

# SVENSK STANDARD

## SS-ISO/IEC 27035:2012



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### **Informationsteknik – Säkerhetstekniker – Styrning och hantering av informationssäkerhetsincidenter (ISO/IEC 27035:2011, IDT)**

### **Information technology – Security techniques – Information security incident management (ISO/IEC 27035:2011, IDT)**

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## 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.

ISO/IEC 27035 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *IT Security techniques*.

This first edition of ISO/IEC 27035 cancels and replaces ISO/IEC TR 18044:2004, which has been technically revised.

## SS-ISO/IEC 27035:2012 (E)

### Introduction

In general, information security policies or controls alone will not guarantee total protection of information, information systems, services or networks. After controls have been implemented, residual vulnerabilities are likely to remain that can make information security ineffective and thus information security incidents possible. This can potentially have both direct and indirect adverse impacts on an organization's business operations. Further, it is inevitable that new instances of previously unidentified threats will occur. Insufficient preparation by an organization to deal with such incidents will make any response less effective, and increase the degree of potential adverse business impact. Therefore, it is essential for any organization serious about information security to have a structured and planned approach to:

- detect, report and assess information security incidents;
- respond to information security incidents, including the activation of appropriate controls for the prevention and reduction of, and recovery from, impacts (for example in the support of crisis management areas);
- report information security vulnerabilities that have not yet been exploited to cause information security events and possibly information security incidents, and assess and deal with them appropriately;
- learn from information security incidents and vulnerabilities, institute preventive controls, and make improvements to the overall approach to information security incident management.

This International Standard provides guidance on information security incident management in Clause 4 to Clause 9. These clauses consist of several subclauses, which include a detailed description of each phase.

The term 'information security incident management' is used in this International Standard to encompass the management of not just information security incidents but also information security vulnerabilities.



# Information technology — Security techniques — Information security incident management

## 1 Scope

This International Standard provides a structured and planned approach to:

- a) detect, report and assess information security incidents;
- b) respond to and manage information security incidents;
- c) detect, assess and manage information security vulnerabilities; and
- d) continuously improve information security and incident management as a result of managing information security incidents and vulnerabilities.

This International Standard provides guidance on information security incident management for large and medium-sized organizations. Smaller organizations can use a basic set of documents, processes and routines described in this International Standard, depending on their size and type of business in relation to the information security risk situation. It also provides guidance for external organizations providing information security incident management services.

## 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, *Information technology — Security techniques — Information security management systems — Overview and vocabulary*

## 3 Terms and definitions

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

### 3.1

#### **information security forensics**

application of investigation and analysis techniques to capture, record and analyse information security incidents

### 3.2

#### **information security incident response team**

##### **ISIRT**

team of appropriately skilled and trusted members of the organization that handles information security incidents during their lifecycle

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**NOTE** The ISIRT as described in this International Standard is an organizational function that covers the process for information security incidents and is focused mainly on IT related incidents. Other common functions (with similar abbreviations) within the incident handling may have a slightly different scope and purpose. The following commonly used abbreviations have a meaning similar to that of ISIRT, though not exactly the same:

- CERT: A Computer Emergency Response Team mainly focuses on Information and Communications Technology (ICT) incidents. There may be other specific national definitions for CERT.
- CSIRT: A Computer Security Incident Response Team is a service organization that is responsible for receiving, reviewing, and responding to computer security incident reports and activity. These services are usually performed for a defined constituency, which could be a parent entity such as a corporation, governmental organization, or educational organization; a region or country; a research network; or a paid client.

### 3.3 information security event

identified occurrence of a system, service or network state indicating a possible breach of information security, policy or failure of controls, or a previously unknown situation that may be security relevant

[ISO/IEC 27000:2009]

### 3.4 information security incident

single or a series of unwanted or unexpected information security events that have a significant probability of compromising business operations and threatening information security

[ISO/IEC 27000:2009]

