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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 15816 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *IT Security techniques*, in collaboration with ITU-T. The identical text is published as ITU-T Rec. X.841.

Annex A forms a normative part of of this International Standard. Annex B is for information only.

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Introduction

This Recommendation | International Standard on Security Information Objects (SIOs) for Access Control provides object definitions that are commonly needed in more than one security standard such that multiple and different definitions of the same functionality may be avoided. Precision in these definitions is achieved by use of the Abstract Syntax Notation One (ASN.1) defined in ITU-T Rec. X.680 (1997) | ISO/IEC 8824-1:1998, and ITU-T Rec. X.681 (1997) | ISO/IEC 8824-2:1998.

The aim of security management is to ensure that assets, including information, are protected appropriately and cost effectively. In order to protect proprietary interests and Intellectual Property Rights, organizations need to control the handling of their information. Severe damage or embarrassment can be caused to either the originator or holder of sensitive information, for example, if it is released to those not authorized to receive it (a breach of confidentiality), or if it is modified in any way (a breach of integrity). Each organization needs to ensure that it protects its own information and assets adequately in all forms during its storage, processing and transmission between and within organizations over both private and public networks. Organizations must be satisfied that their assets will be protected properly when they are held or processed by others if business is to be conducted more widely.

The motivation for development of SIOs for Access Control is the achievement of the flexibility and interoperability in security management that accrues from the use of common structures for similar functions. Standardization of security labels and alternative methods for access control have been pursued in this Recommendation | International Standard.