical patent and copyright systems, has become increasingly chimerical in practice. *That model has been overwhelmed by the rise and rapid expansion of a countervailing group of deviant models that apply different and seldom explored economic principles.* The bigger picture that emerges from this survey does not just concern the evolution of intellectual property rights, in short. It concerns the changing nature of competition in the so-called information society, changes that all the attention bestowed on the classical patent and copyright systems in recent years may paradoxically have obscured.

Because these changing regulatory models continue to arise in a haphazard manner, with no unifying principle or standards, they tend inherently to breed chronic states of under- and over-protection. The oscillations of industrial designs between one such state or the other over a two-hundred year period of regulatory activity were charted in one of this writer's previous monographs. In retrospect, design protection appears to have been a precursor of the many legal hybrids that world intellectual property law would strive to accommodate in the last half of the twentieth century.

As to these marginal cases, factors pulling for over- or underprotection exist on

both sides of the classical line of demarcation. On the copyright side of *Figure 4*, for example, a broad derivative work right sometimes favours overlapping claims to incremental innovation while restricting access to ideas, methods and processes by indirect means and for a very long duration. At the same time, underprotection can result from the inability of copyright-like models to protect the internal dynamic features of technological innovation, in which idea and expression merge, and from the lack of any exclusive right to control end use. Similarly, overprotection on the industrial property side of *Figure 4* results from the progressive monopolization of ever smaller aggregates of inventive activity. By the same token, the non-obviousness standard and its variants can favour chronic underprotection by excluding the bulk of the incremental innovation that underlies today's most promising technologies.

#### *A permeable line of demarcation*

These mixed economic signals emitted from both sides of the division portrayed in *Figure 4* add to the abundant evidence casting doubt on the continued validity of the classical line of demarcation under modern conditions. The survey suggests, indeed, that the marginal cases on either side of that line seem to flow into one another without encountering any meaningful resistance from it. A typeface design converted into a computer program will claim entry into the small-change of copyright law, as will the digitalized design of a sweater nominally excluded from the same copyright law on other grounds. Electronic circuit designs traditionally excluded from utility model laws may at different times qualify for protection as an unregistered design, as a computer program, as a technical drawing, as an integrated circuit design, and as a patentable invention, not to mention trade secret protection of the pertinent know-how. The overlapping rights acquired in this fashion make the degree of protection actually acquired in any particular case turn on accidental or trivial aspects of the innovation in question. The cumulative legal product seems a caricature of the international intellectual property system as conceived in the nineteenth century.

That the marginal cases on either side of the dividing line appear to flow into one another also tallies with complaints that the non-obviousness standard has been falling lower and lower or that artistic property law sometimes affords patent-like protection, say, of computer programs. The inability of the classical line of demarcation to impede this flow then suggests that, under modern conditions, the line itself has become increasingly meaningless and that the marginal cases on either side of that line cannot be distinguished from each other. A review of all the deviant cases confirms this insight, namely: *that the legal hybrids identified in the survey actually resemble each other more than they resemble art and inventions, the prototypical subject matters of the dominant paradigms.*

It is useful to reconsider some of their common characteristics in this light. Few, if any, of the subject matters governed by hybrid legal regimes actually partake of art in the historical sense. This lack of affinity is accentuated when the objects of neighbouring rights regimes that do border on artistic works, such as those protecting performances, broadcasts, and sound recordings, are filtered out of the survey

because they do not promote technological innovation and in no way disrupt the negative function of the patent system. Moreover, none of the hybrid regimes require the strict evaluation of merit characteristic of a mature patent system, while all of them tend to allow the market directly or indirectly to determine the value of their respective subject matters. (To the extent that even the validity of traditional utility patents in the United States increasingly depends on secondary factors, such as commercial success and copying, the patent law itself is opening towards market-determined values). Finally, most of the deviant subject matters also lead a dualist existence that enables them to compete either as disembodied representations of non-protectible matter or as components of material supports that are distributed on the products market.

That the marginal cases resemble each other more than they resemble art or inventions is of capital importance in arriving at a systemic clarification of the problem. It should be remembered that Kohler and Picard coined the term 'intellectual property' because they thought patents, copyrights, and trademarks had more in common with each other than with the categories of tangible property inherited from antiquity. *That the legal hybrids resemble each other more than they resemble the true objects of classical copyright and patents systems likewise suggests that one is witnessing the formation of a new intellectual property paradigm that has much to reveal about the economics of competition in a post-industrial marketplace.*

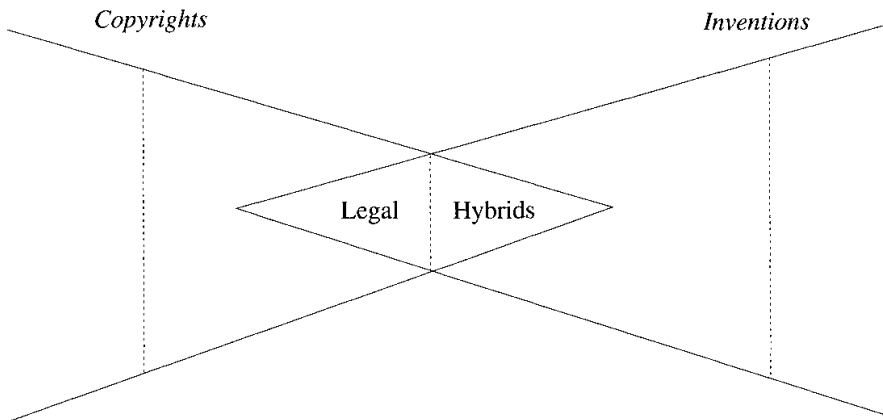
These insights mandate a rectification of the working hypothesis adopted at the outset of this study. The reader will recall that, in the classical international framework, artistic and industrial property meet face to face at the line of demarcation running between the Great Conventions, as shown in *Figures 1, 3 and 4*. In *Figure 3*, the two domains were portrayed as spectrums in which the level of protection varied from 'thick' to 'thin' according to the subject matter in question. A simplifying assumption was then made to the effect that deviant intellectual property regimes within the classical universe of discourse, if observable at all, would logically tend to group themselves at the 'thin' edges of their respective jurisdictional spheres. This hypothesis was graphically illustrated in *Figures 3 and 4*.

The foregoing observations now make it possible to adjust that assumption to better conform to empirical reality. What the survey actually reveals is that *the patent and copyright paradigms have thrust deeper and deeper into each other's jurisdictions in order to provide some makeweight or emergency form of protection for marginal subject matters that resemble each other more than they resemble 'inventions' or 'works of art'*. For example, deviant modalities appearing within the domain of artistic property, such as copyright protection of computer programs, sometimes actually deliver a thick form of protection that emulates patent law more than the thin scope of protection that copyright courts historically afforded functional and factual works. To the extent that courts evaluating the inventive height of utility models during infringement actions take commercial success into account, the market will indirectly determine value in the manner of copyright law, and judges will retroactively adjust the eligibility and scope of protection criteria to reflect this calculus.

### *Overlapping jurisdictional spheres*

Contrary to the classical tenets of the international intellectual property system, in sum, the data do not show two distinct jurisdictional spheres meeting at a common line of demarcation with no space in between. What the data show is that the *two jurisdictional spheres identified above actually overlap without regard to the historical line of demarcation grounded in the regulation of the products market by the patent paradigm*. This finding is represented in *Figure 6*, entitled ‘Overlapping jurisdictional spheres’.

*Figure 6. Overlapping Jurisdictional Spheres*



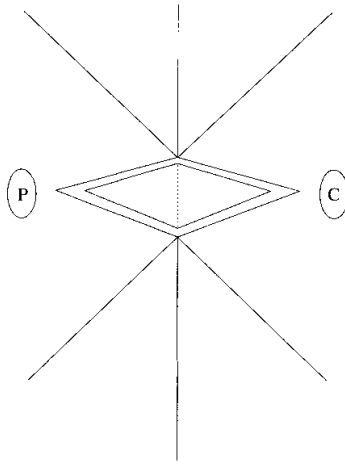
A number of conclusions follow from these findings. First, nothing has so far emerged from the survey of legal hybrids that casts doubt on the continuing validity of the master paradigms with respect to true inventions or works of art in the ordinary and historical sense. To the extent that current economic literature continues to challenge or defend the workings of these paradigms with respect to their traditional objects of protection, neither side can take much comfort from the data reported herein. *Crucial problems arise in an intermediate zone between the patent and copyright paradigms*. Analysis of this zone has been handicapped, however, by the difficulty of pinpointing either its overall dimensions or even its locus within an international intellectual property system still premised on the non-existence of any open space between the constituent subsystems of a bipolar structure.

The empirical survey resolves this paradox by showing that the dominant paradigms actually overlap instead of meeting face to face. As *Figure 6* indicates, the supposedly non-existent space actually resides within the intersecting regions of the dominant paradigms themselves, on either side of the classical line of demarcation. The intermediate zone of copyright law thus extends into the industrial property spectrum and mingles almost imperceptibly with its natural constituents; the intermediate zone of industrial property law likewise extends into the sphere of artistic property and mingles almost imperceptibly with its regular constituents. The true outlines of the intermediate zone as a whole become visible, indeed, only when the

observer focuses attention on the similarities of its overlapping constituent parts rather than on the dissimilarities of 'art' and 'inventions'.

A chart of the real motions of the intellectual property universe, as set out in *Figure 6*, can then be enhanced by a number of technical adjustments based on the preceding observations. First, one can physically separate the overlapping spheres in such a way as to leave the intermediate domain of marginal cases intact. This isolates the common domain, while indicating that the master paradigms retain their integrity outside that zone. *Figure 7*, entitled 'Real Locus of the Intermediate Zone', embodies this adjustment.

*Figure 7. Real Locus of the Intermediate Zone*



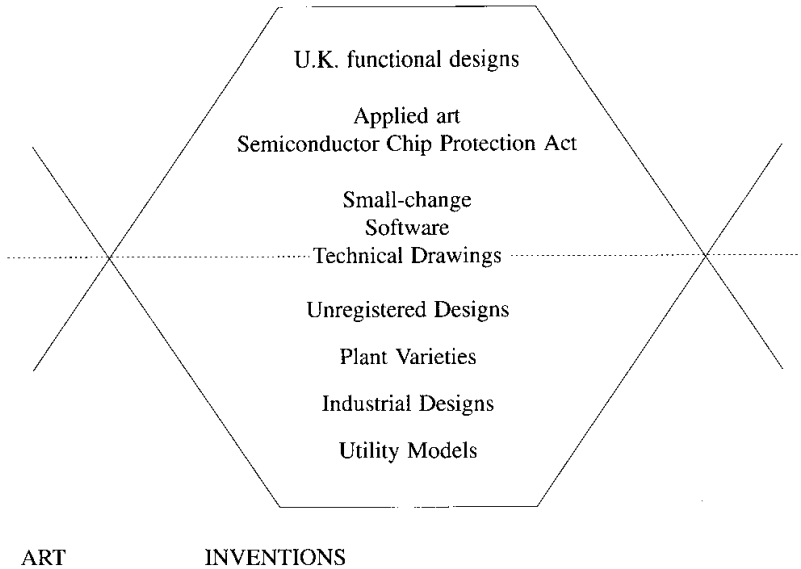
Further adjustments are then in order. For example, the classical line of demarcation running between the dominant paradigms can be suppressed within the intermediate zone, once that zone is isolated from the jurisdiction of the dominant subsystems and viewed as an entity in its own right. This conforms to the data showing that, within the intermediate zone, the formal line of demarcation constitutes an utterly permeable non-barrier. It also expresses the fact that, within the marginal zone, all the constituent members affect the products market in one way or another, and none of them partakes of art in the historical and ordinary sense.

The proximity of the intermediate zone to the dominant paradigms still conveys a false sense of homogeneity, however, which wrongly suggests that some facile relation between this zone and its bigger and more established neighbours lies readily at hand. In reality, *the classical distinction between patents and copyrights breaks down altogether within the marginal or intermediate zone*. There one finds an amalgamation of protective devices drawn from both of the dominant jurisdictions and meted out in a heterogeneous and sometimes almost haphazard basis that varies with the artificial legal pigeon holes any given creation happens to fit.

To capture these complexities, one may portray the intermediate zone as an autonomous entity independent of its evolutionary locus at the juncture of the dominant intellectual property subsystems. One can then logically detach this entity from

its historical matrix and situate it at a certain distance from its overarching progenitors, in order to suggest its potentially autonomous character. These last adjustments are accomplished in *Figure 8*, entitled ‘The Legal Hybrids as an Autonomous Entity’.

*Figure 8. The Legal Hybrids as an Autonomous Entity*



*Figure 8* confirms that, in the space where the patent and copyright systems overlap, legal hybrids multiply and thrive notwithstanding the contradictions they breed. This common domain, largely hidden from view by the paradigmatic blinkers of ordinary legal thought, operates with a different legal and economic logic, and its microcosmic operations increasingly distort and destabilize the workings of the master paradigms themselves. Identifying the common denominator that underlies these regimes, and devising a unified response to the challenge it poses, then become primary objects of inquiry.

