



GUIDE 77-3

Guide for specification of product properties and classes —

Part 3: Experience gained

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

Draft Guides adopted by the responsible Committee or Group are circulated to the member bodies for voting. Publication as a Guide requires approval by at least 75 % of the member 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 shall not be held responsible for identifying any or all such patent rights.

ISO/IEC Guide 77-3 was prepared by the Joint Technical Advisory Group of the ISO Technical Management Board and the IEC Standardization Management Board on product properties and families.

ISO/IEC Guide 77 consists of the following parts, under the general title *Guide for specification of product properties and classes*:

- *Part 1: Fundamental benefits*
- *Part 2: Technical principles and guidance*
- *Part 3: Experience gained*

Introduction

This part of ISO/IEC Guide 77 contains a number of experience reports about the development of reference dictionaries. It contains examples from ISO/TC 29 (on cutting tools), ISO/TC 184/SC 4 (on instrumentation and fasteners), and IEC/SC 3D (on the IEC reference dictionary).

The **common ISO 13584/IEC 61360 dictionary model** (2.1) and the methodology as described in ISO/IEC Guide 77-1 and ISO/IEC Guide 77-2 have been used and are being used as the basis for the development of reference dictionaries. To support future developers of reference dictionaries, this part of ISO/IEC Guide 77 describes the experiences gained in some projects over the last few years. The experiences reported are based on work from different standardization committees. The aim of this part of ISO/IEC Guide 77 is to give practical information, such as the following:

- a) Which kind of procedures have been adopted for the creation of the different reference dictionaries?
- b) What basic decisions have been taken in the creation process?
- c) How much effort has been spent on these projects?
- d) How have the resources of the common ISO/IEC data model been used?
- e) How will the reference dictionaries be maintained?

The following International Standards are used as examples:

- ISO 13399, a reference dictionary for cutting tools developed by ISO/TC 29/WG 34;
- IEC 61360, the reference dictionary of components within the electrotechnical domain developed by IEC/SC 3D;
- ISO 13584-501, an initial reference dictionary content of laboratory and environment measuring instruments to be registered into ISO 13584-501RA (Registration Authority), developed by ISO/TC 184/SC 4/WG 2;
- ISO 13584-511, a reference dictionary of fasteners developed by ISO/TC 184/SC 4/WG 2 with support from ISO/TC 2.

The examples provided contain a variety of different approaches, based on different starting points and goals. Due to these different approaches, the clauses in this part of ISO/IEC Guide 77 describing each of the individual projects are not structured in the same way. Rather than following a uniform structure, they emphasize those aspects which were important for their specific development process. To give an initial overview, key points and common and differentiating aspects have been summarized in Clause 3. Clauses 4 to 7 contain the detailed reports about the development projects.

NOTE In the context of this part of ISO/IEC Guide 77, the term “reference dictionary” is used to refer to the data dictionaries that have been built in the above-mentioned technical standardization committees on the basis of the data model defined in ISO 13584 and IEC 61360. In other communities (e.g. in the semantic Web world), such a reference dictionary would be seen as a special case of an ontology.

Guide for specification of product properties and classes —

Part 3: Experience gained

1 Scope

This part of ISO/IEC Guide 77 provides general advice and guidance for the description of products and their characteristics by the use of ISO 13584 and IEC 61360 for the creation of computer processable product libraries, catalogues and reference dictionaries. This description will provide the details of the products and their properties in an unambiguous manner, capable of computer communication in a form that is independent of any proprietary application software. The term “product” is taken to include devices, processes, systems, installations, etc. This part of ISO/IEC Guide 77 is intended to assist in the objective of enabling the flow of technical information between internal and external business partners in a cost effective and timely manner.

The guidance in this part of ISO/IEC Guide 77 is intended to assist the following groups:

- convenors and members of ISO technical committees;
- technical experts contributing their knowledge to the development of reference dictionaries, data bases and product libraries;
- information experts responsible for the generation of applications of ISO 13584, particularly related to standardized reference dictionaries;
- managers and technical experts in the manufacturing industry.

This part of ISO/IEC Guide 77 is intended to provide practical information of the experience gained in the creation of product reference dictionaries within ISO and IEC. This part of ISO/IEC Guide 77 is intended for information only, in areas such as education.

The following are within the scope of this part of ISO/IEC Guide 77:

- experience of developing a reference dictionary for cutting tools;
- experience of developing a reference dictionary for electronic components;
- experience of creating a system for the maintenance of a reference dictionary for measuring instruments;
- experience of developing a reference dictionary for fasteners.

The following are outside the scope of this part of ISO/IEC Guide 77:

- an overview for ISO technical committees and industrial managers for the development of computer-processable product libraries, reference dictionaries and catalogues;

NOTE 1 An overview of the development of computer-processable product libraries, reference dictionaries and catalogues is provided in ISO/IEC Guide 77-1.

- technical guidance for the creation of product libraries and dictionaries.

NOTE 2 Technical guidance for the creation of product libraries and dictionaries is provided in ISO/IEC Guide 77-2.