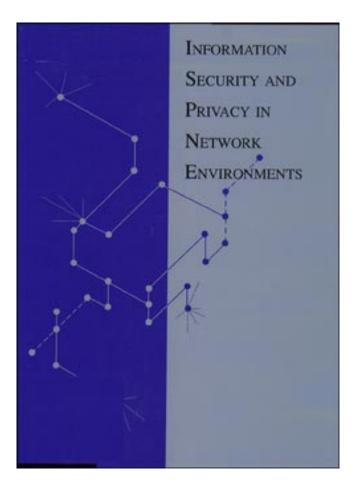
Information Security and Privacy in Network Environments

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Foreword

I nformation networks are changing the way we do business, educate our children, deliver government services, and dispense health care. Information technologies are intruding in our lives in both positive and negative ways. On the positive side, they provide windows to rich information resources throughout the world. They provide instantaneous communication of information that can be shared with all who are connected to the network. As businesses and government become more dependent on networked computer information, the more vulnerable we are to having private and confidential information fall into the hands of the unintended or unauthorized person. Thus appropriate institutional and technological safeguards are required for a broad range of personal, copyrighted, sensitive, or proprietary information. Otherwise, concerns for the security and privacy of networked information may limit the usefulness and acceptance of the global information infrastructure.

This report was prepared in response to a request by the Senate Committee on Governmental Affairs and the House Subcommittee on Telecommunications and Finance. The report focuses on policy issues in three areas: 1) national cryptography policy, including federal information processing standards and export controls; 2) guidance on safeguarding unclassified information in federal agencies; and 3) legal issues and information security, including electronic commerce, privacy, and intellectual property.

OTA appreciates the participation of the many individuals without whose help this report would not have been possible. OTA received valuable assistance from members of the study's advisory panel and participants at four workshops, as well as a broad range of individuals from government, academia, and industry. OTA also appreciates the cooperation of the General Accounting Office and the Congressional Research Service during the course of this assessment. The report itself, however, is the sole responsibility of OTA.

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Note: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove. or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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