### 3.2 A UNIFIED, SYSTEMIC RESPONSE

#### *Incremental innovation bearing know-how on its face*

The findings set out above, together with those of this author’s previous studies, suggest that in one form or another, *the hybrid systems under review all aim to protect intangible industrial know-how that becomes exposed to the risk of instant duplication when embodied in objects sold on the open market.* Originators falling within the marginal zone cannot normally preserve trade secret or confidentiality rights be-



cause their most valuable know-how leaves the factory with the products in which it is embodied. At the same time, these intangible creations enjoy little or no natural lead time because third parties who duplicate tangible products embodying this know-how can obtain insuperable comparative advantages on the relevant market segments.

Viewed from this angle, a parallel exists between the failure of certain new technologies to obtain adequate protection under the master paradigms of world intellectual property law and the much older and better documented difficulties facing industrial design in the same universe of discourse. Like industrial design, much of today's most advanced technology enjoys a less favourable competitive position than that of conventional machinery because the unpatentable, intangible know-how responsible for its commercial value becomes embodied in products that are distributed on the open market. A product of the new technologies, such as a computer program, an integrated circuit design, or even a biogenetically altered organism *may thus bear its know-how on its face, a condition that renders it as vulnerable to rapid appropriation by second comers as any published literary or artistic work*. Because third parties who duplicate the embodied information can rapidly offer substitute products at lower prices than those of the originators, there is no secure interval of lead time in which to penetrate the market and to recuperate the originators' initial investment (as well as losses from prior, unsuccessful essays), not to mention the need to show a profit.

When innovators turn to the world's intellectual property system for relief, however, they are stymied by its bipolar structure cast in terms of 'art' and 'inventions'. *Present-day innovation fits imperfectly within either category because the bulk of today's most valuable innovations flow from incremental advances in applied scientific know-how and because the line between theoretical and applied science has itself broken down in the information age*. Viewed as industrial inventions, these advances often appear too incremental or too small in scale to qualify as major breakthroughs under the non-obviousness or inventive step requirements of patent law. At the same time, these technologies serve impersonal, functional goals that make them alien to the spirit of copyright law, which historically rewards works of art and literature without encroaching on the domain of industrial property law.

In short, because a product of today's most economically significant technologies *often bears its know-how on its face, like any artistic work, it may forfeit all lead time from the moment that the market determines its value or even earlier should commercial success appear imminent*. The fear is that these technologies, if left to fend for themselves in this nether world between the dominant subsystems, will attract insufficient investment in costly research and development owing to the great risk of loss inherent in the innovative enterprise and to the likelihood that imitators rather than innovators will reap the rewards of success in the end.

World intellectual property law has accordingly come under intense pressure to *alleviate this perceived risk aversion by providing innovators with artificial lead time through one legal device or another*. The response has varied with the technology in question, and the cumulative efforts are clearly mirrored in a patchwork quilt of protective legal hybrids, complemented by an increasingly supple law of trade secrets, that has strained the classical system of intellectual property law to the

breaking point. These hybrid devices uniformly deviate from the standard behavioural assumptions underlying the classical modes of protecting industrial or artistic property, and they occupy no discrete position of their own within the international intellectual property system established by the Paris and Berne Conventions over a century ago.

Taken together, these makeshift legal solutions reveal the extent to which applied scientific know-how, inadequately served by the traditional patent law matrix, now poses a serious threat to the stability of an international system built around a static notion of 'industrial property' that no longer corresponds to empirical reality. The provision of a third intellectual property paradigm to meet this challenge has thus become a critical task for world economic development.

*Logic of a modified copyright approach*

*Figure 9*, entitled 'Legal Recognition of the Intermediate Zone', suggests that the creation of an autonomous legal regime to protect interested parties against the appropriation of unpatentable technological know-how would relieve mounting pressure on the international intellectual property system. By cutting its marginal zone loose from the interstices of the bipolar structure elaborated in the nineteenth century, this regime would allow the dominant paradigms of that system to resume their natural functions. At the same time, it would provide a carefully calibrated response to the challenge of the marginal cases, one that takes account of the different economic values at stake. Rather than stretching the patent and copyright subsystems beyond the logic of their historically evolved paradigms, this new legal institution would strike a balance between private and public interests that better reflects the needs of a post-industrial society in the 'age of information'.

*Figure 9. Legal Recognition of the Intermediate Zone*

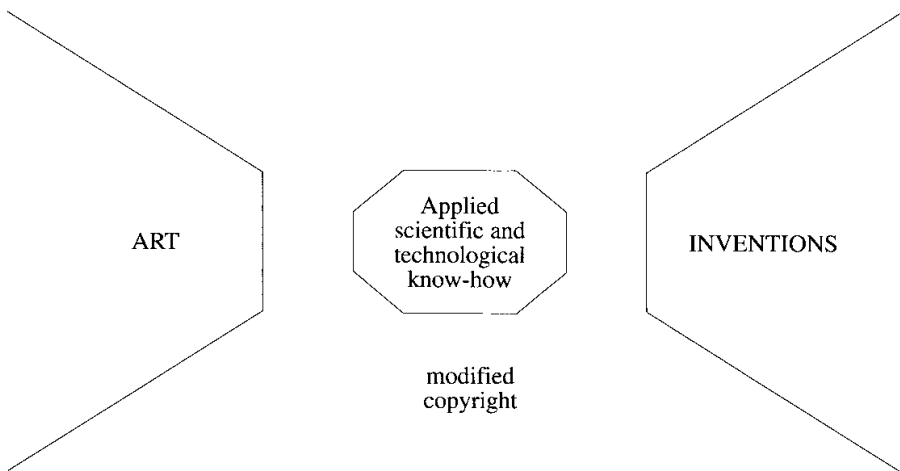
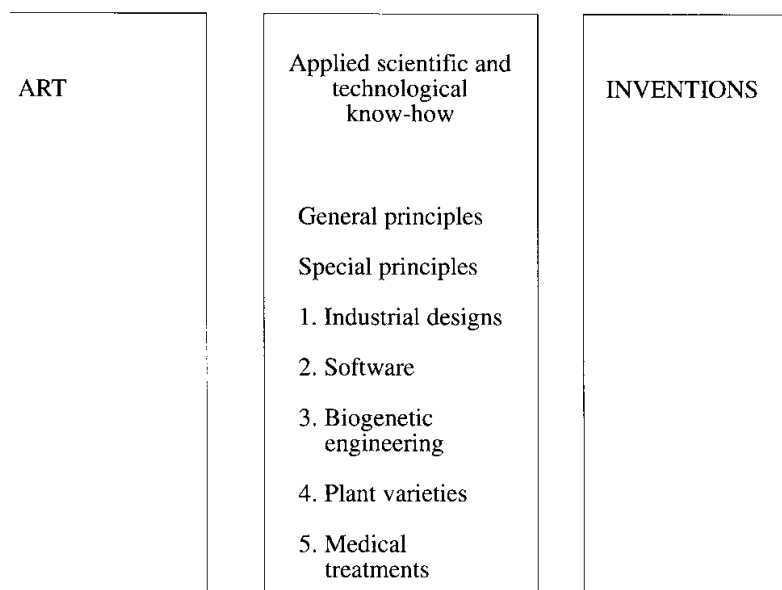


Figure 10, entitled 'Paradigmatic Response to the Disruptive Legal Hybrids', suggests that the proposed new regime should implement a unified set of general principles applicable to all the marginal cases. Rather than continuing to elaborate ad hoc legislative solutions for every new technological advance, specific exemptions and immunities to accommodate the peculiarities of each constituent subject matter would be formulated as needed. This would parallel the methodology prevailing under the Berne Convention, which recognizes certain ad hoc rules for specific subject-matter categories over and above the basic minimum standards applicable to them all.

Figure 10. *Paradigmatic Response to the Disruptive Legal Hybrids*



A paradigmatic response geared neither to art nor inventions but to applied scientific know-how as such, regardless of the medium of expression, should recast the balance between innovation and competition in terms of twenty-first century economic needs. It should provide a minimum degree of artificial lead time in which innovators can penetrate the market, recoup their investment, and try to turn a profit. It should protect the dynamic, behavioural aspects of the innovation as a whole, and not trivial or static features randomly singled out by intellectual property laws developed for different social and economic purposes. Above all, it should deter free-riders by preventing what Professor Davis calls 'the trivial acquisition of functional equivalence' without unduly impeding fair followers from developing incremental innovation of their own.<sup>14</sup>

14. See Davis, *Intellectual Property and Software: the Assumptions are Broken*, *WIPO Symposium on Artificial Intelligence*, at 115.

A future study will reexamine the existing hybrid regimes with a view to identifying their most noteworthy adaptive responses, and it will explain how these ingenious features might be refined and integrated into a unified whole. For present purposes, it is worth noting that any valid attempt to regulate applied scientific and technological know-how as such must depart from a modified copyright model rather than from the modified patent model characteristic of certain nineteenth century hybrid regimes.

The persistence with which industries exploiting the latest technologies keep repeating the demands for copyright protection long voiced by sectors of the design industries and their supporters suggests that more is at stake than the avoidance of free competition. A plausible explanation is that certain regulatory features of the mature copyright paradigm inherently provide a unique response to the economic needs of these same industries notwithstanding the industrial character of the subject matter at issue. With this hypothesis in mind, one should recall that copyright laws have largely evolved their present physiognomy because they deal with intellectual goods not protectible as trade secrets that require no reverse engineering to appropriate. To the extent that their soft modalities of protection constitute a valid economic response to the behaviour of literary and artistic works under free-market conditions, one may logically postulate that similar modalities of protection, suitably modified for a functional milieu, could accommodate technological know-how that behaves in the market place like works of art and literature notwithstanding its industrial character.

From a behavioural standpoint, for example, investors in applied scientific know-how find the copyright paradigm attractive because of its inherent disposition to supply artificial lead time to all comers without regard to innovative merit and without requiring originators to preselect the products that are most worthy of protection. The peculiar modalities of this paradigm then protect the market-determined values of eligible innovation on a nondiscriminatory basis, against copying only, for a lengthy period of time, and they provide a winner-take-all reward that helps to overcome risk aversion. However, the same modalities exculpate fair followers who independently fashion their own creations by exploiting unprotectible matter in the originators' creations, a strategy likely to improve any technology available to the public at large.

If these insights proved accurate, it would not follow that new technologies that depend upon incremental innovation should obtain the generous modalities of the mature copyright paradigm. The opposite is true. Developed with different purposes in mind, the full copyright model provides too many industrial creations with too much undifferentiated protection for much too long a time to promote technological progress in a satisfactory manner. The foregoing observations do suggest that the legal protection of applied scientific know-how could benefit from a judicious adaptation of the copyright modality that did not unduly disrupt the workings of a competitive market for industrial products.

*It follows that a modified copyright approach to new technologies falling between the patent and copyright paradigms could yield unexpected social benefits, even though application of the full copyright paradigm to these same technologies tends to suffocate innovation and to produce intolerable restraints on trade.* A fuller elaboration of the structure and inner logic of this modified copyright approach must

await a later study. In the meanwhile, no one should doubt the potential importance of a third intellectual property paradigm for post-industrial economic development.

Although some may continue to believe that more of every kind of protection benefits present-day innovators, the evidence suggests that a cumbersome legal process has itself begun to slow the pace of innovation and that it has especially harmed the small and medium-sized firms that are often its major exponents. Those who fear the foreseeable complications of a *sui generis* approach to a unified marginal zone should therefore ponder the fate of existing intellectual property regimes that are put to abusive and inconsistent applications. Wherever one looks, indeed, one is struck by the extent to which the laws applicable to patents, copyrights, trade secrets, unfair competition, trade marks, and industrial design are themselves increasingly destabilized by the need to deal with aspects of new technologies for which they are inherently unsuited.

Rather than facing up to the new problems that might arise from a paradigmatic response to applied scientific know-how as such, the intellectual property community is currently experiencing the simultaneous evolution of numerous poorly designed *sui generis* laws, as both new and traditional regimes mutate in unexpected ways under the pressure of events. Sooner or later, unless the urge to throw stop-gap legal hybrids at a moving target is resisted in the interest of a more rational and constructive approach, a discredited intellectual property system risks collapsing of its own protectionist weight.

## Selected Bibliography

*Editor's note:* Nearly all the author's footnotes and general bibliographic references have been omitted for reasons of space. Previous studies by the same author are listed below. These studies provide an empirical foundation for the present monograph and they cite most of the relevant literature on which the present study relies.

1. Reichman, *Proprietary Rights in the New Landscape of Intellectual Property Law: An Anglo-American Perspective*, paper presented to the International Literary and Artistic Association (ALAI), Congress of the Aegean Sea II, Athens, Greece, April 19-26, 1991 (forthcoming 1992).
2. Reichman, *Proprietary Rights in Computer-Generated Productions*, in World Intellectual Property Organization (WIPO), *Worldwide Symposium on the Intellectual Property Aspects of Artificial Intelligence*, pp. 205 et seq. (1991).
3. Reichman, *Electronic Information Tools – The Outer Edge of World Intellectual Property Law*, paper presented to the Symposium on Copyright Protection for Computer Databases, CD-Roms & Factual Compilations, sponsored by the Program in Law & Technology, University of Dayton (Ohio) School of Law, November 8-9, 1991 reproduced in *U. Dayton L. Rev.* (forthcoming 1992).
4. Reichman, *Design Protection and the New Technologies: The United States Experience in a Transnational Perspective*, 19 *U. Baltimore L. Rev.* 6 (1989/90), abridged version reproduced in 1991 *Industrial Property* 220 (Pt. I), 257 (Pt. II), and 1991 *La Propriété Industrielle* 228 (Pt. I), 271 (Pt. II).
5. Reichman, *Computer Programs as Applied Scientific Know-How: Implica-*

- tions of Copyright Protection for Commercialized University Research, 42 *Vanderbilt L. Rev.* 639 (1989).
6. Reichman, Intellectual Property in International Trade: Opportunities and Risks of a GATT Connection, 22 *Vanderbilt J. Transnational Law* 747 (1989).
  7. Reichman, Goldstein on Copyright Law: A Realist's Approach to a Technological Age, 43 *Stanford L. Rev.* 943 (1991).
  8. Reichman, Design Protection in Domestic and Foreign Copyright Law: From the Berne Revision of 1948 to the Copyright Act of 1976, 1983 *Duke L. J.* 1143.
  9. Reichman, Design Protection After the Copyright Act of 1976: A Comparative View of the Emerging Interim Models, 31 *J. Copyright Society U.S.A.* 267 (1984).



