International Standard

ISO/IEC 27031

Cybersecurity — Information and communication technology readiness for business continuity

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

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Foreword

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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.

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 6.4, 6.5, 6.6, 9.2 and 10.1.5.

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.iec.ch/national-committees.

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.

Cybersecurity — Information and communication technology readiness for business continuity

1 Scope

This document describes the concepts and principles of information and communication technology (ICT) readiness for business continuity (IRBC). It 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 serves the following business continuity objectives for ICT:

— minimum business continuity objective (MBCO),

— recovery point objective (RPO),

— recovery time objective (RTO) as part of the ICT business continuity planning.

This document is applicable to all types and sizes of organizations.

This document describes how ICT departments plan and prepare to contribute to the resilience objectives of the organization.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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, *Information technology — Security techniques — Information security management systems — Overview and vocabulary*

ISO/IEC 27002, *Information security, cybersecurity and privacy protection — Information security controls*

ISO/IEC 27005, *Information security, cybersecurity and privacy protection — Guidance on managing information security risks*

ISO/IEC 27035-1:2023, *Information technology — Information security incident management — Part 1: Principles and process*

ISO 22300, *Security and resilience — Vocabulary*

ISO 22301, *Security and resilience — Business continuity management systems — Requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 27000, ISO/IEC 27002, ISO/IEC 27005, ISO/IEC 27035-1, ISO 22300, ISO 22301, and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/