

International Standard

ISO/IEC 27031

Second edition

2025-05

Cybersecurity — Information and communication technology readiness for business continuity

Cybersécurité — Préparation des technologies de l'information et a la communication pour la continuité d'activité

(https://standards.iteh.ai)
Document Preview

ISO/IEC 27031-2025

https://standards.iteh.ai/catalog/standards/iso/c30dba04-327f-4ac4-b6fc-d3ac16306214/iso-iec-27031-2025

Reference number ISO/IEC 27031:2025(en)

© ISO/IEC 2025

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO/IEC 27031-2025

https://standards.iteh.ai/catalog/standards/iso/c30dba04-327f-4ac4-b6fc-d3ac16306214/iso-iec-27031-2025



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents				
Fore	word		v	
Intro	ductio	n	vi	
1	Scop	e	1	
2	-	native references		
3		ns and definitions		
4 5	Abbreviated terms			
	Stru (5.1	cture of this document General		
_	0.1			
6	Integ 6.1	gration of IRBC into BCM		
	6.2	Enabling governance		
	6.3	Business continuity management objectives		
	6.4	Risk management and applicable controls for IRBC		
	6.5	Incident management and relationship to IRBC		
	6.6	BCM strategies and alignment to IRBC		
7		ness expectations for IRBC		
	7.1	Risk review		
		7.1.1 General 7.1.2 Monitoring, detection and analysis of threats and events		
	7.2	Inputs from business impact analysis		
		7.2.1 General	8	
		7.2.2 Understanding critical ICT services	8	
	7.3	7.2.3 Assessing ICT readiness against business continuity requirements	9 a	
	7.3	7.3.1 General		
		7.3.2 ICT dependencies for the scope		
		7.3.3 Determine any contractual aspects of dependencies	10	
8	Defi	ning prerequisites for IRBC		
	8.1	ning prerequisites for IRBC Incident based – preparation before incident	10	
		8.1.1 General		
		8.1.2 ICT Recovery capabilities 8.1.3 Establishing an IRBC		
		8.1.4 Setting objectives		
		8.1.5 Determining possible outcomes and benefits of IRBC		
		8.1.6 Equipment redundancy planning	13	
	0.0	8.1.7 Determining the scope of ICT services related to the objectives	13	
	8.2	Determining target ICT RTO and RPO		
9	Determining IRBC strategies			
	9.1 9.2	General IRBC strategy options		
	9.2	9.2.1 General		
		9.2.2 Skills and knowledge		
		9.2.3 Facilities	16	
		9.2.4 Technology		
		9.2.5 Data		
		9.2.6 Processes 9.2.7 Suppliers		
10	Doto			
10	10.1	rmining the ICT continuity plan Prerequisites for the development of plans		
	10.1	10.1.1 Determining and setting the recovery organization		
		10.1.2 Determining time frames for plan development, reporting and testing		

		10.1.3 Resources	
		10.1.4 Competency of IRBC staff	
	400	10.1.5 Technological solutions	
	10.2	Recovery plan activation	
		10.2.1 ICT BCP Activation	
	10.2	10.2.2 Escalation	
	10.3	ICT recovery plans	
		10.3.1 RPO and RTO plans for ICT	
		10.3.2 Facilities	
		10.3.3 Technology	
		10.3.4 Data	
		10.3.5 Response and recovery procedures	23
	10.4	10.3.6 People	23
	10.4 10.5	Temporary work around plansExternal contacts and procedures	
		•	
11		ng, exercise, and auditing	
	11.1		
	11.2	Testing dependencies	24
		11.2.1 Test and exercise	
		11.2.2 Test and exercise program	
		11.2.3 Scope of exercises	
		11.2.4 Planning an exercise	
		11.2.5 Alert based and different recovery stages	
		11.2.6 Managing an exercise	
	11.3	Learning from tests	28
	11.4	Auditing the IRBC	28
	11.5	Control of documented information	
12	Final	MBCO (https://standards.iteh.ai)	29
13	Top r	nanagement responsibilities regarding evaluating the IRBC	29
	13.1	General DOCIMAENT PRAVIAW	29
	13.2	Management responsibilities	29
Anne	ex A (in	formative) Comparing RTO and RPO to business objectives for ICT recovery	31
Anne	ex B (in	formative) Risk reporting for FMEAlha04-327f-4ac4-h6fc-d3ac16306214/iso-lec-27	.03.1-2.1 32
Bibliography			

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iso.org/directives<

ISO and IEC draw attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO and IEC had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents and https://patents.iec.ch. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *Information security, cybersecurity and privacy protection*.

This second edition cancels and replaces the first edition (ISO/IEC 27031:2011), which has been technically revised.

ISO/IEC 27031:2025

The main changes are as follows:

- the structure of the document has been changed;
- the scope has been changed for clarification;
- technical content has been added in <u>6.4</u>, <u>6.5</u>, <u>6.6</u>, <u>9.2</u> and <u>10.1.5</u>.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iso.org/members.html and www.iso.org/members.html and

Introduction

Over the years, information and communication technology (ICT) has become an integral part of many of the activities within the critical infrastructures in all organizational sectors, whether public or private. The proliferation of the internet and other electronic networking services, as well as the capabilities of systems and applications, has also resulted in organizations becoming more reliant on reliable, safe and secure ICT infrastructures.

Meanwhile, the need for business continuity management (BCM), including incident preparedness, disaster recovery planning, and emergency response and management, has been recognized and supported with the development and endorsement of specific domains of knowledge, expertise, and standards, including ISO 22313.

Failures of ICT services, including those caused by security issues such as systems intrusion and malware infections, impact the continuity of business operations. Thus, managing ICT and related continuity, as well as other security aspects, form a key part of business continuity requirements. Furthermore, in the majority of cases, the critical processes and activities that require business continuity are usually dependent upon ICT. This dependence means that disruptions to ICT can constitute strategic risks to the reputation of the organization and its ability to operate.

The advent and increasing dominance of Internet-based ICT services (cloud ICT services) has caused the nature of preparedness to change from relying on internal processes to a reliance on the quality and robustness of services from other organizations and the associated business relationships with such organizations.

ICT readiness is an essential component for many organizations in the implementation of business continuity management and information security management.

As a result, effective BCM is frequently dependent upon effective ICT readiness to ensure that the organization's objectives can continue to be met during disruptions. This is particularly important as the consequences of disruptions to ICT often have the added complication of being invisible or difficult to detect.

For an organization to achieve ICT readiness for business continuity (IRBC), it should put in place a systematic process to prevent, predict and manage ICT disruptions and incidents which have the potential to disrupt ICT services. This can be achieved by coordinating IRBC with the information security and BCM processes. In this way, IRBC supports BCM by ensuring that the ICT services can be recovered to pre-determined levels within timescales required and agreed by the organization.

If an organization is using relevant information security and business continuity standards, the establishment of IRBC should preferably take into consideration existing or intended processes linked to these standards. This linkage can support the establishment of IRBC and also avoid any dual processes for the organization.

This document describes the concepts and principles of ICT readiness for business continuity (IRBC) and provides a framework of methods and processes to identify and specify aspects for improving an organization's ICT readiness to ensure business continuity.

This document complements the information security controls relating to business continuity in ISO/IEC 27002. It also supports the information security risk management process specified in ISO/IEC 27005.

Based upon ICT readiness objectives, this document also extends the practices of information security incident management into ICT readiness planning, training and operation.