# Standardization and the EC Directive of 14 May 1991 on the Legal Protection of Computer programs

*Michael Lehmann*

The Directive on the legal protection of computer programs<sup>1</sup> was adopted just in time. After a long and tiresome international discussion,<sup>2</sup> the EC Directive now undertakes to harmonize copyright protection within the Member States and integrate it into the Berne Convention. The staggering European computer industries need this 'legal aid' desperately:<sup>3</sup> although the worldwide turnover of the computer industries amounts to 700 billion ECU, Europe can claim only a relatively small share of it, 175 billion ECU, and the European market share of IBM, already dominating the world market, is bigger than the combined shares of Siemens/Nixdorf, Bull, Olivetti and Philips in Europe.

The shortcomings of the European industries are due to, *i.a.*, a dramatic lack of European standardization, especially concerning computer interfaces. This situation drastically hinders *interoperability*, a principle which might guarantee that every acquirer can assemble his computer system with components from different vendors or licensors, without taking the risk that these system components cannot interoperate optimally with each other or the risk that a component from one seller cannot be replaced by that of another vendor. The Commission, especially DG IV (Competition), and the European Parliament, therefore, wanted to safeguard the efficient functioning of a European computer market concerning hardware and software.<sup>4</sup>

## 1. International Standardization

The Directive stresses in its recitals<sup>5</sup> that computer programs are playing an increasingly important role in a broad range of industries. Computer program technology

---

1. OJEC No L 122/42 of 14 May 1991.

2. Beginning with the first proposal for a Council Directive on the legal protection of computer programs of 5 January 1989, OJEC No C 91/4.

3. See report of the Commission concerning the European electronic and informatic industries: situation, chances, risks, and proposals for actions, SEK (91) 565 fin.; Council doc. 5653/91.

4. For further details see M. Lehmann, Die Europäische Richtlinie über den Schutz von Computerprogrammen, *GRUR Int.* 1991, 327; Th. Dreier, The Council Directive of May 14, 1991 on the legal protection of computer programs, *EIPR*, 1991, 9.

5. *Supra* note 1, at 42, 43.



can accordingly be considered as being of fundamental importance for the Community's industrial development. Together with genetic engineering, it is one of the key industries for European economic growth towards the year 2000.

The laws of the Member States contain many differences in the legal protection of computer programs. For instance, no copyright protection is available in Portugal and Greece; in Germany a special level of creativity is required. These differences have had negative effects on the functioning of the common market; they might well have become even greater if each Member State had introduced independently new legislation regarding the protection of computer programs. Moreover, international protection by the Berne Convention might have become impossible.

In its recitals, the Directive expressly refers to the current European efforts to promote adequate industrial standards within the common market: 'The Community is fully committed to the promotion of international standardization.' A similar statement can be found concerning the telecommunication sector in the Council's Decisions relating to standardization in the field of information technology and telecommunication.<sup>6</sup> So far, however, the European Commission in its Green Paper on the '*Development of the European Standardization: Measures for a faster technological Integration in Europe*',<sup>7</sup> has not yet presented any specific provisions for the European computer industries; nor have CEN, CENELEC and ETSI.

## 2. Interfaces

The Directive defines<sup>8</sup> interfaces as follows: 'The parts of the program which provide for (such) interconnection and interaction between elements of software and hardware'. To promote interoperability, the Commission originally considered excluding interfaces entirely or in part from copyright protection<sup>9</sup> or of requiring their publication in accordance with the antitrust provisions of Articles 85 and 86 of the EEC Treaty.<sup>10</sup> Article 1 (2) of the Directive now expressly emphasized that all ideas and principles underlying a computer program, including its interfaces, remain free.

On the other hand, the specific implementation or configuration of a particular creatively designed interface may qualify for copyright protection: 'Ideas and principles which underlie any element of a computer program, including those which underlie its interfaces, are not protected by copyright under this Directive'. In the light of the continuing advancement of standards and standardization of interfaces, the requirement for copyright protection of interfaces (see Article 1 (3): 'own intellectual creation') will be fulfilled only in exceptional cases.<sup>11</sup> In particular the logic,

6. See the next to last recital of the Directive, *supra* note 1, at 44.

7. See also the position of the Economic and Social Committee of the EC, OJEC No C 120/28 of 20 March 1991 (published 6 May 1991).

8. See Recitals, *supra* note 1, at 43 (left column).

9. Cf. Green Paper on Copyright and the Challenge of Technology. Copyright Issues Requiring Immediate Action, COM (88) 172 of 23 August 1988, 170 *et seq.*

10. Cf. M. Lehmann, *CR* 1989, 1085; *id.* (ed.), *Rechtsschutz und Verwertung von Computerprogrammen*, 1988, 513; D. Schroeder, *Computerrechts-Handbuch*, 1990, 73, No 14 *et seq.*; Decision of the Commission of 15 December 1986 (X/Open Group), OJEC No L 35/36 of 6 February 1987.

11. Cf. M. Lehmann and Th. Dreier, The legal protection of computer programs: certain aspects of the proposal for an (EC) Council Directive, 6 *Computer Law & Practice* 92 (1990).

the algorithm and the programming language of a program are generally free, as well as all standardized interfaces.

### 3. Interoperability and 'Reverse Engineering'

The mandatory (cf. Article 9) provision of Article 6 of the Directive limits the exclusive rights of the copyright holder, especially his rights of reproduction and translation under Article 4(a) and (b). This was probably the provision most disputed by the computer lobby in the course of the preparatory consultations.<sup>12</sup> Originally, the Commission's draft had intended to transfer this problem to antitrust law.<sup>13</sup> In the attached 'Conclusions of the Commission',<sup>14</sup> already mentioned, this problem was addressed only as follows: 'For example, under certain circumstances the exercise of copyright as to the aspects of a program, which other companies need to use in order to write compatible programs, could amount to such an abuse.' The quoted passage refers to interfaces.

The starting point for a correct understanding of Article 6 must, therefore be the principle stated in Article 1: the ideas and principles underlying interfaces are not eligible for copyright protection. Because these ideas and principles must be used to establish the interoperability<sup>15</sup> of the products (hardware and/or software),<sup>16</sup> this requires the limitation of the absolute rights of the creator of a program to ensure access to these ideas and principles. Phrased in the words of the recitals of the Council of Ministers:<sup>17</sup>

'Whereas the unauthorized reproduction, translation, adaption or transformation of the form of the code in which a copy of a computer program has been made available constitutes an infringement of the exclusive rights of the author;

Whereas, nevertheless, circumstances may exist when such a reproduction of the code and translation of its form within the meaning of Article 4(a) and (b) are indispensable to obtain the necessary information to achieve the interoperability of an independently created program with other programs;

Whereas it has therefore to be considered that in these limited circumstances

12. M. Sucker (at the time DG IV, Competition) remarked once that he had never experienced such an extensive international and European lobby fight on the contents of a particular European Directive. The importance could also be seen from the daily press; cf. U. Imenga, *Wege zur Software-Piraterie*, FAZ of 8 November 1990, 19; *see also* M. Lehmann, *CR* 1990, 749; M. Sucker, *CR* 1990, 811.

13. *See* OJEC No C 91/4 of 12 April 1989.

14. *Supra* note 13, at 16.

15. The Directive defines interoperability 'as the ability to exchange information and mutually to use the information which has been exchanged'. Cf. Recitals *supra* note 1, at 43.

16. It should thereby be made clear that interfaces are not only accessible to a reverse analysis, but that the information thereby obtained may also be used for the connection of a compatible product (hardware and/or software). A pure decompiling without the possibility of use would be an academic experiment; cf. Recitals *supra* note, at 43: 'An objective of this exception [Art. 6] is to make it possible to connect all components of a computer system, including those of different manufacturers, so that they can work together.'

17. *Supra* note 1, at 43.

only, performance of the acts of reproduction and translation by or on behalf of a person having a right to use a copy of the program is legitimate and compatible with fair practice and must therefore be deemed not to require the authorization of the rightholder;

Whereas an objective of this exception is to make it possible to connect all components of a computer system, including those of different manufacturers, so that they can work together ...'

In the Communication of the Commission to the European Parliament in accordance with Article 149(2)(b) EEC Treaty,<sup>18</sup> a disputed point was also clarified more closely. During the formulation of this Directive within the Commission, this point was particularly disputed amongst the Directorates General (DG III on one side, and DG IV and XIII on the other side). It involves the question of interoperability of a 'competing product', meaning the question of whether decompilation is allowed to establish the interoperability of a competing product.

The Commission stresses that an independently created computer program using interface information derived through decompilation need not be interoperable with the program which has been decompiled, but rather may compete with it and not connect to it. In other words, decompilation may be used to create, for example, a compatible operating system or BIOS that will not interoperate with other programs in the same way as the decompiled program. Decompilation is not allowed if it does not serve to achieve interoperability, but only to facilitate and save costs in the course of the development of a competing product.<sup>19</sup>

In general, if one studies the wording of Article 6 in detail, the thought of 'over-regulation' is obvious here, considering the meticulous definition of the restrictive conditions (cf. Article 6(1)(a-c) as cumulative conditions) for allowing reverse analysis, which cannot be justified by copyright considerations alone,<sup>20</sup> the exact definitions of the purposes for which the information obtained in the course of the decompilation may be used (cf. Article 6(2)(a-c)), and the general clause of Art 6(3) which follows it.

The latter provision is intended to underline the agreement between the Direc-

18. Treaty of 18 January 1991, Doc. (91) 87 final - SYN 183.

19. Cf. the exact wording, *supra* note 18: 'Decompilation is permitted by Article 6 to the extent necessary to ensure the interoperability of an independently created computer program. Such a program may connect to the program subject to decompilation. Alternatively it may compete with the decompiled program and in such cases will not normally connect to it. Article 6 does not, however, permit decompilation beyond what is necessary to achieve the interoperability of the independently created program. It cannot therefore be used to create a program reproducing parts of a decompiled program having no relevance to the interoperability of the independently created program.'

20. Cf. M. Lehmann, *CR* 1989, 1057; *idem*, *CR* 1990, 94; H. Haberstumpf, *CR* 1991, 129; K.A. Bauer, *CR* 1990, 89; V. Ilzhöfer, *CR* 1990, 578; M. Kindermann, *CR* 1990, 638. The Commission makes efforts here, especially under the pressure of interested software manufacturers, to exclude every conceivable misuse, especially software piracy in connection with a reverse analysis. This also involves the protection of know-how and industrial secrets (*but cf.* Art. 9(1)), which are incorporated in a computer program and could be discovered by the competition in a decompilation.

tive and the Berne Convention, especially with respect to Article 9(2) Berne Convention,<sup>21</sup> and also corresponds to the Anglo-American concept of *fair use*. Decompilation may not unreasonably prejudice the legitimate interests of the copyright holder or conflict with the normal exploitation of a computer program. On the basis of Article 6(3), courts can enjoin misuse in connection with a reverse analysis in cases that are not directly covered by the wordings of Articles 6(1) and (2).<sup>22</sup>

If one wishes to attempt to reduce the conditions of Article 6 to a few expressive formulae, the reverse analysis relating to interfaces can be considered legitimate as *ultima ratio*<sup>23</sup> if the interoperability of computer programs<sup>24</sup> cannot be achieved otherwise. Any competitor may develop a compatible and competing product which will not normally connect to the program which has been analyzed, but rather to other programs.<sup>25</sup> The basic intention of Article 6 is to permit competition<sup>26</sup> on all levels (hardware and/or software), so that every purchaser can assemble his computer system with components from different sources like building blocks, without taking the risk that these system components cannot interoperate optimally with each other or that a component from one vendor cannot be replaced by that of another vendor.<sup>27</sup>

Hopefully, the future standardization of interfaces will also help to defuse the present explosive nature of this problem, especially as suppliers that dominate the market must already publish their interface information<sup>28</sup> for reasons relating to antitrust law.

