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Part 3: Guidelines for ICT incident response operations

Technologies de l'information — Gestion des incidents de sécurité de l'information —

Partie 3: Lignes directrices relatives aux opérations de réponse aux incidents TIC

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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*.

A list of all parts in the ISO 27035 series can be found on the ISO website.

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.

Introduction

An information security incident can involve ICT or not. For example, information that spreads unintentionally through the loss of paper documents can very well be a serious information security incident, which requires incident reporting, investigation, containment, corrective actions and management involvement. This type of incident management is often carried out, for example, by the Chief Information Security Officer (CISO) within the organization. Guidance on the management of such information security incidents can be found in ISO/IEC 27035-1. This document, however, only considers incident response operations for ICT-related incidents, and not for information security incidents related to paper documents or any other non-ICT incidents. Whenever the term "information security" is used in this document, it is done so in the context of ICT-related information security.

The organizational structures for information security vary depending on the size and business field of organizations. As various and numerous incidents occur and are increasing (such as network incidents, e.g. intrusions, data breaches and hacking), higher concerns about information security have been raised by organizations. A secure ICT environment set up to withstand various types of attacks (such as DoS, worms and viruses) with network security equipment such as firewalls, intrusion detection systems (IDSs) and intrusion prevention systems (IPSs) should be complemented with clear operating procedures for incident handling, along with well-defined reporting structures within the organization.

To ensure confidentiality, integrity and availability of information and to handle incidents efficiently, capabilities to conduct incident response operations is required. For this purpose, a computer security incident response team (CSIRT) should be established to perform tasks such as monitoring, detection, analysis and response activities for collected data or security events. These tasks may be assisted by artificial intelligence tools and techniques.

This document supports the controls of ISO/IEC 27001:2013, Annex A, related to incident management.

Not all steps in this document are applicable since it depends on the particular incident. For example, a smaller organization may not use all guidance in this document but can find it useful for organization of their ICT-related incident operations especially if operating their own ICT environment. It can also be useful for smaller organizations that have outsourced their IT operations to better understand the requirements and execution of incident operations that they should expect from their ICT supplier(s).

This document is particularly useful to organizations providing ICT services that involve interactions between organizations of incident operations in order to follow the same processes and terms.

This document also provides a better understanding on how incident operations relates to the users/customers in order to define when and how such interaction needs to take place, even if this is not specified.