

# **BSI Standards Publication**

Information security, cybersecurity and privacy protection — Requirements for the competence of IT security testing and evaluation laboratories

Part 2: Testing for ISO/IEC 19790



#### **National foreword**

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A list of organizations represented on this committee can be obtained on request to its committee manager.

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Partie 2: Essais pour l'ISO/IEC 19790



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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.

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 <a href="www.iso.org/directives">www.iso.org/directives</a> or <a href="www.iso.org/directives">www.iso.org/directives<

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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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>. In the IEC, see <a href="https://www.iec.ch/understanding-standards">www.iec.ch/understanding-standards</a>.

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/IEC 23532 series can be found on the ISO and IEC websites.

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

#### Introduction

Laboratories performing testing for conformance to ISO/IEC 19790 and the test requirements in ISO/IEC 24759 may utilize and require conformance to ISO/IEC 17025:2017. ISO/IEC 17025:2017 gives generalized requirements for a broad range of testing and calibration laboratories to enable them to demonstrate that they operate competently and are able to generate valid results.

Laboratories that perform such validations have specific requirements for competence to ISO/IEC 19790 that will enable them to generate valid results.

By providing additional details and supplementary requirements to ISO/IEC 17025:2017 that are specific to information security testing and evaluation laboratories, this document will facilitate cooperation and better conformity and harmonization between laboratories and other bodies. This document may be used by countries and accreditation bodies as a set of requirements for lab assessments and accreditations.

To help implementers, this document is numbered identically to ISO/IEC 17025:2017. Supplementary requirements are presented as subclauses additional to ISO/IEC 17025:2017.

# Information security, cybersecurity and privacy protection — Requirements for the competence of IT security testing and evaluation laboratories —

#### Part 2:

## **Testing for ISO/IEC 19790**

#### 1 Scope

This document complements and supplements the procedures and general requirements found in ISO/IEC 17025:2017 for laboratories performing testing based on ISO/IEC 19790 and ISO/IEC 24759.

#### 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 17000, Conformity assessment — Vocabulary and general principles

ISO/IEC 17025:2017, General requirements for the competence of testing and calibration laboratories

 ${\tt ISO/IEC~19790,} \ \textit{Information technology} - \textit{Security techniques} - \textit{Security requirements for cryptographic modules}$ 

ISO/IEC 19896-1, IT security techniques — Competence requirements for information security testers and evaluators — Part 1: Introduction, concepts and general requirements

ISO/IEC 19896-2, IT security techniques — Competence requirements for information security testers and evaluators — Part 2: Knowledge, skills and effectiveness requirements for ISO/IEC 19790 testers

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 17000, ISO/IEC 17025:2017, ISO/IEC 19790, ISO/IEC 19896-1, ISO/IEC 19896-2 and the following apply.

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

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="https://www.electropedia.org/">https://www.electropedia.org/</a>

#### 3.1

# cryptographic security testing laboratory testing laboratory

laboratory performing cryptographic module security testing and/or cryptographic algorithms conformance testing

Note 1 to entry: See ISO/IEC 24759 for cryptographic module security testing.

Note 2 to entry: See ISO/IEC 18367 for cryptographic algorithms conformance testing.