- 
21. Contrary to M. Kindermann, *CR* 1990, 638, it is not equally possible to derive a convincing argument against reverse analysis from this, because Art. 9(2) Berne Convention provides for an exceptional circumstance which, beginning with the intention of the legislators, is well adapted to this reverse analysis and thereby to the related 'reproduction' of a program; cf. W.R. Cornish, *Computer Program Copyright and the Berne Convention*, 4 *EIPR* 129 (1990). Furthermore, the Berne Convention must also be adapted specifically for software, just as national copyright law; cf. M. Lehmann, *BB* 1985, 1209. It must not be forgotten the Convention primarily had in view the international protection of copyrighted printed material.
  22. In the course of the consultations on the Directive, this general clause was frequently criticized as redundant and therefore unnecessary.
  23. See also M. Lehmann, *CR* 1989, 1062.
  24. The software-hardware connection is unclear, meaning the establishment of interoperability, for example, only in order to be able to connect a printer; the Recitals for the Directive (*supra* note 1, at 43, definition of interface) speak nevertheless for a broad interpretation: 'connection and interaction between elements of software and hardware'.
  25. Without thereby infringing the copyright or any other intellectual property right: cf. Art. 6(2)(c) and Art. 9; see also *supra* note 20.
  26. Cf. especially M. Sucker, *CR* 1990, 812.
  27. Under some circumstances, even a repeated reverse analysis may be allowed; cf. Sucker, *supra* note 26.
  28. Cf. the reasons of the Council, Doc. 10652/190 of 14 December 1990, 7: 'The provisions of this Directive are without prejudice to the application of the competition rules under Articles 85 and 86 of the Treaty if a dominant supplier refuses to make information available which is necessary for interoperability as defined in this Directive. The provisions of this Directive should be without prejudice to specific requirements of Community law already enacted in respect of the publication of interfaces in the telecommunications sector or Council Decisions relating to standardization in the field of information technology and telecommunications'.

#### 4. Conclusion

At first glance, standardization and the variety of competition seem to be two antagonistic principles which are not easily reconciled. In reality, they are like two focuses of an ellipse around which every competitor must circle. Efficient competition requires a minimum degree of standardization on the one hand; on the other hand, too many industry standards can hinder the development of an adequate plurality and variety of competitive offers on the market. The principle of interoperability seems to serve as an acceptable scheme for creating an equilibrium on the market for computer industries in Europe. The Council Directive of 14 May 1991 on the legal protection of computer programs should, therefore, be welcomed.

# Standardization and Exclusivity in Intellectual Property

*Jaap H. Spoor*

Standardization has been a problem ever since language was thoroughly dstandardized at the Tower of Babel construction site. Since then, the world has largely adopted the metric system, Greenwich time, VHS and MS-DOS. However, we still prefer to fax our letters instead of mailing them electronically, as fax protocols have been standardized while there still are too many different electronic mail standards. Standards are useful. They provide us with plugs that fit into sockets and with standard software that will function on any IBM-PC compatible computer. They spare us the nuisance of having to find out time and again how to shift gears in a rented car. Anyone who ever drove a 1956 Austin Cambridge will appreciate the advantage.

Standards are economical. Firms can reduce their stock of spare parts by fitting identical parts on different products, thus economizing while improving on customer support and performance. Standards will often be a prerequisite to product success or failure. People will only buy cassette recorders if enough prerecorded cassettes are available. For this very reason, DAT-recorders have not proved successful. Likewise, the major breakthrough of CD-ROM has still to come: both the producers and the consumers are waiting for standards.

Standards may even be vital to our safety, for instance by guaranteeing that the red traffic light on top always means *stop*, whether in the USA or here. (But be careful. The meaning may be standardized, but compliance often is not, as anyone who has recently tried to cross a busy street in Amsterdam will be able to confirm).

Not surprisingly, standardization – or normalization – is promoted by a multitude of official organizations. Unfortunately, their activities usually take years at least to lead to results. The market cannot always wait. Moreover, the results are sometimes compromised by too many compromises. Besides, standardization often concerns aspects which governmental normalization committees would never consider worth even considering.

Consequently, many standards just emerge in practice. One firm's product turns out to be successful, and its characteristics serve as a model for others. Such market recognition is a compliment to the firm in question, but compliments do not bring in much money. Developing the product required investments which must be earned back – if possible with profits. Market acceptance provides excellent opportunities, which may however be partly or even entirely lost if the product charac-

teristics, or even the entire product, is copied by others. Can one oppose to such copying?<sup>1</sup>

So far, the situation is in no way different from the need to protect successful products against copying in general. With standardization, the essential difference lies in the position of third parties. They may just *have* to copy the standard, if they are to sell any products at all. Let us consider an example.

## 1. The Tomado Case

Sometime in the mid-sixties, Tomado, a manufacturer of various household products, started marketing coat-hangers of renewed design. Simple as these products may seem to the casual observer, we are informed that considerable efforts had been devoted to their development. Anyway, the market was willing. C&A, the largest chain of clothes shops in the Netherlands, chose them as the only model to be used in their stores. They also ordered their suppliers to deliver all clothes on these coat hangers. As a result, even such suppliers as did not exclusively work for C&A preferred to use this model for all their products, so as not to get confused when delivering products to C&A.

In all, C&A's choice had a considerable impact on the coat hangers market. One of Tomado's competitors, Hazenveld, was about to lose a large part of his customers. He therefore decided to copy Tomado's products. Thereupon, Tomado sued Hazenveld under the traditional unfair competition doctrine of *slavish imitation*.

A few words must be said about this doctrine. It is essentially based on a 1953 Netherlands Supreme Court landmark decision<sup>2</sup> which declared unlawful the copying of non-copyrighted or patented products, provided that such copying is both unnecessary and that it causes confusion among the public; the copying being considered unnecessary if it might have been avoided without adversely affecting product quality or usefulness.<sup>3</sup>

On the present occasion, there was no doubt that many other commercially available coat hangers were of good quality and usefulness, so the copying could have been considered unnecessary. However, Hazenveld argued that C&A's demands should be considered as a measure of standardization, and that standardizing a product concerns its *usefulness*, since a product which can hardly be sold is of little use. The argument was accepted by the District Court. It was then rejected on appeal, but in last resort the Netherlands Supreme Court reversed the Appeals Court's decision and held the copying to be admissible.<sup>4</sup>

1. Of course, standardization gives rise to many other legal issues. For an overview, cf. C. Stuurman, *Juridische aspecten van normalisatie van informatietechnologie en telecommunicatie*, *Computerrecht* 1991, 64.

2. Supreme Court of the Netherlands (Hoge Raad) 26 June 1953, *NJ* 1954, 90.

3. In 1975, a Uniform Design and Model Act came into force in the three Benelux countries (Belgium, The Netherlands and Luxembourg), which replaced the slavish imitation doctrine. However, this doctrine subsists for such products as were already on the market before the Uniform Act came into force; cf. Article 25 of the Act and Supreme Court of the Netherlands (Hoge Raad) 31 May 1991, *RvdW* 1991, 141.

4. Supreme Court of the Netherlands (Hoge Raad) 12 June 1970, *NJ* 1970, 434, *BIE* 1970, 306.

The Tomado case may serve to demonstrate certain aspects of standardization. First, it shows that standardization may entirely depend on what happens in the market place. Tomado no doubt wanted to bring a successful product, but they probably never intended to set a standard. Secondly, it shows that standardization is a matter of degree. Acceptance does not have to be universal. In fact, any firm may have its own standards; British Leyland exhaust pipes (to which we will come back later) are probably just standard to certain of their car models, and to no other car in the world.

Thirdly, standards may cover most of the product, or just details. Quite often, a standard merely concerns aspects which are necessary to make certain products fit. DIN A4, for instance, concerns paper size only, ensuring a good fit in files, binders, copiers, printers and the rest. In other words, the standard defines the *interface* between these products. It does not give any rules as to paper weight, color, composition or many other qualities. The coat hangers' standard, however, (as implicitly defined by C&A) went much farther, since it required the products to be interchangeable, or *compatible*.<sup>5</sup>

The difference between identity of interfaces on the one hand, and compatibility on the other, is important for the legal analysis of standardization. Products may contain several, or even many interfaces. Products are only compatible to the extent that they use the same interfaces. Think for instance of SLR<sup>6</sup> cameras. Many of them use the same batteries and the same films. Consequently, they use the same interfaces for batteries and films, and insofar they are compatible. In general, their lens fittings differ, however. In this respect they use different interfaces, so taking all together, they are only partly compatible. The distinction is especially important in the case of computer operating systems, which have to interface with perhaps thousands of application programs, each of which may make different demands as to the interface. Here, full compatibility may almost require identity.

Although the Tomado case highlights the impact which normalization may have on protection, one should bear in mind that the slavish imitation doctrine differs from intellectual property rights, such as patents and copyright. Let us therefore consider the situation under these rights. Can one claim exclusive rights concerning certain standards? If so, does the law make any amends for the more or less pressing needs of third parties to comply with those standards?

## 2. Copyright

Copyright protects original works only, and the scope of protection is restricted to those parts or aspects of the work that are original. There is no copyright infringement if factual information is copied from a book, unless in doing so one also copies

---

5. In practice, the word *compatibility* is often used to describe the capability to *fit* (nut versus bolt) as well as product interchangeability. In this article, I will just use it in the latter sense, while describing the capability to fit as a matter of *interfacing*.

6. Single Lens Reflex.



the original selection which had been made, or its structure, sequence or organization.

Many standards concern quite simple aspects only, aspects which are not considered original under most copyright laws. In some countries, however, even simple forms may be copyrightable. Perhaps, the best known example can be found in the British *Leyland* case.

## 2.1 THE BRITISH LEYLAND CASE

In *British Leyland v. Armstrong*, Armstrong produced and sold replacement exhaust pipes for a number of BL car models. Because they had to fit on the cars, Armstrong's products were more or less exact copies of BL's exhaust pipes (and thereby also of the underlying technical drawings thereof). Such drawings are (or rather *were*, for the law has been changed since) protected under U.K. copyright law.

British Leyland started infringement proceedings against Armstrong. Both in the High Court and in the Court of Appeal BL were successful, but the House of Lords reversed the judgment. Their Lordships admitted that BL's copyright had been infringed, but a majority also held that '[t]he exercise by BL of their copyright in the drawing will render the car unfit for the purpose for which the car is held. BL cannot exercise their copyright so as to prevent the car being repaired by replacement of the exhaust pipe'. Consequently, Armstrong's trade was found permissible.

Although *BL v. Armstrong* was not about standards in the usual sense of the word, it certainly was about compatibility. The need for compatibility both caused and excused the copying. This judgment caused a lot of comment; perhaps more because of the construction which their Lordships used than because of its result. It had been generally agreed, for instance in the Whitford report,<sup>7</sup> that existing copyright law, as interpreted in a number of remarkable earlier decisions, rather overprotected producers of useful articles. Still, the cure was found as dubious as its origin. Thus, Fellner, while welcoming the decision as 'Our Souls Redeemed from the Company Store', described the solution as '[j]udicial creativity [conjuring] from the hat a rabbit'.<sup>8</sup>

## 2.2 COMPUTER CASES

Nevertheless, as a case where compatibility excuses copyright infringement, *BL v. Leyland* probably stands alone, as is demonstrated, for instance, by a number of cases in the computer field. Thus, Apple Computer has been very successful in defending the exclusivity of its computers against competitors who tried to market compatible computers (often called *clones*) which were provided with a copy of the Applesoft operating system. A considerable number of cases have been reported from many countries. Once it was accepted that Apple's software was copyright pro-

7. *Report of the Committee to consider the Law on Copyright and Designs*, London 1977, 27 ff.

8. C. Fellner, *BL v. Armstrong* in the House of Lords: Our Souls Redeemed from the Company Store, [1986] 4 *EIPR* 117.

tected, the copying was generally considered infringing. Clearly, the mere fact that third parties wish to provide a compatible system does not set aside copyright.

Similar cases have been reported with respect to IBM PC clones. The factual situation is different, however. The IBM PC operating system consists of two parts: the IBM BIOS (or Basic In- and Output Software) and the rest of the PC-DOS operating system.<sup>9</sup> While the BIOS is a proprietary IBM system, PC-DOS is almost (although not entirely) identical to Microsoft MS-DOS. As computer manufacturers can obtain licences for MS-DOS from Microsoft, or just buy original MS-DOS packaged software, all a manufacturer of PC-compatibles needs is either the original IBM or a compatible BIOS.

IBM is reported repeatedly to have taken successful action against clone manufacturers copying its BIOS.<sup>10</sup> On the other hand, several firms have successfully developed compatible BIOS, which satisfy the functional demands without copying the actual form of its IBM counterpart, thus showing that it may be possible to conform to a copyrighted standard for computer software without copying the protected form of the program embodying that standard.

This was demonstrated with even greater clarity in *Intel v. NEC*. NEC developed a microprocessor chip which was compatible with Intel's 8088 and 8086 chips. Apart from the microprocessor as such, these chips contain minute and highly elementary computer programs, known as *microcode*. Intel sued NEC for infringement of its copyright in the microcode program.<sup>11</sup> Indeed, the court found the programs to be copyrightable.<sup>12</sup> It also held, however, that NEC had not copied Intel's programs, but that it had independently developed new microcode programs performing the same functions.

These examples demonstrate that software being standard does not form a bar to its being copyrightable. They also show that copyright protection of standard software does not necessarily form a bar to compatibility. Still, it is far from easy to develop PC-BIOS or Intel microcode compatible software, and the more elaborate an operating system is, the more difficult it may be to achieve compatibility.