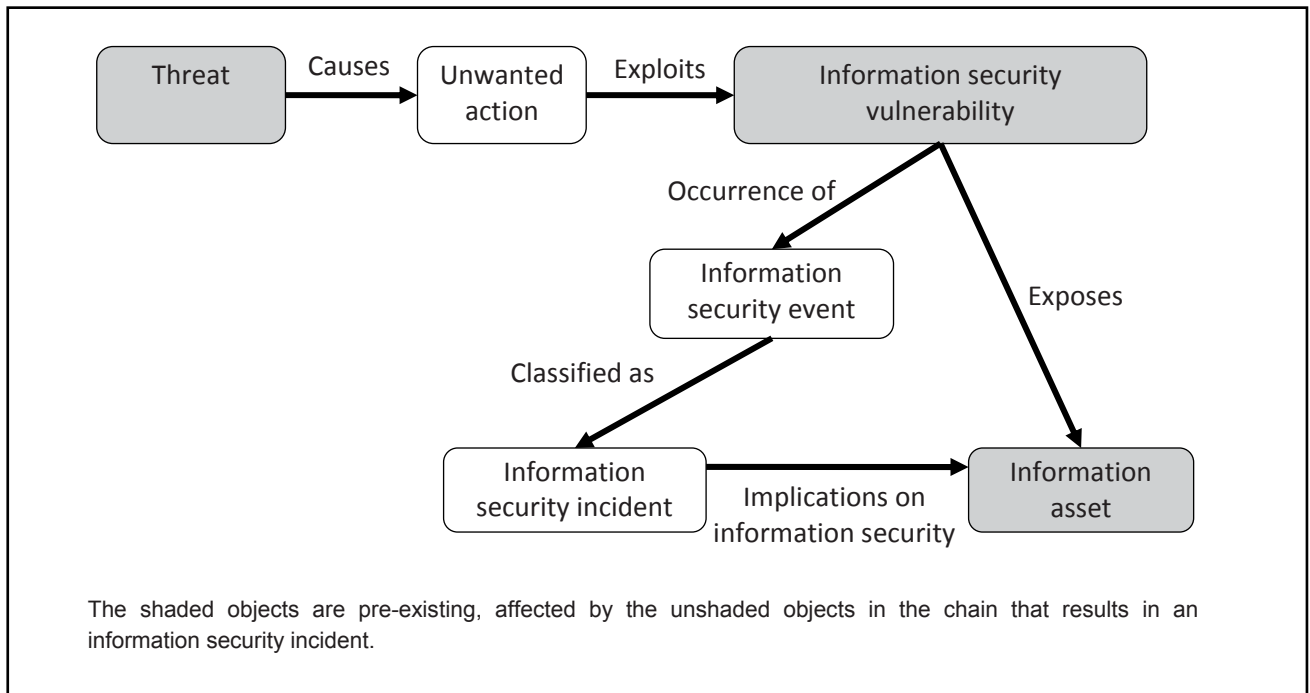
## 4 Overview

### 4.1 Basic concepts

An information security event is an identified occurrence of a system, service or network state indicating a possible breach of information security policy or failure of controls, or a previously unknown situation that may be security relevant. An information security incident is a single or a series of unwanted or unexpected information security events that have a significant probability of compromising business operations and threatening information security.

The occurrence of an information security event does not necessarily mean that an attempt has been successful or that there are any implications on confidentiality, integrity and/or availability, i.e. not all information security events are classified as information security incidents.

A threat acts in unwanted ways to exploit the vulnerabilities (weaknesses) of information systems, services or networks, which is the occurrence of information security events and potentially causes unwanted incidents to information assets exposed by the vulnerabilities. Figure 1 shows this relationship of objects in an information security incident chain. The shaded objects are pre-existing, affected by the unshaded objects in the chain that results in an information security incident.



**Figure 1 — The relationship of objects in an information security incident chain**

## 4.2 Objectives

As a key part of an organization's overall information security strategy, the organization should put controls and procedures in place to enable a structured well-planned approach to the management of information security incidents. From a business perspective, the prime objective is to avoid or contain the impact of information security incidents to reduce the direct and indirect costs caused by the incidents.

The primary steps to minimize the direct negative impact of information security incidents are the following:

- stop and contain,
- eradicate,
- analyse and report, and
- follow up.

The objectives of a structured well-planned approach are more refined and should ensure the following:

- a) Information security events are detected and dealt with efficiently, in particular in identifying whether they need to be categorized and classified as information security incidents or not.
- b) Identified information security incidents are assessed and responded to in the most appropriate and efficient manner.
- c) The adverse effects of information security incidents on the organization and its business operations are minimized by appropriate controls as part of the incident response, possibly in conjunction with relevant elements from a crisis management plan or plans.
- d) Reported information security vulnerabilities are assessed and dealt with appropriately.
- e) Lessons are learnt quickly from information security incidents, vulnerabilities and associated management. This is to increase the chances of preventing future information security incidents from occurring, improve the implementation and use of information security controls, and improve the overall information security incident management scheme.