MALAYSIAN STANDARD

MS ISO/IEC 27033-1:2012

Information technology - Security techniques - Network security - Part 1: Overview and concepts (ISO/IEC 27033-1:2009, IDT)

ICS: 35.040

Descriptors: information technology, security, techniques, network, overview, concept

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (STANDARDS MALAYSIA)** is the national standards and accreditation body of Malaysia.

The main function of STANDARDS MALAYSIA is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefiting the health and safety of the public, protecting the consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation.

Malaysian Standards (MS) are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. To the greatest extent possible, Malaysian Standards are aligned to or are adoption of international standards. Approval of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Malaysian Standards are reviewed periodically. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

STANDARDS MALAYSIA has appointed **SIRIM Berhad** as the agent to develop, distribute and sell the Malaysian Standards.

For further information on Malaysian Standards, please contact:

Department of Standards Malaysia
Ministry of Science, Technology and Innovation
Level 1 & 2, Block 2300, Century Square
Jalan Usahawan
63000 Cyberjaya
Selangor Darul Ehsan
MALAYSIA

Tel: 60 3 8318 0002
Fax: 60 3 8319 3131
http://www.standardsmalaysia.gov.my

E-mail: central@standardsmalaysia.gov.my

OR

SIRIM Berhad
(Company No. 367474 - V)
1, Persiaran Dato' Menteri
Section 2, P.O. Box 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA

Tel: 60 3 5544 6000
Fax: 60 3 5510 8095
http://www.sirim.my

E-mail: msonline@sirim.my

CONTENTS

Committee representation

The Industry Standards Committee on Information Technology, Communications and Multimedia (ISC G) under whose authority this Malaysian Standard was adopted, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Department of Standards Malaysia
Federation of Malaysian Manufacturers
Institut Tadbiran Awam Negara, Malaysia
Malaysian Administrative, Modernisation and Management Planning Unit
Malaysian International Chamber of Commerce and Industry
Malaysian National Computer Confederation
Malaysian Technical Standards Forum Bhd
MIMOS Berhad
Ministry of Domestic Trade, Co-operatives and Consumerism
Ministry of Energy, Green Technology and Water
Ministry of Information, Communication and Culture
Ministry of International Trade and Industry
Ministry of Science, Technology and Innovation
Multimedia Development Corporation Sdn Bhd
Multimedia University
Persatuan Industri Komputer dan Multimedia Malaysia
Science and Technology Research Institute for Defence
SIRIM Berhad (Secretariat)
Suruhanjaya Komunikasi dan Multimedia Malaysia
Telekom Malaysia Berhad
The Institution of Engineers, Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Information Security which supervised the adoption of the ISO/IEC Standard as Malaysian Standard consists of representatives from the following organisations:

Bank Negara Malaysia
Chief Government Security Office
CyberSecurity Malaysia
International Islamic Universiti Malaysia
Malaysian Administrative, Modernisation and Management Planning Unit
Malaysian Electronic Payment System Sdn Bhd
Malaysian National Computer Confederation
MIMOS Berhad
Ministry of Information, Communication and Culture
Ministry of Science, Technology and Innovation
Multimedia Development Corporation Sdn Bhd
Persatuan Industri Komputer dan Multimedia Malaysia
PricewaterhouseCoopers
SIRIM Berhad (Secretariat)
Suruhanjaya Komunikasi dan Multimedia Malaysia
Teknimuda Sdn Bhd
Telekom Malaysia Berhad
Tenaga Nasional Berhad

Committee representation *(continued)*

The Working Group on Information Security Management Systems which recommended the adoption of the ISO/IEC Standard as Malaysian Standard consists of representatives from the following organisations:

Cyberintelligence
CyberSecurity Malaysia
Extol MSC Berhad
Independent
International Islamic Universiti Malaysia
JARING Communications Sdn Bhd
Khazanah Nasional Berhad
KPMG
Malaysian Administrative, Modernisation and Management Planning Unit
Malaysian Electronic Payment System Sdn Bhd
Ministry of Information, Communication and Culture
PricewaterhouseCoopers
RHB Bank Berhad
Shell Information Technology International
SIRIM Berhad (Secretariat)
SIRIM QAS International Sdn Bhd
Suruhanjaya Komunikasi dan Multimedia Malaysia
Teknimuda Sdn Bhd
Telekom Malaysia Berhad
Universiti Pertahanan Nasional Malaysia

NATIONAL FOREWORD

The adoption of the ISO/IEC Standard as a Malaysian Standard was recommended by the Working Group on Information Security Management Systems under the authority of the Industry Standards Committee on Information Technology, Communications and Multimedia.

This Malaysian Standard is identical with ISO/IEC 27033-1:2009, *Information technology - Security techniques - Network security - Part 1: Overview and concepts*, published by the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC). However, for the purposes of this Malaysian Standard, the following apply:

a) in the source text, "this International Standard" should read "this Malaysian Standard"; and

b) the comma which is used as a decimal sign (if any), to read as a point; and

c) reference to International Standards should be replaced by corresponding Malaysian Standards as follows:

Referenced International Standards	Corresponding Malaysian Standards
ISO/IEC 7498 (all parts), *Information technology - Open Systems Interconnection - Basic Reference Model*	MS ISO/IEC 7498 (all parts), *Information technology - Open systems Interconnection - Basic reference Model*
ISO/IEC 27001:2005, *Information technology - Security techniques - Information security management systems - Requirements*	MS ISO/IEC 27001:2007, *Information technology - Security techniques - Information security management systems - Requirements*
ISO/IEC 27002:2005, *Information technology - Security techniques - Code of practice for information security management*	MS ISO/IEC 27002:2005, *Information technology - Security techniques - Code of practice for information security management*
ISO/IEC 27005:2008, *Information technology - Security techniques - Information security risk management*	MS ISO/IEC 27005:2008, *Information technology - Security techniques - Information security risk management*

Compliance with a Malaysian Standard does not of itself confer immunity from legal obligations.

NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, and wording (or is an identical translation) of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and structure although it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21-1.

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 2.

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 document 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 27033-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *IT Security techniques*.

This first edition of ISO/IEC 27033-1 cancels and replaces ISO/IEC 18028-1:2006.

ISO/IEC 27033 consists of the following parts, under the general title *Information technology — Security techniques — IT network security*:

— *Part 1: Guidelines for network security*

The following parts are under preparation:

— *Part 2: Guidelines for the design and implementation of network security*

— *Part 3: Reference networking scenarios — Risks, design techniques and control issues*

Risks, design techniques and control issues for

— securing communications between networks using security gateways,

— securing virtual private networks,

— IP convergence, and

— wireless networks

will form the subject of future parts.