Besides, whether it will be feasible to develop compatible but non-infringing programs will not just depend on the complexity of the task but also on market conditions. The IBM PC was highly popular as a product, thereby ensuring a large market for compatible products. The necessary investment may be too high in the case of less successful computers. Other operating systems, for instance mainframe systems, are so complex that it may take many years to develop compatible software. Consequently, the mainframe or the current version of its operating system may well have become obsolete before the compatible system is operational. In other words, it may be possible, but it certainly is not always feasible to circumvent copyright in standard software by developing compatible programs.

9. G. Gervaise Davis III, *IBM PC Software and Hardware Compatibility*, [1984] 10 *EIPR* 273.

10. Davis, *supra* note 9, at 274.

11. Cf. R. Steinberg, *NEC v. INTEL: The battle over copyright protection for microcode*, *Jurimetrics Journal* 27/2 (Winter 1987) 173ff; H. Sandison, *NEC Corp. v. Intel Corp. US Court Finds Intel's Microcode Copyrightable*, [1987] 1 *EIPR* 25ff.

12. District Court, N.D. California 1986, 1 USPQ 2d 1492.

### 3. Patents

The impact of compatibility on software copyright has given rise to extensive discussion, especially in the context of the European Community Council Software Directive.<sup>13</sup> Remarkably enough, no such discussions have been reported from the patent field, although many standards are partly or entirely covered by patents. This may especially be true in the case of rather fundamental inventions, which represent a major step forward and thereby open new technological avenues.

Basic compact disc technology, for instance, is tributary to a range of patents, among other things in the field of laser technology. For obvious reasons, compact discs are heavily standardized, or it would be impossible to use CD's from different sources on the same equipment. Any disc producer will need licenses under these patents.<sup>14</sup>

This does not necessarily give rise to difficulties, at least not as to principle, since in this case the patent owners are willing to grant such licenses – against payment of course.<sup>15</sup> However, things may be different if the patent owner refuses to grant any licenses, or grants partial licenses only, in order to reserve a monopoly for himself. This is said to apply, for instance, to the IBM Micro Channel Architecture or MCA, which forms an essential part of the IBM PS/2 personal computer system. Probably, IBM will not just grant the necessary licenses to any interested firm, if it will license MCA at all. In fact, the experience with PC clones, which almost drove IBM out of that market, is believed to have been a major incentive for IBM to somehow patent its PS/2 system.

For practical reasons, patented standards may remain rare. First, the standard must concern something which is inventive. Secondly, it must have been novel – almost the complete opposite of being standard – until the patent was applied for. Thirdly, the market place must be willing to accept the standard in spite of the patent, which it may be reluctant to do as the patent may form a barrier to alternative sources for the products becoming available. The resulting monopoly keeps prices high; at the same time there is no way out if the supplier, no matter why, ceases producing the system. For these same reasons, patented standards for which no licenses can be obtained will be even rarer.

Nevertheless, once a standard has been patented (or, more likely, once certain patented technology has become accepted as a standard), it may be difficult for third parties to find a way out if the patentee then decides to refuse licensing the technology. Patents, especially the more fundamental ones, are hard or even impossible to circumvent, at least if the product has to remain compatible with the patented technology.

In theory, compulsory licenses, provided for by most patent laws, might offer a solution. In Dutch patent law, such licenses may, for instance, be granted for reasons of public interest and in the case of derivative (also called dependent) patents. In practice, however, licenses of the former category have proved extremely rare, while licenses for derivative patents will only be granted if the prospective licensee

13. For an overview of this debate, cf. M. Lehmann's contribution to this volume.

14. Some of these patents may by now have expired. For our subject this does not make any difference.

15. The conditions of the license may of course give rise to considerable negotiation.

owns a patent which cannot be used without using the patented technology for which the license is claimed.<sup>16</sup> Clearly, neither possibility offers easy access to patented standard technology if no voluntary license can be obtained. It must therefore be concluded that patents for standards, rare as they probably are, may offer quite strong monopolies.

#### 4. Trademarks

Trademark law also has an impact on the use of standards, as many standards are known by a name which has been registered as a trademark. In principle, existing generic names cannot serve as a trademark because they are descriptive and thereby lack the necessary distinctive character. In practice, however, it is not always easy to establish when a word became a generic name, and many rather specialized generic names are nevertheless filed as trademarks, at least in certain combinations.<sup>17</sup>

More important, however, is the use of trademarks in order to describe product compatibility. Microcomputers are announced as *IBM compatible*, while printers 'emulate' *HP Laserjet*. Such referencing is widespread and customary; besides, it often is a virtual necessity. It is hard to avoid using the Honda trademark if one wishes to point out that one sells spare parts which are specifically designed to fit on a Honda Accord. Yet, such use gives rise to questions of trademark law.

According to the Uniform Benelux Trade Mark Act (BTMA), the trademark owner can oppose any use of his trademark for goods or services which are similar to those for which that trademark has been registered, as well as any *other* use of the trademark, which is made without valid reason in an economic setting and which may be prejudicial to his interests. It is generally accepted that to sell 'Armstrong' exhaust pipes with the indication that they will fit on 'Austin' cars does not constitute use of the latter trademark for the registered goods or services, but it does constitute 'other' use of that trademark under Benelux trademark law. Clearly, such use is made in an economic setting and there are several reasons why it may be damaging to the trademark owner, for instance, because the sale of Armstrong products will reduce his own turnover.

Consequently, the essential question will be whether referencing is excused by a valid reason. In principle, this will be the case if two conditions are met: the referencing must be really necessary, not just an easy way of saying something that could also be explained in another way; and the referencing must be unavoidable. Thus, in practice, even if it is necessary to use a certain trademark for referencing, one is never entitled to use the characteristic logo form thereof. Lettering must be modest, and every precaution must be taken to prevent the public from interpreting the use of

---

16. Besides, although many patent laws provide for such compulsory licensing, they often require that the dependent patent is of sufficient interest to justify the license to be granted.

17. Cf. District Court of 's-Hertogenbosch 21 July 1987, *BIE* 1990, 42 (*Lantech v. TechLAN*). The word 'LAN' was not (yet) considered widely known as an acronym for 'local area network', and therefore not descriptive. In its judgment of 3 September 1991, *IER* 1991, 51, (*Gateway*), the same Court came to a similar finding with respect to the use as a trademark of the word 'Gateway', which in spite of its frequent use to denote certain computerized connections, was considered to be 'as yet insufficiently defined'.

the trademark as an indication of a link between the companies or a sign that the use of that trademark had been authorized. Let me give a few examples.

In *Psion Plc v. Cheap Chip*, the defendants sold an exchangeable 'Datapack module' for Psion's computers. It was decided that they had a valid reason to use the Psion trademark in order to describe this quality, but not for mentioning on the packaging: 'Psion and ... are trademarks of Psion Plc', since this might give the impression that the module originated from Psion itself.<sup>18</sup>

In *Saab Scania v. Hové*, the use of the Scania trademark in brochures for compatible spare parts was considered not to be strictly neutral and limited to fact; consequently it was not excused by a valid reason.<sup>19</sup> In *Apple v. CAB*, the defendants infringed Apple's trademark among other things by calling their own computers 'compAppleble' with Apple's computers. Again, even assuming it was necessary to make some kind of reference, this one certainly was not neutral.

## 5. Discussion

The examples given above show that standards as well as their names may be the subject of intellectual property rights. Some standards can be fully monopolized, while others can be circumvented by compatible but non-infringing products. But even in the latter case, the owner of the right in the standard will have a considerable advantage over his competitors.

It has sometimes been argued that standards should be treated differently from other subject matter of intellectual property rights. In the debate concerning the EC Software Directive, it has even been suggested that interfaces should remain unprotected altogether. It should be noted that several generally accepted principles as well as exceptions to intellectual property rights will already to a certain extent limit monopoly rights in standards or their denominations. Many standards will lack the necessary originality or novelty, while the use of others will remain permissible under the fair use defence or similar doctrines.

In some instances, it will be possible to obtain compulsory patent licences. Trademark law may limit the possibility to obtain trademark rights in standards, or permit the use of a trademark for referencing purposes. But, as said before, such limitations usually result from the general principles of the intellectual property right which is involved, and do not just focus on standards. For a number of reasons, I do not think that special limits should be introduced regarding the exercise of intellectual property rights in standards.

Perhaps most important, it may be difficult, if at all possible, to define which products or product characteristics can be termed *standard* and will therefore enjoy limited protection only. One will at least have to consider what degree of market acceptance will be required before something can be called a standard and to describe what forms part of that standard. Even if we accept that Apple Mackintosh represents a standard, that standard will not comprise every nut and bolt of the thing, but only those features which, for instance, ensure software compatibility. On the other

18. District Court of Breda 13 February 1991, *IER* 1991, 21.

19. Court of Appeal of Amsterdam 25 February 1988, *BIE* 1989, 8.

hand, it can be argued that almost any part of any product may serve as an interface to another product.<sup>20</sup> That would mean, however, that anything can at any time become a standard or part of a standard. Clearly, the concepts of standards and standardization are not standardized.

It is equally difficult to define *market acceptance*. The Apple Mac may well have less than one percent of the computer market in general, but five percent of the microcomputer market, and over fifty percent of some specialized market *niche*. British Leyland may have a market share of over ten percent of the car market in the UK but less than one percent in some other country; at the same time, it will have a 100 per cent market share in proprietary spare parts for BL cars in any country.

Such questions are well-known in anti-trust law, but they fall outside the scope of intellectual property. Indeed, this is an indication that the problem we are dealing with may concern anti-trust law rather than intellectual property.

By their very nature, intellectual property rights confer to the owner a monopoly in the protected subject matter. Such monopolies have repeatedly been criticized, not only where standards are involved. This has everything to do with the intangible nature of these rights. Exploitation of patentable inventions or copyright works will yield profits while the earlier investments will often remain invisible. At times, the profits will exceed those investments. There may even have been hardly any expense at all – just a lucky strike. But it may be the other way round as well. As a rule, research and development are costly – that is true for standards as well as for other products. Copyright or patent protection does not guarantee that such costs will be earned back, but it may help.

More important, the monopoly is always a relative one. There are alternatives to any system, and the market will support them if the monopoly gives rise to terms and conditions which are considered unreasonable. As a rule, compatible products will be available, or it will at least be possible to develop them. And even if they are lacking, one can always decide to switch to a non-compatible but competitive system. Even if no Apple clones are available, one can always choose IBM. Or Atari. Or Commodore.

In practice, before really embracing a standard, professional customers will usually insist on at least a second source being available. Consequently, licences can be obtained for many protected standards, as is demonstrated, for instance, by the compact disc technology example. On the other hand, if the right owner refuses to grant a licence, that may offer an incentive to develop competing products.

Apple's microcomputers were successful before the IBM PC entered the market. The PC was cloned, which made prices go down, while Apple managed to keep its prices high by virtue of its monopoly. It has often been said that Apple made the better product, but the PC was more successful, not in the least because clones were available.

For its PS/2, IBM has chosen to exclude cloning by means of a monopoly, based on patents and copyright. Perhaps as a result of this policy, software development has been slower than expected, and until now, the market has not embraced PS/2. Although intellectual property offers monopolies, it does not by itself offer market

---

20. Cf. R.J. Hart, *Interfaces, Interoperability and Maintenance*, [1991] 4 *EIPR*, 112, 113.

power. Taking all together, there seems to be no reason why standards should be treated differently from other subject matter protected by intellectual property rights.

# The Economic Analysis of Intellectual Property Law

*Antoon A. Quaedylic*

The 'economic analysis of law' departs from the conviction that economics is a powerful tool for analysing a broad range of questions of legal interpretation and policy.<sup>1</sup> It differs from earlier applications of economic methods in the analysis of legal problems in that it is not limited to areas of law which affect the workings of the economy directly.<sup>2</sup> Indeed, the economic analysis of law deals with a vast area of legal problems, including constitutional, penal, commercial and family law, as well as other fields.

The science of economics sees man as a rational maximizer of his self-interest in a world in which resources are limited. When resources are being used where their value is greatest they are being exploited efficiently in economic terms. Economists regard the legal rules as instruments of efficiency and welfare: does the law serve the goal to which it is directed and does the 'output' of a certain regulation justify its costs? This turns the economic analysis into a fundamentally utilitarian approach of law. As we shall see, the economic analysis has also received some of the criticism which has been directed towards utilitarians.

## 1. Success of the Economic Analysis of Law

The onset of the modern economic analysis of law dates from the end of the 1950s. Coase's article about the problem of social cost<sup>3</sup> is considered as the 'starting shot'.<sup>4</sup> In the beginning, however, the audience was limited mainly to economists; only after the publication of Posner's standard work *Economic Analysis of Law* in 1972 was the attention of an ever greater circle of lawyers drawn towards the economic approach, resulting (in the U.S.) in a true explosion of studies and publications. As from the mid-seventies, the economic analysis began to penetrate into Australia, Canada and the United Kingdom. In the German-speaking countries of continental Europe, a fierce interest in the new approach sprang up as from the start of the eighties, culminating in a flood of publications.<sup>5</sup> In the Netherlands, the economic

- 
1. R.A. Posner, *Economic Analysis of Law*, Boston 1972, 1.
  2. E. Mackaay, *Economics of Information and Law*, Montreal 1980.
  3. R. Coase, The Problem of Social Costs, 3 *J. of Law and Economics* 1 (1960).
  4. E. Mackaay, Het recht bezien door de bril van de economist, een gestyleerd overzicht van de rechts-economie, *R.M. Themis* 1988, 411.
  5. E. Mackaay, *supra* note 4, at 418.



analysis of law has only recently been introduced.<sup>6</sup> Since 1980, there has been a modest but increasing stream of publications.<sup>7</sup> In 1989, a comprehensive introduction to the economics of law was published, written by Holzhauser, Teijl and others,<sup>8</sup> and in 1990, a special issue of the popular law review *Ars Aequi* was devoted to the same subject. Nevertheless, the economic approach is still a new phenomenon to most Dutch lawyers.

