

# SLOVENSKI STANDARD oSIST prEN ISO/IEC 15408-4:2024

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Informacijska varnost, kibernetska varnost in varovanje zasebnosti - Merila za vrednotenje varnosti IT - 4. del: Okvir za specifikacijo metod vrednotenja in dejavnosti (ISO/IEC DIS 15408-4:2024)

Information security, cybersecurity and privacy protection - Evaluation criteria for IT security - Part 4: Framework for the specification of evaluation methods and activities (ISO/IEC DIS 15408-4:2024)

Informationssicherheit, Cybersicherheit und Schutz der Privatsphäre -Evaluationskriterien für IT-Sicherheit - Teil 4: Rahmen für die Festlegung von Bewertungsmethoden und -tätigkeiten

Sécurité de l'information, cybersécurité et protection de la vie privée - Critères d'évaluation pour la sécurité des technologies de l'information - Partie 4: Cadre prévu pour la spécification des méthodes d'évaluation et des activités connexes (ISO/IEC DIS 15408-4:2024)

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35.030 Informacijska varnost IT Security

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### DRAFT International Standard

### ISO/IEC DIS 15408-4

Information security, cybersecurity and privacy protection —
Evaluation criteria for IT security —

Part 4:

Framework for the specification of evaluation methods and activities

Sécurité de l'information, cybersécurité et protection de la vie privée — Critères d'évaluation pour la sécurité des technologies de l'information —

Partie 4: Cadre prévu pour la spécification des méthodes d'évaluation et des activités connexes

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#### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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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 fifth edition cancels and replaces the fourth edition (ISO/IEC 15408-2:2022), which has been technically revised.

The main changes are as follows: oSIST prEN ISO/IEC 15408-

Minor typographical errors corrected.

A list of all parts in the ISO 15408 series can be found on the ISO website.

The catalogue of security assurance requirements defined in this document is provided in machine readable format (XML) at: <a href="https://standards.iso.org/iso-iec/TBD">https://standards.iso.org/iso-iec/TBD</a>.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

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Republic of Korea National Security Research Institute

Spain Centro Criptológico Nacional

Sweden FMV, Swedish Defence Materiel Administration

United Kingdom National Cyber Security Centre

United States The National Security Agency and the National Institute of Standards and Technology

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#### Introduction

The ISO/IEC 15408 series permits comparability between the results of independent security evaluations, by providing a common set of requirements for the security functionality of IT products and for assurance measures applied to these IT products during a security evaluation. ISO/IEC 18045 provides a companion methodology for some of the assurance requirements specified in the ISO/IEC 15408 series.

The model of security evaluation in ISO/IEC 15408-1 identifies that high-level generic evaluation activities are defined in ISO/IEC 18045, but that more specific evaluation activities (EAs) can be defined as technology-specific adaptations of these generic activities for particular evaluation contexts, e.g. for security functional requirements (SFRs) or security assurance requirements (SARs) applied to specific technologies or target of evaluation (TOE) types. Specification of such evaluation activities is already occurring amongst practitioners and this creates a need for a specification for defining such evaluation activities.

This document describes a framework that can be used for deriving evaluation activities from work units of ISO/IEC 18045 and grouping them into evaluation methods (EMs). Evaluation activities or evaluation methods can be included in protection profiles (PPs) and any documents supporting them. Where a PP, PP-Configuration, PP-Module, package, or Security Target (ST) identifies that specific evaluation methods/evaluation activities are to be used, then the evaluators are required by ISO/IEC 18045 to follow and report the relevant evaluation methods/evaluation activities when assigning evaluator verdicts. As noted in ISO/IEC 15408-1, in some cases an evaluation authority can decide not to approve the use of particular evaluation methods/evaluation activities: in such a case, the evaluation authority can decide not to carry out evaluations following an ST that requires those evaluation methods/evaluation activities.

This document also allows for evaluation activities to be defined for extended SARs, in which case derivation of the evaluation activities relates to equivalent evaluator action elements and work units defined for that extended SAR. Where reference is made in this document to the use of ISO/IEC 18045 or ISO/IEC 15408-3 for SARs (such as when defining rationales for evaluation activities), then, in the case of an extended SAR, the reference applies instead to the equivalent evaluator action elements and work units defined for that extended SAR.

For clarity, this document specifies how to define evaluation methods and evaluation activities but does not itself specify instances of evaluation methods or evaluation activities.

