INTERNATIONAL **STANDARD**

ISO/IEC 27010

First edition 2012-04-01

Information technology — Security techniques — Information security management for inter-sector and inter-organizational communications

de l'im.
nisationne. Technologies de l'information — Techniques de sécurité — Gestion de la sécurité de l'information des communications intersectorielles et interorganisationnelles



Reference number ISO/IEC 27010:2012(E)



© ISO/IEC 2012

Actual or utilized in any for ring from either ISO at All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

Contents

Page

Forewordv						
Introductionvi						
1	Scope	. '				
2	Normative references	. 1				
3	Terms and definitions	. 1				
4	Concepts and justification	. 2				
4.1	Introduction	. 2				
4.2 4.3	Information sharing communities					
4.3 4.4	Community management					
4.5	Inter-sector communication	. 2				
4.6	Conformity					
4.7	Communications model					
5 5.1	Security policy	; ;				
5.1.1	Information security policy document	į				
5.1.2	Review of the information security policy					
6	Organization of information security					
6.1	Internal organization					
6.2 6.2.1	External partiesldentification of risks related to external parties					
6.2.2	Addressing security when dealing with customers					
6.2.3	Addressing security in third party agreements	. ξ				
7	Asset management					
7.1 7.1.1	Responsibility for assets					
7.1.1 7.1.2	Inventory of assets Ownership of assets	. t				
7.1.3	Acceptable use of assets	. 6				
7.2	Information classification					
7.2.1 7.2.2	Classification guidelines Information labelling and handling					
7.3	Information exchanges protection	. 7				
7.3.1	Information dissemination					
7.3.2 7.3.3	Information disclaimers					
7.3.4	Information sensitivity reduction	.8				
7.3.5	Anonymous source protection					
7.3.6 7.3.7	Anonymous recipient protection Onwards release authority					
8	Human resources security					
8.1	Prior to employment					
8.1.1	Roles and responsibilities	. 9				
8.1.2 8.1.3	Screening Terms and conditions of employment					
8.1.3 8.2	During employment1					
8.3	Termination or change of employment					
9	Physical and environmental security	1 (

ISO/IEC 27010:2012(E)

10	Communications and operations management	
10.1	Operational procedures and responsibilities	.10
10.2	Third party service delivery management	.10
10.3	System planning and acceptance	
10.4	Protection against malicious and mobile code	.10
10.4.1	Controls against malicious code	
10.4.2	Controls against mobile code	
10. 4 .2 10.5	Back-up	
10.5	Network security management	
10.7	Media handling	
10.8	Exchange of information	
10.8.1	Information exchange policies and procedures	
10.8.2	Exchange agreements	
10.8.3	Physical media in transit	
10.8.4	Electronic messaging	
10.8.5	Business information systems	
10.9	Electronic commerce services	.11
10.10	Monitoring	.11
10.10.1	Audit logging	.11
	Monitoring system use	
	Protection of log information	
	Administrator and operator logs	
	Fault logging	
	Clock synchronisation	
10.10.6		
11	Access control	.12
12	Information systems acquisition, development and maintenance	.12
12.1	Security requirements of information systems	
12.2	Correct processing in applications	.12
12.3	Cryptographic controls	.12
12.3.1	Policy on the use of cryptographic controls	.12
12.3.2	Key management	
12.4	Security of system files	
12.5	Security in development and support processes	
12.6	Technical vulnerability management	
13	Information security incident management	.13
13.1	Reporting information security events and weaknesses	.13
13.1.1	Reporting information security events	.13
13.1.2	Reporting security weaknesses	.13
	Early warning system	
13.2	Management of information security incidents and improvements	
13.2.1	Responsibilities and procedures	
13.2.2	Learning from information security incidents	
13.2.3	Collection of evidence	
13.2.3		
14	Business continuity management	.14
14.1	Information security aspects of business continuity management	.14
14.1.1	Including information security in the business continuity management process	
14.1.2	Business continuity and risk assessment	
14.1.3	Developing and implementing continuity plans including information security	14
14.1.4	Business continuity planning framework	
	Testing, maintaining and re-assessing business continuity plans	
14.1.3		
15	Compliance	.15
15.1	Compliance with legal requirements	.15
15.1.1	Identification of applicable legislation	
15.1.2	Intellectual property rights (IPR)	
15.1.3	Protection of organizational records	
15.1.3 15.1.4	Data protection and privacy of personal information	
15.1.4 15.1.5	Prevention of misuse of information processing facilities	. I Ə