### *The economic approach in intellectual property law*

Economic considerations have always played a role of some importance in the field of intellectual property law. Even if the emphasis on economic aspects is often attributed to the common law systems, one cannot deny that on the continent, economic arguments are nowadays prevalent at least in the justification of patent law.<sup>9</sup> The considerable economic importance of copyright law is widely recognized on the continent,<sup>10</sup> and the emphasis on the economic aspect is growing – perhaps too fast.<sup>11</sup> Even in copyright law, this tendency is not new. As Ginsburg has demonstrated in a very interesting article on the origins of the French copyright law as a product of the Revolution, ‘the speeches in the revolutionary assemblies, the texts of the laws, and the Court decisions construing the laws, all indicate at the least a strong instrumentalist undercurrent to the French [copyright/related] decrees of 1791 and 1793’.<sup>12</sup>

Brinkhof<sup>13</sup> has shown that the same applies to the motives which lied at the root of French patent law. Whereas the *Assemblée Nationale* was persuaded by the argument that an inventor had a natural right to his invention, in fact the advocates of a patent act wanted to stimulate the economy of France. Brinkhof quotes Bouffler, speaking before the *Assemblée Nationale* in 1790: ‘Messieurs, il entrait dans vos desseins paternels de vivifier, ou pour mieux dire, ressusciter l’industrie française.’

6. Cf. Mackaay’s bibliography, *supra* note 4, at 417.

7. Several Dutch authors have dealt with the economic approach of intellectual property, including P.J. Kaufmann, *Passing Off and Misappropriation in the Law of Unfair Competition*, Utrecht 1984; F.W. Grosheide, *Auteursrecht op Maat*, Deventer 1986, 133-136; P.B. Hugenholtz, *Auteursrecht op informatie*, Deventer 1989, 144-145, 151-178; E. Mackaay, De hersenschim als rustig bezit, moet alle informatie voorwerp van eigendom zijn?, *Computerrecht* 1984/1985, no. 6, 12; and, more elaborately, R.W. Holzhauser and R. Teijl, *infra* note 9.

8. R.W. Holzhauser and R. Teijl, *Inleiding rechtseconomie*, Arnhem 1989. I would like to thank Mr. Holzhauser for his particularly kind help in providing me with sources and literature.

9. R. Teijl and R.W. Holzhauser, De toenemende complexiteit van het intellectuele eigendomsrecht, een economische analyse, *Serie Rechtseconomische verkenningen*, Deel I, Arnhem 1991; *idem*, Property Rights, Property Rules and Liability Rules in Intellectual Property, Another View, Another Cathedral, paper presented at the 7th annual meeting of the European Association of Law and Economics, *EALE*, Rome, 3-5 September 1990 (with very rich bibliography).

10. Cf. i.a. Le droit d’auteur, enjeu économique et culturel. Copyright, economic and cultural challenge, 2nd Symposium IPA, Paris 1990.

11. H. Cohen Jehoram, Critical reflections on the economic importance of copyright, 20 *IIC* 485 (1989).

12. J.C. Ginsburg, A Tale of Two Copyrights: Literary Property in Revolutionary France and America, *RIDA* 147 (1991), 125, 131, referring to C. Hesse, *Res Publicata: the Printed Word in Paris 1789-1810*, Princeton 1986.

13. J.J. Brinkhof, Over octrooierecht en economie, *Ars Aequi* 1990, 192, 195.

Against this background, an economic approach will already be familiar to most intellectual property specialists: 'intellectual property is a natural field for economic analysis of law.'<sup>14</sup>

The basic new element which the economic approach introduces to the theory of intellectual property law is the particular attention it pays to the notion of costs. *Lawyers* content themselves with saying that a patent right yields a reward, and that the reward will stimulate technological invention. *Economists* find that this reward is *paid for by society*, because it entails *costs*, that is:

- costs, because others cannot apply a useful invention (except by getting permission);
- costs caused by the expensive administration of a patent office;
- costs (social costs) of litigation, because intellectual property rights will attack or be challenged, thus involving court proceedings;
- costs, because an intellectual property right granted to X may give such a headstart that Y is discouraged in continuing his inventive efforts;
- costs, because intellectual property monopolies may promise profits to such an extent that *too* many resources may inefficiently be turned towards inventive activity (the problem of rent seeking).

The problem of the economists is whether, all costs considered, intellectual property rights still are advantageous to society. Some economists think they are not. They take the view that there is no advantage in creating intellectual property rights, or at least, that such advantage has not been established, and that other ways exist to realize the aims pursued by intellectual property rights. Others, supporting intellectual property, try to find an economic explanation for the existence of intellectual property rights by proposing, for example, a property rights theory to explain that a monopoly *can* promote competition, or a prospect theory, which defends that intellectual property rights diminish social costs of research by providing an incentive to coordinate costly research efforts.

In order to make a clear concept possible, some economists make use of mathematical models which enable them to arrive at a far more detailed scheme of the pros and cons than legal reasoning is capable of achieving. They examine under what conditions intellectual property rights have an optimal effect, for instance, by giving an exclusive patent right of ten years or of twenty years.

I will limit myself to a survey of the results of economic reasoning in the respective fields of patent, copyright, and trademark law. Next, I will deal with the concept of monopoly as opposed to property. Finally, some attention will be given to the relationship between economics and the concept of justice.

## 2. An Economic Approach of Patent, Copyright and Trademark Law

This section contains only a general inventory of the arguments which are invoked by the economists in favour of, or against, the creation and existence of intellectual

14. W.M. Landes and R.A. Posner, An Economic Analysis of Copyright Law, 18 *Journal of Legal Studies* 325 (1989).

property rights. As the relationship to the field of patent law has thus far been best explored, most of the attention will be devoted to the discussion concerning patents. Thereafter, I shall also give a short summary of the theories put forward as to copyright and trademark law.

## 2.1 PATENT LAW

'Private inventors have an incentive to invest in innovation only if they receive an appropriate return. Whether producers will have the correct incentive depends on their ability to appropriate at least some of the value that users place on those works. If potential innovators are limited in their ability to capture this value, they may not have enough incentive to invest a socially optimal amount in innovative activity'. Besen and Raskind<sup>15</sup> put forward this thought in a consideration which seems to be essentially inspired by patent law. As a matter of fact, the basic idea behind the patent grant is to combat what would otherwise be a tendency toward underinvestment in research, development, and related activities.<sup>16</sup> In most cases, invention itself and the development of the invention into a commercially marketable commodity requires important investments in time, labour, and money.

This would not be worth the effort if the inventor did not have the possibility of regaining at least his investments. However, this would be very difficult without an intellectual property right, particularly if the invention were easy to apply or produce, for example, if no special know-how was required to that end. In a market of free competition, the inventor would be forced by free riding competitors to soon drive the price down to a price approaching the marginal cost of production. The profits to be realized in that situation would not allow for any return of the research and development costs.<sup>17</sup>

Also, inventive activity is pervaded with uncertainty; it is not clear whether the goal of invention or innovation will be reached and how much it will cost. In order to persuade producers to engage in inventive activity, the prospect of a reward will provide an additional incentive. Otherwise, the high risks involved can lead to underinvestment. Moreover, it is alleged that patents serve to bring the private benefits of inventions in line with their social value. By providing an exclusive right to the inventor, he is enabled to ask a price which approaches the value it has for the users.

Some authors particularly emphasize the importance of patents for innovation as distinguished from invention. Innovation in this sense means the practical application of existing inventions. It is this, as Schumpeter observed, and not the invention *per se*, which is economically relevant. Patents serve the process of innovation by providing a hedge against losses and by permitting the patent holder to secure financial backing for post-invention research and development expenditures.

---

15. S.M. Besen and L.J. Raskind, *An Introduction to the Law and Economics of Intellectual Property*, 5 *Journal of Economic Perspectives* 3 (1991).

16. E. Kaufer, *The Economics of the Patent System*, Chur 1989, 41.

17. R. Eisenberg, *Patents and the Progress of Science*, 56 *University of Chicago Law Review* 1017, 1025 (1989).

### *Prospect theory*

Innovation also plays a central role in the 'prospect theory' of Kitch,<sup>18</sup> who particularly stresses the role that the patent system can play by increasing the output from resources used for innovative activities. This view of the patent system conceives the process of technological innovation as one in which resources are brought to bear upon an array of technological prospects, each with its own associated sets of probabilities of costs and returns. An exclusive right in an invention does not just mean an exclusive right to make one product, but reserves a whole ('prospect') field of technical innovation, including many possibilities, to the right owner. For example, the patent on a newly invented technical idea will not only cover the first primitive machine which embodies that idea but also later, more sophisticated versions, although they have been invented by others.

The word 'prospect' refers to a particular opportunity to develop a known technological possibility: the prospect theory focuses on post-invention innovation. Thus, the patent system forces other innovators in the same 'prospect' field to coordinate research and development efforts, which in turn will prevent duplicative research and thus diminish social costs. The word prospect is used by Kitch to indicate the analogy with the 19th century American mineral claim system for public lands: 'prospectors' would be given exclusive claims to exploit minerals. Thus, the government retained the ownership of public lands while making it possible for private firms to efficiently find and extract the minerals they contained.

### *Property rights theory*

The problem of wasteful, duplicative research is examined under the broader theory of property rights by Demsetz, Lehmann and Von Weizsäcker. Lehmann<sup>19</sup> and Von Weizsäcker<sup>20</sup> draw an analogy between an invention and a fishing pool: if the lake (or the invention) is communal ownership, too many resources will be turned towards fishing (or: towards the development of the invention into a commodity of practical use). Moreover, the economic resource will be exhausted without the users realizing the economic significance of their activities. By granting a property right in the resource, private ownership is created which guarantees the most efficient use: resources are used as efficiently as possible.

This effect was already described (but not in an intellectual property context) by Coase in his famous article about the problem of social cost.<sup>21</sup> In his frequently

18. E.W. Kitch, The Nature and Function of the Patent System, 20 *Journal of Law and Economics* 265 (1977).

19. M. Lehmann, Property and Intellectual Property: Property Rights as Restrictions on Competition in Furtherance of Competition, 20 *IIC* 1 (1989); *idem*, Bürgerliches und Handelsrecht. Eine juristische und ökonomische Analyse, Stuttgart 1983, 49; *idem*, Eigentum, geistiges Eigentum, gewerbliche Schutzrechte, *GRUR Int.* 1983, 356; *idem*, Theorie der Property Rights und Schutz des geistigen und gewerblichen Eigentums Wettbewerbsbeschränkungen zur Förderung des Wettbewerbes, in: *Ansprüche, Eigentums- und Verfügungsrechte*, Berlin 1984.

20. Von Weizsäcker, Rechte und Verhältnisse in der modernen Wirtschaftslehre, *Kyklos* 1981, 345.

21. *Supra* note 3.

quoted statement, Demsetz declares that 'property rights develop to internalize externalities when the gains of internalization become larger than the cost of internalization.'<sup>22</sup> Von Weizsäcker and Lehmann defend that by restricting competition on a lower level (production) through intellectual property rights a fruitful competition on a higher level (invention and innovation) is enhanced. Thus, also the property rights reasoning asserts that intellectual property rights *diminish social costs*.

### *Nordhaus model*

Penetrating as they may be, the theories in favour of patent protection nevertheless stay on a rather general level. The enormous difficulties to be overcome if one desires specific results are illustrated by attempts undertaken by economists to define the optimal patent life. Kaufer describes the Nordhaus model<sup>23</sup> which arrives at very different optimal durations for inventions of various kinds. Kaufer concludes that a tailor-made patent duration for each invention would be ideal, but that it is not feasible. He also reminds us of numerous and important factors which have not yet been taken into account in the Nordhaus model. For example, patents as an appropriation mechanism are not perfect. The patent holder will be able to appropriate the economic benefits flowing from the invention only to a small extent (20-50 per cent).

Secondly, there may be several patented processes for the same end; in that case, the patent monopoly is only of limited significance. Thirdly, the legal validity of the patent may be challenged and the patent holder may prefer an out-of-court settlement over the costs and risks of litigation. Another problem not accounted for in the Nordhaus model is rent-seeking. I will take a closer look at this below.

