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ISO/IEC 11889-3

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Information technology — Trusted Platform Module —

Part 3: Structures

Technologies de l'information — Module de plate-forme de confiance — Partie 3: Structures

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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
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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 11889-3 was prepared by the Trusted Computing Group (TCG) and was adopted, under the PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

ISO/IEC 11889 consists of the following parts, under the general title *Information technology — Trusted Platform Module*:

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— *Part 1: Overview*

— *Part 2: Design principles*

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— *Part 3: Structures*

— *Part 4: Commands*

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Introduction

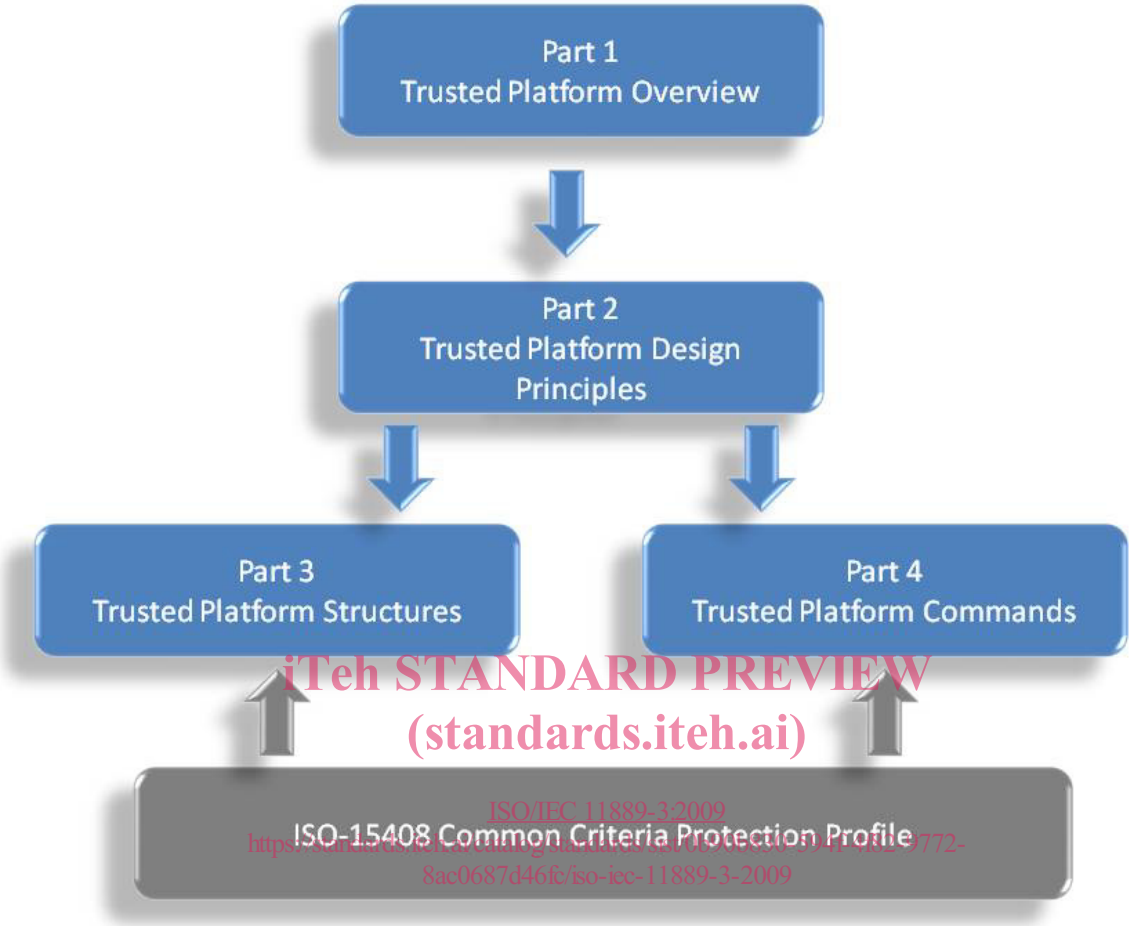

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Figure 1. TPM Main Specification Roadmap

Start of informative comment

ISO/IEC 11889 is from the Trusted Computing Group (TCG) Trusted Platform Module (TPM) specification 1.2 version 103. The part numbers for ISO/IEC 11889 and the TCG specification do not match. The reason is the inclusion of the Overview document that is not a member of the TCG part numbering. The mapping between the two is as follows:

ISO Reference	TCG Reference
Part 1 Overview	Not published
Part 2 Design Principles	Part 1 Design Principles
Part 3 Structures	Part 2 Structures
Part 4 Commands	Part 3 Commands

End of informative comment

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Information technology — Trusted Platform Module —

Part 3:
Structures

1. Scope

ISO/IEC 11889 defines the Trusted Platform Module (TPM), a device that enables trust in computing platforms in general. ISO/IEC 11889 is broken into parts to make the role of each document clear. Any version of the standard requires all parts to be a complete standard.

A TPM designer MUST be aware that for a complete definition of all requirements necessary to build a TPM, the designer MUST use the appropriate platform specific specification to understand all of the TPM requirements.

Part 3 defines the structures and constants in use by the TPM. As the TPM must interoperate between various implementations, these structures enable the required interoperability. The other rationale for defining the structures is that some of the structures require security properties, either confidentiality or integrity calculations. If the structures are built incorrectly the security properties may not be present, hence the need to define the structures.

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1.1 Key words

The key words “MUST,” “MUST NOT,” “REQUIRED,” “SHALL,” “SHALL NOT,” “SHOULD,” “SHOULD NOT,” “RECOMMENDED,” “MAY,” and “OPTIONAL” in this document’s normative statements are to be interpreted as described in RFC-2119, *Key words for use in RFCs to Indicate Requirement Levels.*

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1.2 Statement Type

Please note a very important distinction between different sections of text throughout this document. You will encounter two distinctive kinds of text: informative comment and normative statements. Because most of the text in this specification will be of the kind normative statements, the authors have informally defined it as the default and, as such, have specifically called out text of the kind informative comment. They have done this by flagging the beginning and end of each informative comment and highlighting its text in gray. This means that unless text is specifically marked as of the kind informative comment, you can consider it of the kind normative statements.

For example:

Start of informative comment

This is the first paragraph of 1–n paragraphs containing text of the kind *informative comment* ...

This is the second paragraph of text of the kind *informative comment* ...

This is the nth paragraph of text of the kind *informative comment* ...

To understand the standard the user must read the standard. (This use of MUST does not require any action).

End of informative comment

This is the first paragraph of one or more paragraphs (and/or sections) containing the text of the kind normative statements ...

To understand the standard the user MUST read the standard. (This use of MUST indicates a keyword usage and requires an action).

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