

1. Record Nr.	UNINA9910961070503321
Titolo	Bits of power : issues in global access to scientific data // Committee on Issues in the Transborder Flow of Scientific Data, U.S. National Committee for CODATA, Commission on Physical Sciences, Mathematics, and Applications, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, 1997
ISBN	9780309174978 030917497X 9780309523561 0309523567 9780585001807 0585001804
Edizione	[1st ed.]
Descrizione fisica	1 online resource (250 p.)
Disciplina	501/.4
Soggetti	Communication in science Research - Information services Database management Information technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Front Matter""; ""Preface""; ""Acknowledgments""; ""Contents""; ""Summary""; ""1 Introduction""; ""2 Trends and Issues in Information Technology""; ""3 Scientific Issues in the International Exchange of Data in the Natural Sciences""; ""4 Data from Publicly Funded Researcha€? The Economic Perspective""; ""5 The Trend Toward Strengthened Intellectual Property Rights: A Potential Threat to Public-Good Uses of Scientific Data""; ""APPENDIX A Abbreviations and Acronyms""; ""APPENDIX B Glossary""; ""APPENDIX C Examples of Successful International Data Exchange Activities in the Natural Sciences"" ""APPENDIX D Inquiry to Interested Parties on Issues in the Transborder Flow of Scientific Data"" ""Index""
Sommario/riassunto	Since Galileo corresponded with Kepler, the community of scientists

has become increasingly international. A DNA sequence is as significant to a researcher in Novosibirsk as it is to one in Pasadena. And with the advent of electronic communications technology, these experts can share information within minutes. What are the consequences when more bits of scientific data cross more national borders and do it more swiftly than ever before? Bits of Power assesses the state of international exchange of data in the natural sciences, identifying strengths, weaknesses, and challenges. The committee makes recommendations about access to scientific data derived from public funding. The volume examines: Trends in the electronic transfer and management of scientific data. Pressure toward commercialization of scientific data, including the economic aspects of government dissemination of the data. The implications of proposed changes to intellectual property laws and the role of scientists in shaping legislative and legal solutions. Improving access to scientific data by and from the developing world. Bits of Power explores how these issues have been addressed in the European Community and includes examples of successful data transfer activities in the natural sciences. The book will be of interest to scientists and scientific data managers, as well as intellectual property rights attorneys, legislators, government agencies, and international organizations concerned about the electronic flow of scientific data.