### *Objections to the patent system*

From an economic point of view, the objections to the patent system can be divided into three groups. The most fundamental objection is that subjecting new inventions to monopoly control restricts their use and thereby reduces the social benefits of patented inventions.<sup>24</sup>

Secondly, various arguments are invoked in order to sustain a position that patent protection would not be necessary. Hirshleifer<sup>25</sup> suggests that foreknowledge of technical improvements may make gains achievable for the inventor, which might eliminate the danger of underinvestment in the absence of patent protection. Other arguments are that even without patent protection, the inventor has a sufficient head start position to realize profits covering his research and development expenditures. The need to keep up with market rivals will force him to invest in inven-

22. H. Demsetz, *Toward a Theory of Property Rights*, 57 *American Economic Review* 347, 350 (1967).

23. E. Kaufer, *supra* note 16, at 24.

24. R. Eisenberg, *supra* note 17, at 1026.

25. J. Hirshleifer, *The private and social value of information and the reward to incentive activity*, 61 *American Economic Review* 561 (1971).

tion and innovation anyway. Exclusivity can be ensured by recourse to the non-patent barriers to market entry.<sup>26</sup>

Thirdly, the opponents of the patent system allege that patents cause distortions of the economic activity and have negative effects on the research efforts of others. Rent-seeking firms will drive up R & D costs until the discounted present value of the invention is obliterated by costs incurred to win the race to obtain the patent (or to circumvent it). It diverts resources away from competition and from invention and innovation in non-patentable fields. However, others consider it an advantage that intensive research is done by multiple competitors in the same field. It leads to more inventions of a greater variety, thus creating more choices for the consumer.

## 2.2 COPYRIGHT LAW

In comparison to the economic literature on patent law, very little attention has been given to copyright law. Copyright's central problem is in the public good character of its object: while the investment of creating a work is high, copying is easy and inexpensive. As a consequence, the author may not be able to recover his expenses in creating the work. Copyright aims at enabling the creator to appropriate the benefits flowing from the creation and at securing access to the work for users within fair limits.<sup>27</sup> The economists' version of copyright can help to explain legal instruments, such as the idea/expression dichotomy, the fair-use doctrine and the duration of copyright.

### *Distinguishing copyright from patents*

In introductory texts about the economic analysis of intellectual property as a whole, the economic justification of copyright and patents often seems to be identical: to create an incentive for intellectual activity and an economic inducement to publish. When terms like 'an incentive to invest in innovation'<sup>28</sup> appear as a justification for both patents and copyright, one can hardly help thinking that the authors' minds have been primarily preoccupied with patent law, since the great majority of copyrighted creations does not deserve the qualification of being innovative.<sup>29</sup> However, it is not surprising to find copyright and patent law placed together, if one recognizes that the same is done in the United States Constitution, which grants the Congress the power to 'promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries'.

Putting patents and copyrights in one economic box, at least on a general level,

26. E. Mackaay, Economic Incentives in Markets for Information and Innovation, 13 *Harvard Journal of Law & Public Policy* 867, 884 (1990).

27. W.M. Landes and R.A. Posner, *supra* note 14.

28. S.M. Besen and L.J. Raskind, *supra* note 15, at 5.

29. 'Economic' confusion of copyright and patent law occurs more often, see: A. Strowel, L'analyse économique du droit d'auteur: une revue critique des arguments invoqués, in M. van Hoecke (ed.), *Le rôle socio-économique des droits intellectuels*, Brussels 1991, 103, 106.

seems justified by modern developments which extend copyright protection to technical innovations like computer software<sup>30</sup> and chips.<sup>31</sup> Nevertheless, I would defend the idea that copyright has some features which clearly distinguish it from the protection of technical creations, notwithstanding the fact that in numerous jurisdictions, a large group of commonplace functional articles enjoy copyright protection. In fact, copyright often protects only the decorative aspects of those articles – not the functional ones. Ornamental aspects are aspects with perfect (or nearly perfect) substitutes, whereas a property right in functional aspects will create a dead-weight loss, which is augmented by the long term of copyright protection.<sup>32</sup>

### *Economic assessment of copyright*

Even though most economists seem to (more or less silently) take the view that copyright is an instrument for promoting an efficient distribution, this view is not shared by all of them.<sup>33</sup> In 1970, Steven Breyer<sup>34</sup> sharply attacked the way in which ‘the wisdom of such protection is often taken for granted’. According to Breyer, ‘to demonstrate that initial publisher’s costs are high, while reproduction costs are low, is not sufficient to establish the need for copyright protection. Rather, one must examine other factors – the probable speed and velocity of competitive response, the presence of subsidies, the ability of buyers to channel revenue to publishers and authors in the absence of protection – before it can be said that copyright protection is needed’.

More or less the same view is taken by Teijl and Holzhauser<sup>35</sup> who state that examples proving that copyright stimulates general welfare are ‘not abundant’. However, one could object that the economists have neither been able to prove that copy-

30. Cf. M. Lehmann, *Theorie der Property Rights und Schutz von Computerprogrammen*, in: *idem*, *Rechtsschutz und Verwertung von Computerprogrammen*, Köln 1988.

31. The US Semiconductor Chip Protection Act of 1984 is a piece of legislation within the copyright regime; cf. S.M. Besen and L.J. Ruskind, *supra* note 15, at 19. In the Netherlands, before creating a *sui generis* regime for chips, which has been greatly inspired by the US example, most scholars considered the copyright regime the most suitable for the legal protection of chips. The same view has been adopted in case law cf. District Court of Zwolle 22 July 1983, BIE 1983, 332, and District Court of Zwolle 16 April 1987, *Computerrecht* 1987, 248.

32. If applied to functional solutions as such, apart from other objections, the duration of copyright may turn into an overprotection of works, which impedes the development of new products. The objection that most functional works will lose their importance before copyright protection expires, because technical development overtakes them, overlooks the fact that functional innovations which do *not* lose their importance after some years, happen to be the most important ones – and they stay under copyright protection. At a very early stage G. Vandenberghe warned against copyright protection of computer programs on the solid economic ground that such a protection might impede technical innovation (and not on romantic grounds, as has been suggested); G. Vandenberghe, *Bescherming van computersoftware*, Antwerpen/Deventer 1984. *See also*: W. van Hattum, *Techniek is meer dan stof alleen*, BIE 1988, 143.

33. W.M. Landes and R.A. Posner, *supra* nota 14, at 331.

34. S. Breyer, *The Uneasy Case for Copyright: a Study of Copyright in Books, Photocopies, and Computer Programs*, 84 *Harvard Law Review* 281.

35. *Supra* note 9.

right hinders general welfare. A fundamental attack on copyright (as well as on patent law) has been undertaken by Palmer (U.S.) and Lepage (France).<sup>36</sup>

### *A case study*

An interesting example of where copyright protection extends too far (in an economist's point of view) is given by Besen and Raskind.<sup>37</sup> A manufacturer of framed pictures purchased copyrighted volumes of an art history book from Mirage Editions, clipped the photographic illustrations, and mounted them for sale as framed pictures. The court held that the framed pictures infringed the copyright.<sup>38</sup> In the almost identical called *Poortvliet* case, the Dutch Supreme Court came to a similar conclusion.<sup>39</sup> Besen and Raskind object: the person who first saw the market opportunity for framed pictures and who paid the asking price for the protected book, was denied an economic reward for entrepreneurship.

## 2.3 TRADEMARK LAW

The economic analysis of trademark law has yet to receive as much attention as patent law,<sup>40</sup> but nevertheless, some very interesting contributions on the subject have been published. The few observations to be made here are based mainly on the publications of Kaufmann,<sup>41</sup> Landes and Posner,<sup>42</sup> and Lehmann.<sup>43</sup> A model has been provided by Landes and Posner, dealing for instance with the relations between the expenses incurred by a company for a trademark, the lowering of the search costs for the consumer, and the influence on price and profits. Apart from this, the economists also address specific trademark doctrines, such as distinctiveness.<sup>44</sup>

### *A different intellectual property right*

All the above-mentioned authors agree that the essential economic function of trademarks is to reduce the consumer's search costs. The trademark conveys infor-

36. T.G. Palmer, Intellectual Property: A Non-Posnerian Law and Economics Approach, 12 *Hamline Law Review* 261 (1989); H. Lepage, *La nouvelle économie industrielle*, 349-84 (1988).

37. S.M. Besen and L.J. Raskind, *supra* note 15, at 16.

38. *Mirage Editions, Inc. v. Albuquerque Art Co.* 856 F.2d 1341 (9th C. 1988).

39. Supreme Court of the Netherlands (Hoge Raad) 19 January 1979, *Nederlandse Jurisprudentie* 1979, 412.

40. References to publications can be found in M. Lehmann, 20 *IIC* 7, no. 12 (1989).

41. P.J. Kaufmann, *supra* note 7.

42. W.M. Landes and R.A. Posner, Trademark Law: an Economic Perspective, 30 *Journal of Law and Economics* 265 (1987).

43. M. Lehmann, Die Wettbewerbsrechtliche Ausnutzung und Beeinträchtigung des guten Rufs bekannter Namen und Herkunftsangaben, *GRUR Int.* 1986, 6; M. Lehmann, *GRUR Int.* 1983, 356-362.

44. Cf. S. Naresh, Incontestability and Rights in Descriptive Trademarks, 53 *University of Chicago Law Review* 951 (1986).



mation that allows the consumer to efficiently identify the product and to expect a quality consistent with other products of the same brand. This already indicates that the nature of this intellectual property right is quite distinct from patents and copyrights, as the following observations confirm.

Kaufmann<sup>45</sup> qualifies trademark law as part of the law of unfair competition, the essence of which is to prevent confusion for the consumers rather than to prevent the misappropriation of an intangible property by the consumer. Lehmann states that trademarks are a condition to creating a communication and information channel between sellers and consumers.<sup>46</sup>

In the standard work by Henning-Bodewig and Kur about trademarks and consumers, Henning-Bodewig provides a very thorough analysis and critique of the application of economic analysis to trademark law. Although she does not reject the value of economic analysis as such, she regards it with scepticism. A system of economic analysis which solely pursues economic efficiency could, especially when it has normative pretensions, ignore social and consumer interests.<sup>47</sup>

Apparently, it is neither the creation of economic incentives which is primarily at stake, nor the impartation of a just reward, but the quality of communication. These are considerations which clearly indicate an essential difference between trademark law on one side and patent and copyright law on the other. *Prima facie*, an economic analysis of trademark law definitely lacks the dramatic tension which characterized the economic assault on copyright and patents: no basic questions are raised as to the justification of trademark law, no basic certainties are reversed. Landes and Posner<sup>48</sup> call their article an essay in *positive* – rather than normative – law and economics. They state that trademark law can best be explained on the hypothesis that the law is trying to promote economic efficiency. Is that all?

### *Monopolistic effects*

There is more to trademark law, and it appears clearly in some places. I have chosen two examples. The first is taken from Landes and Posner.<sup>49</sup> The problem of rent seeking has already been discussed under patent law. However, as Landes and Posner demonstrate, it can also occur under trademark law, especially in trademark systems where a trademark right is acquired purely and exclusively by registration, without any actual requirement for the trademark to be used to maintain the right. A consequence may be the ‘banking’ of trademarks: register them in order to sell them

45. P.J. Kaufmann, *supra* note 7, at 132.

46. M. Lehmann (1986), *supra* note 43, at 14; *see also* M. Lehman (1984), *supra* note 19, at 525.

47. F. Henning-Bodewig and A. Kur, *Marke und Verbraucher, Funktionen der Marke in der Marktwirtschaft, Weinheim* 1988, Vol. I, 258-268, 127-168.

48. W.M. Landes and R.A. Posner, *supra* note 42, at 265.

49. *Supra* note 42, at 281.

later, thus creating a costly barrier to market entry under a trademark that, in reality, is not used and should be free.<sup>50</sup>

The second example is taken from Kaufmann. A modern school of thought contends that protection should be accorded not only to the identification function of the trademark, which Kaufmann considers essential,<sup>51</sup> but also to its distinctive qualities as such, regardless of the underlying product and regardless of the existence of any confusion. Benelux trademark law has indeed adopted this point of view.<sup>52</sup> Kaufmann argues that the protection of the appealing power of the trademark as such turns the trademark into an absolute, exclusive property right, which can be protected as a value in and of itself.<sup>53</sup>

These two examples have a feature in common: the protection which is offered has monopolistic implications. In fact, the protection of a trademark normally used in its basic identification function does not constitute a monopoly as such, because it does not form a barrier to entry onto the market. Ample alternative trademarks, which have not yet been occupied, are freely available. One could conclude that, basically, a trademark gives the owner a property right, but not a monopoly.

The same applies to normal property rights. If, in the city of Nijmegen, I am the owner of a beautiful old Studebaker automobile, I have a factual quasi monopoly in addition to my property right, but I do not create a barrier against others to market entry.<sup>54</sup> However, if the exclusive trademark right is extended to certain functions, it can develop into a monopolistic privilege. It is then that economists, as well as legal specialists, raise their voices.<sup>55</sup> Apparently, a border is crossed at that moment. I shall elaborate on this now.

### 3. Property and Monopoly

The advocates of intellectual property laws prefer to speak about property, and the opponents prefer the word monopoly. Even if the word monopoly were justified, the adherents of intellectual property rights argue, as we saw, that such rights are created in furtherance of competition on a higher level of economic activity, and not in order to impede competition. Mackaay<sup>56</sup> suggests that the unfavourable picture of monopoly as it emerges from the neo-classical approach has been revised by the

50. C.M.D. de Waele reports a case where Penthouse magazine found that its trademark had been 'reserved' in Japan; C.M.D. de Waele, *Melukunleguto, een kennismaking met het Japanse merkenrecht*, *BIE* 1991, 73-83, with further reference to Tokyo High Court 21 February 1983, in T. Doi, *Digest of Court Decisions in Patents and Licensing*, Vol. XIII, no 13, 1983, 27.