The following notes appears in other parts of the ISO/IEC 15408 series and in ISO/IEC 18045 to describe the use of bold and italic type in those documents. This document does not use those conventions, but the notes have been retained for alignment with the rest of the series.

- NOTE 1 This document uses bold type to highlight hierarchical relationships between requirements. This convention calls for the use of bold type for all new requirements.
- NOTE 2 For security functional requirements, the use of italics denotes assignment and selection items.
- NOTE 3 For security assurance requirements, special verbs relating to mandatory evaluation activities are presented in bold italic type face.

# Information security, cybersecurity and privacy protection — Evaluation criteria for IT security —

#### Part 4:

## Framework for the specification of evaluation methods and activities

#### 1 Scope

This document provides a standardized framework for specifying objective, repeatable and reproducible evaluation methods and evaluation activities.

This document does not specify how to evaluate, adopt, or maintain evaluation methods and evaluation activities. These aspects are a matter for those originating the evaluation methods and evaluation activities in their particular area of interest.

#### 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 15408-1, Information security, cybersecurity and privacy protection — Evaluation criteria for IT security — Part 1: Introduction and general model

ISO/IEC 15408-2, Information security, cybersecurity and privacy protection — Evaluation criteria for IT security — Part 2: Security functional components

ISO/IEC 15408-3, Information security, cybersecurity and privacy protection — Evaluation criteria for IT security — Part 3: Security assurance components

ISO/IEC 18045, Information security, cybersecurity and privacy protection — Methodology for IT security evaluation

#### 3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms, definitions, and abbreviated terms given in ISO/IEC 15408-1, ISO/IEC 15408-2, ISO/IEC 15408-3, ISO/IEC 15408-5, ISO/IEC 18045 and the following apply.

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

- ISO Online browsing platform: available at <u>www.iso.org/obp</u>;
- IEC Electropedia: available at <u>www.electropedia.org/</u>.

#### 4 General model of evaluation methods and evaluation activities

#### 4.1 Concepts and model

ISO/IEC 18045 defines a generic set of work units that an evaluator carries out in order to reach a verdict for most of the assurance classes, families and components defined in ISO/IEC 15408-3. The relationship between the structure of a SAR in ISO/IEC 15408-3 and the work units in ISO/IEC 18045 is described in ISO/IEC 18045 and summarized in Figure 1.

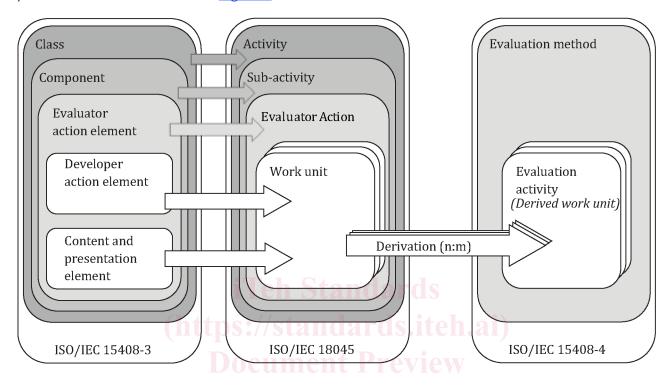


Figure 1 — Mapping of ISO/IEC 15408-3 and ISO/IEC 18045 to structures of this document

For the purposes of defining new evaluation methods and evaluation activities, the main point to note is that each action (representing an evaluator action element in ISO/IEC 15408-3 or an implied evaluator action element) is represented in ISO/IEC 18045 as a set of work units that are carried out by an evaluator.

This document specifies the ways in which new evaluation activities can be derived from the generic work units in ISO/IEC 18045, and combined into an evaluation method that is intended for use in some particular evaluation context. A typical example of such an evaluation context would be a particular TOE type or particular technology type.

#### **EXAMPLE 1**

- TOE type: a network device
- Technology type: specific cryptographic functions

If evaluation methods and evaluation activities are required to be used with a particular PP, PP-Module or PP-Configuration, then a PP or PP-Module or PP-Configuration shall identify this requirement in its conformance statement. If evaluation methods and evaluation activities are required to be used with a particular package, then the package shall identify this requirement in the security requirement section. If Evaluation Methods and Evaluation Activities are claimed by an ST as a result of that ST claiming conformance to a PP, PP-Configuration, or package, then the ST shall identify the EMs/EAs used in its conformance claim. No formal claim of conformance to ISO/IEC 15408-4 is made in any of these cases (the contents of PPs, PP-Modules, PP-Configurations and packages are described in more detail in ISO/IEC 15408-1).