		cryptographic controls	
		information sharing communityith security policies and standards, and technical compliance	
15.3	Information s	stems audit considerations	16
15.3.1	Information s	stems audit controlsnformation systems audit tools	16
15.3.2	Audit of comr	nunity functions	16
Annex	A (informative)	Sharing sensitive information	17
Annex	B (informative)	Establishing trust in information exchanges	22
Annex	C (informative)	The Traffic Light Protocol	27
Annex	D (informative)	Models for organizing an information sharing community	28
Bibliog	raphy		34
		Models for organizing an information sharing community	
© ISO/IE0	C 2012 – All rights ı	eserved	٧

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.

Cc. ISO/IEC 27010 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 27, IT Security techniques.

Introduction

This International Standard is a supplement to ISO/IEC 27001:2005 and ISO/IEC 27002:2005 for use by information sharing communities. The guidelines contained within this International Standard are in addition to and complement the generic guidance given within other members of the ISO/IEC 27000 family of standards.

Whereas ISO/IEC 27001:2005 and ISO/IEC 27002:2005 address information exchange between organizations, they do so in a generic manner. When organizations wish to communicate sensitive information to multiple other organizations, the originator must have confidence that its use in those other organizations will be subject to adequate security controls implemented by the receiving organizations. This can be achieved through the establishment of an information sharing community, where each member trusts the other members to protect the shared information, even though the organizations may otherwise be in competition with each other.

An information sharing community cannot work without trust. Those providing information must be able to trust the recipients not to disclose or to act upon the data inappropriately. Those receiving information must be able to trust that information is accurate, subject to any qualifications notified by the originator. Both aspects are important, and must be supported by demonstrably effective security policies and the use of good practice. To achieve this, the community members must all implement a common management system covering the security of the shared information. This is the ISMS for the information sharing community.

In addition, information sharing can take place between information sharing communities, where not all recipients will be known to the originator. This will only work if there is adequate trust between the communities and their information sharing agreements. It is particularly relevant to the sharing of sensitive information between diverse communities such as different industry or market sectors.

This International Standard provides guidelines and general principles on how the specified requirements can be met using established messaging and other technical methods. It is designed to support the creation of trust when exchanging and sharing sensitive information, thereby encouraging the international growth of information sharing communities.

This document is a previous general ded by tills

Information technology — Security techniques — Information security management for inter-sector and inter-organizational communications

1 Scope

This International Standard provides guidelines in addition to guidance given in the ISO/IEC 27000 family of standards for implementing information security management within information sharing communities.

This International Standard provides controls and guidance specifically relating to initiating, implementing, maintaining, and improving information security in inter-organizational and inter-sector communications.

This International Standard is applicable to all forms of exchange and sharing of sensitive information, both public and private, nationally and internationally, within the same industry or market sector or between sectors. In particular, it may be applicable to information exchanges and sharing relating to the provision, maintenance and protection of an organization's or nation state's critical infrastructure.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 27000:2009, Information technology — Security techniques — Information security management systems — Overview and vocabulary

ISO/IEC 27002:2005, Information technology — Security techniques — Code of practice for information security management

3 Terms and definitions

For the purposes of this document, the terms and definitions in ISO/IEC 27000 and the following apply.

3.1

information sharing community

group of organizations that agree to share information

NOTE An organization can be an individual.

3.2

trusted information communication entity

autonomous organization supporting information exchange within an information sharing community