51. Cf. M. Lehmann (1986), *supra* note 43, at 14.

52. This point of view will not be changed (significantly) in this respect, under the influence of the European Directive of 21 december 1988; see L. Wichers Hoeth, Art. 13 A 2 BMW mag blijven, *IER* 1988, 85; H.R. Furstner and M.C. Geuze, *Beschermingsomvang van het merk in de Benelux en de EEG-harmonisatie*, *BIE* 1988, 215-220; S. Boekman, *Clareijn/Klarein: Toen, nu en in de toekomst*, in *Noten bij noten*, Zwolle 1990, 1,5.

53. P.J. Kaufmann, *supra* note 7, at 133.

54. E. Mackaay, *supra* note 26, at 889.

55. In general, the extension of the protection provided by the Benelux Trademark Act has been severely criticized abroad.

56. E. Mackaay, *supra* note 26, at 887 *et seq.*

economists. But *is* it indeed justifiable to speak about monopolies? No, it is not, in the opinion of Kitch,<sup>57</sup> as quoted by Mackaay:<sup>58</sup>

‘The ownership of patents is no different than the ownership of any other property right necessary as an input, and we should no more assume that the owner of a patent is a monopolist than we should assume that the owner of particularly fertile land, especially productive skills, or of an advantageous location is a monopolist’.

Not only is the factual monopolistic character of intellectual property rights disputed, it is also stressed that the legal rules impose numerous restrictions on duration, etc.<sup>59</sup>

I believe that Strowel is quite right where he states that a monopoly in the legal sense of an exclusive right does not necessarily confer a monopoly as it is defined by the economic science, and that the identity of the term has led to confusion.<sup>60</sup> Nevertheless, one should not close one’s eyes to the fact that the use of intellectual property rights for certain aims can create monopolistic effects. I refer to the efforts made by the Court of Justice of the European Communities to prevent the creation of artificial market separations by the use of intellectual property rights.

It is unlikely that any intellectual property statute establishes a massive monopolistic privilege as such; on the other hand, even the most innocent looking rights can produce monopolistic effects. Patent rights, for example, are always suspected to entail strong monopolistic effects. But in most situations other solutions exist, which compete with the patent. Even if those solutions are less than perfect, they offer a reasonable alternative if the patent holder were to ask an unreasonable price. Also, competitors can succeed in inventing around the patent. Moreover, competing patent inventions may already exist. Finally, the patent can always be challenged in court, and there is a possibility of compulsive licensing.

Compared to patents, a trademark – at least when taken in its basic function as an identification token – seems to be a very peaceful property right. The experiences of certain Dutch second-hand car dealers are different: even if specialized in BMW automobiles, they may not call themselves ‘BMW specialists’, for this constitutes an infringement on the trademark of BMW.<sup>61</sup> Here, a very far-reaching right and, in my view, a nearly monopolistic position is granted in favour of the trademark holder. In the light of the freedom of expression,<sup>62</sup> this strong protection was questioned by

57. E.W. Kitch, Patents: Monopolies or Property Rights?, 8 *Research in Law and Economics* 31, 33 (1987).

58. E. Mackaay, *supra* note 26, at 904-905.

59. Cf. M. Lehmann (1984), *supra* note 19, at 526 *et seq.*

60. A. Strowel, *supra* note 29.

61. Cf. District Court of Haarlem 20 December 1983, *BIE* 1986, 87; Commercial Court of Brugge 29 March 1984, *BIE* 1986, 89; District Court of Arnhem 8 March 1984, *BIE* 1986, 84; District Court of Amsterdam 20 September 1984, *BIE* 1986, 96; Court of Appeal of The Hague 5 February 1986, *BIE* 1987, 222; District Court of Leeuwarden 19 February 1987, *BIE* 1989, 96; District Court of Haarlem 12 June 1987, *BIE* 1987, 307; District Court of Utrecht 7 July 1987, *BIE* 1990, 141; Court of Appeal of The Hague 10 September 1987, *BIE* 1990, 251; Court of Appeal of The Hague 14 April 1988, *BIE* 1989, 99.

62. D.W.F. Verkade, *Intellectuele Eigendom, Mededinging en Informatievrijheid*, Deventer 1990, 42.

Verkade in his inaugural lecture in Leyden. Arkenbout has warned that, under the new regime of service marks, the situation for second-hand dealers may become even more difficult.<sup>63</sup> Monopolistic effects of the Benelux trademark system may also have been experienced by producers of generic drugs and, at any rate, by doctors and pharmacists who may identify generic products with a trademark only under restricted conditions.<sup>64</sup>

As in the field of aesthetic works an infinite variety is possible, and as, moreover, copyright is mostly seen as a right which protects only against derivative works, but does not prevent anyone from creating works independently, the monopolistic character of copyright seems quite modest.<sup>65</sup> Even in cases like the *Mirage Editions* or *Poortvliet*, where new market opportunities are cut off for commercially talented re-users, the monopolistic effect of copyrights (if there is any) will hardly perturb anyone. However, the more a work gets integrated in the cultural patrimony, the more the exercise of the copyright can take on monopolistic features. If the Bible was still subject to a copyright, it would provide an absolute monopoly, since no other literary work could possibly replace it in its function. Likewise, the winner of the Pulitzer Prize or the Prix Goncourt will find that, during the one year that his or her work is awarded the prize, she or he possesses a kind of monopoly.

It seems that serious monopolistic complications can occur mainly where copyrights are granted in essentially technical or functional creations, as for example computer programs. Nevertheless, as is illustrated by two cases which were brought before the European Court of Justice, *Consortio componentistica di recambio v. Renault*, and *Volvo v. Veng*,<sup>66</sup> such an effect can also be generated by the exercise of exclusive rights in predominantly or even entirely aesthetic or ornamental forms.<sup>67</sup> In those cases, a model patent protection on spare parts was involved but, subject to the applicable law, copyrights to spare parts are not always impossible.

#### 4. Economics and Justice

Efficiency cannot be a basis for a general theory about the assignment of rights, as Mackaay states in his survey of the economic analysis in *Themis*.<sup>68</sup> As to the question which rights should be assigned to whom, economics can inform us about the effect of legal rules, but not about their justice<sup>69</sup> – at least, if one does not, like Posner, promote efficiency itself as a moral maxim.<sup>70</sup> In some cases, justice is inefficient; sub-

63. E.J. Arkenbout, *Handelsnamen en dienstmerken*, Zwolle 1987, 164–166.

64. Benelux Court of Justice 9 July 1984, BIE 1985, 69; see M. Lehman (1986), *supra* note 43, at 16.

65. Cf. M. Lehmann (1984), *supra* note 19, at 530. See also A. Strowel, *supra* note 29, at 128.

66. European Court of Justice, Cases 53/87 and 238/87, both decided on 5 October 1988, *Nederlandse Jurisprudentie* 1991, 106, 107.

67. Above all, copyright can be (ab)used as an instrument to attain a factual market monopoly or enterprise monopoly, see A. Strowel, *supra* note 29, at 129–132.

68. E. Mackaay (1988), *supra* note 4, at 436.

69. A.M. Hol, *Efficiëntie als instrument en als norm, enkele rechtstheoretische kanttekeningen bij de economische analyse van het recht, Ars Aequi* 1990, 632, 644.

70. This view is far from finding support by all economists.

jective rights are worth more than their economic return.<sup>71</sup> It is not astonishing for a normative economic analysis based on the maxim of efficiency to be received with scepticism in those fields of intellectual property where, like in trademark law, the protection of consumer interests is sometimes more valued than the rule of efficiency, as has been sustained in Henning-Bodewig's analysis in *Marke und Verbraucher*.<sup>72</sup>

What is the role of justice in granting intellectual property rights? There are two lines of reasoning on which property, in its broad sense, could be based: the existence of rights in one's own person and the existence of a title to the fruit of one's labour. Both elements have been eloquently expressed in the work of John Locke, who is quoted by Underkuffler and Lehmann:

'Though the earth, and all inferior Creatures be common to all Men, yet every Man has a property in his own person. No one but himself has rights in this. It can be said that the toil of his body and the work of his hands are intrinsically his property. Therefore, that which he transforms from the state created and so left by nature, he has combined with his labors and added something of his own self. Since he has removed it from the general state created by nature, something has been added to it by his toil, which excludes the common rights of others. Because his toil is unquestionably a property of the laborer, no one but he can have rights in that which has been combined with his toil, especially if sufficient quantity and quality remain for the others collectively'.

Underkuffler<sup>73</sup> underscores the idea that a man's property is intimately connected with his person. Lehmann emphasizes that property is vested in the fruit of one's work.<sup>74</sup> These lines of reasoning both can serve as a justification for all intellectual property rights. Clearly, in copyright the personal imprint of the maker is an argument of justice in favour of protection which is as valid as the fact that the work was made by the efforts of the creator.

As to inventions, most of them require effort; but if the invention is accomplished by chance, the only justification for granting a patent is that the inventor personally found the solution. As to trademarks, the rationale of a property right to be granted in one's own person or in the result of one's work is less predominant, but it certainly is not entirely absent. A justification for granting a property right may be the efforts that the trademark holder exerted by investing in marketing and publicity. It is also defensible that there is an analogy to the right to one's own person or identity: in fact, trademarks and the goodwill attached to them provide not only goods or services with an identity, but also create a corporate image and a 'personality' for the

71. R.H. Nieuwenhuis, *Recht en belang*, in *Flores debitorum, opstellen over ethiek en recht*, Zwolle 1984, 65, 74. See also Von Weizsäcker, *supra* note 20, at 350. Von Weizsäcker introduces an anecdote from Xenophon which could very well serve as an example of where justice overrules economic efficiency.

72. *Supra* note 47, at 263-268.

73. L.S. Underkuffler, *On Property: an Essay*, 100 *Yale Law Journal* 127 (1990).

74. M. Lehman (1989) *supra* note 19, at 9-10.

trademark holder.<sup>75</sup> If the trademark of a craftsman extends his identity to his goods and *vice versa*, this could also apply to companies.

It is not without reason that I turn to the justice rationale for intellectual property rights, even if I know that among many modern intellectual property lawyers it is not considered the most important question and that the rhetoric of ‘most sacred rights’ of the French Revolution hardly appeals to them. First and foremost, one should be very cautious when abolishing or restricting intellectual property rights which by non-specialists – including judges – are considered as a just reward. As Spoor demonstrates in his important inaugural lecture,<sup>76</sup> such a policy can, to the detriment of the whole intellectual property system, result in overstressing other intellectual property rights, particularly copyright, in order to shelter creations elsewhere expelled. Secondly, to a certain extent, the justification of property rights forms at the same time their limitation. The reasons which justify property rights do not justify monopolies, particularly since monopolies may damage other men’s property in a broad sense.<sup>77</sup> This leads to the conclusion that monopolistic effects resulting from intellectual property regulations as discussed in paragraph 3 will be acceptable only if they are supported by a clear economic rationale.

## 5. Conclusion

I started by saying that no intellectual property lawyer will be amazed if in his professional field he is confronted with economic reasoning; regretfully, after this hopeful start, I conclude, as a lawyer, by philosophising about justice. My conclusion is that economics and justice are equally important rationales for providing and delimitating property rights in intellectual creations, but that monopolistic impacts of intellectual property regulations can be justified only in the rare instance in which they are supported by strong economic reasons. A lot of work remains to be done by lawyers and economists.<sup>78</sup> Everything is open to discussion; let us welcome economics as an incentive to innovation in intellectual property law.

75. Cf. J.M.M. Maeijer, brilliantly supporting, with reference to Von Gierke, that a legal person is, for the purposes of the law, a ‘real’ person, who can even exercise the moral rights of an author; J.M.M. Maeijer, *Rechtspersoonlijkheid, persoonlijkheidsrechten en vatbaarheid voor beslag van het auteursrecht*, *BIE* 1990, 352.

76. J.H. Spoor, *De gestage groei van merk, werk en uitvinding*, Zwolle 1990.

77. L.S. Underkuffler, *supra* note 73, at 140-141.

78. Teijl and Holzhauser have advanced a very interesting proposal for applying the ideas of Calabresi and Melamed to intellectual property law, which might eventually be an answer to the increasing complexity of the intellectual property system; Teijl and Holzhauser, *supra* note 9. Calabresi and Melamed have brought forward an analysis in which property and liability rules, which are legally quite distinct, are brought together in a comprehensive system; G. Calabresi and A.D. Melamed, *Property Rules, Liability Rules and Inalienability: One View of the Cathedral*, 85 *Harvard Law Review* 1098-1128 (1972). Indeed, in several fields of intellectual property law, one can observe a shifting from property rights to liability rules.



In June 1991 the first international conference on information law – organized by the Institute for Information Law of the University of Amsterdam – was held in Amsterdam. Scholars and practitioners of various backgrounds were present to discuss the principal problems of information law facing the 21st century. This book contains a selection of the papers presented at the conference by a host of acclaimed experts.

The book is divided into separate chapters, reflecting the three main themes of the conference: access to the media market, public and private relationships in the information market, and intellectual property and information technology. In addition, the book contains an introductory chapter discussing general topics of information law. Overall, the book presents an exciting overview of key issues of information law, involving telecommunications and broadcasting, advertising and product placement, privacy, rights to government controlled information, exclusive rights in information and information technology, et cetera.

'Information Law towards the 21st Century' is the second volume of the Information Law series.