

STN	Informačné technológie Manažment incidentov informačnej bezpečnosti Časť 3: Návodý na prevádzku odozvy na incident IKT	STN ISO/IEC 27035-3 97 4101
------------	---	---

Information technology
Information security incident management
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

Informationstechnik
Informationssicherheit Vorfallmanagement
Teil 3: Leitlinien für IKT-Vorfallsreaktionsmaßnahmen

Táto norma obsahuje anglickú verziu ISO/IEC 27035-3: 2020.

This standard includes the English version of ISO/IEC 27035-3: 2020.

134594

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2022
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii.

Anotácia

Tento dokument poskytuje návod na reakciu na incidenty informačnej bezpečnosti v prevádzke bezpečnosti IKT. Tento dokument jednak pokrýva prevádzkové aspekty bezpečnosti IKT z pohľadu ľudí, procesov a technológií. Ďalej sa zameriava na reakciu na incidenty informačnej bezpečnosti vrátane detekcie incidentov informačnej bezpečnosti, hlásenia, triedenia, analýzy, reakcie, zadržiavania, obnovy a ukončenia.

Tento dokument sa netýka operácií reakcie na incidenty, ktoré nesúvisia s IKT, ako je strata papierových dokumentov.

Princípy uvedené v tomto dokumente sú všeobecné a určené na použitie vo všetkých organizáciách bez ohľadu na typ, veľkosť alebo povahu. Organizácie môžu upraviť ustanovenia uvedené v tomto dokumente podľa svojho druhu, veľkosti a charakteru podnikania vo vzťahu k situácii rizika informačnej bezpečnosti.

Tento dokument sa vzťahuje aj na externé organizácie poskytujúce služby riadenia incidentov bezpečnosti informácií.

Národný predhovor

Normatívne referenčné dokumenty

Nasledujúce dokumenty, celé alebo ich časti, sú v tomto dokumente normatívnymi odkazmi a sú nevyhnutné pri jeho používaní. Pri datovaných odkazoch sa použije len citované vydanie. Pri nedatovaných odkazoch sa použije najnovšie vydanie citovaného dokumentu (vrátane všetkých zmien).

POZNÁMKA 1. – Ak bola medzinárodná publikácia zmenená spoločnými modifikáciami, čo je indikované označením (mod), použije sa príslušná EN/HD.

POZNÁMKA 2. – Aktuálne informácie o platných a zrušených STN možno získať na webovej stránke www.unms.sk.

ISO/IEC 27000 zavedená v STN EN ISO/IEC 27000 Informačné technológie. Bezpečnostné metódy. Systémy riadenia informačnej bezpečnosti. Prehľad a slovník (ISO/IEC 27000) (36 9789)

ISO/IEC 27035-1 dosiaľ nezavedená

ISO/IEC 27035-2 zavedená v STN ISO/IEC 27035-2 Informačné technológie. Bezpečnostné metódy. Manažment incidentov informačnej bezpečnosti. Časť 2: Návod na plánovanie a prípravu odozvy na incident (97 4101)

ISO/IEC 27037 zavedená v STN EN ISO/IEC 27037 Informačné technológie. Bezpečnostné metódy. Návod na identifikáciu, zber, získavanie a zachovanie digitálnych dôkazov (ISO/IEC 27037) (36 9762)

ISO/IEC 27043 zavedená v STN EN ISO/IEC 27043 Informačné technológie. Bezpečnostné metódy. Princípy a procesy vyšetrovania incidentov (ISO/IEC 27043) (36 9768)

Vypracovanie normy

Spracovateľ normy: Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, Bratislava

Technická komisia: TK 37 Informačné technológie

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	2
5 Overview	3
5.1 General.....	3
5.2 Structure of this document.....	3
6 Common types of attacks	5
7 Incident detection operations	6
7.1 Point of contact.....	6
7.2 Monitoring and detection.....	7
7.3 Common ways detection is performed.....	8
7.3.1 Monitoring public sources to look for potential reports (and threats).....	8
7.3.2 Validation of external source data.....	9
7.3.3 Proactive detection.....	10
7.3.4 Reactive methods.....	10
8 Incident notification operations	11
8.1 Overview.....	11
8.2 Immediate incident notification.....	12
8.2.1 Incident reporting forms.....	12
8.2.2 Critical information that incident reports should (ideally) contain.....	12
8.2.3 Methods to receive reports.....	12
8.2.4 Considerations for escalation.....	13
8.3 PoC structure.....	13
8.3.1 Incident response operation notification if a single PoC exists.....	13
8.3.2 Incident response operation notification if multiple PoCs exist.....	14
9 Incident triage operations	14
9.1 Overview.....	14
9.2 How triage is conducted.....	14
10 Incident analysis operations	15
10.1 Overview.....	15
10.2 Purpose of analysis.....	17
10.3 Intra-incident analysis.....	18
10.4 Inter-incident analysis.....	19
10.5 Analysis tools.....	20
10.6 Storing evidence and analysis results.....	20
11 Incident containment, eradication and recovery operations	21
11.1 Overview.....	21
11.2 Conducting the response for containment, eradication and recovery.....	21
11.2.1 Containment description.....	21
11.2.2 Containment goals.....	21
11.2.3 Common containment strategies.....	21
11.2.4 Issues associated with containment.....	22
11.3 Eradication.....	22
11.3.1 Eradication description.....	22
11.3.2 Eradication strategies.....	22
11.3.3 Issues associated with eradication.....	23
11.4 Recovery.....	23

ISO/IEC 27035-3:2020(E)

11.4.1	Recovery description	23
11.4.2	Recovery strategies.....	23
11.4.3	Issues associated with recovery	23
12	Incident reporting operations.....	23
12.1	Overview	23
12.2	How to establish reporting.....	24
12.3	How to establish external reporting, if required.....	25
12.4	Information sharing.....	26
12.5	Other reporting considerations.....	26
12.6	Types of reports.....	27
12.7	Methods for storing reports and analysts' knowledge.....	27
Annex A	(informative) Example of the incident criteria based on information security events and incidents.....	28
Bibliography	31

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see <http://patents.iec.ch>).

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.

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.

ISO/IEC 27035-3:2020(E)

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.

Information technology — Information security incident management —

Part 3: Guidelines for ICT incident response operations

1 Scope

This document gives guidelines for information security incident response in ICT security operations. This document does this by firstly covering the operational aspects in ICT security operations from a people, processes and technology perspective. It then further focuses on information security incident response in ICT security operations including information security incident detection, reporting, triage, analysis, response, containment, eradication, recovery and conclusion.

This document is not concerned with non-ICT incident response operations such as loss of paper-based documents.

This document is based on the “Detection and reporting” phase, the “Assessment and decision” phase and the “Responses” phase of the “Information security incident management phases” model presented in ISO/IEC 27035-1:2016.

The principles given in this document are generic and intended to be applicable to all organizations, regardless of type, size or nature. Organizations can adjust the provisions given in this document according to their type, size and nature of business in relation to the information security risk situation.

This document is also applicable to external organizations providing information security incident management services.

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 27035-1, *Information technology — Security techniques — Information security incident management — Part 1: Principles of incident management*

ISO/IEC 27035-2, *Information technology — Security techniques — Information security incident management — Part 2: Guidelines to plan and prepare for incident response*

ISO/IEC 27037, *Information technology — Security techniques — Guidelines for identification, collection, acquisition and preservation of digital evidence*

ISO/IEC 27043, *Information technology — Security techniques — Incident investigation principles and processes*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN