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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 www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 211, *Geographic information/Geomatics*.

This first edition of ISO 19104 cancels and replaces ISO/TS 19104:2008, which has been technically revised.

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Introduction

A common language is an essential prerequisite to human communication. A simple knowledge of vocabulary however, is insufficient to guarantee effective communication. A word can have several meanings depending on the context in which it is used. Similarly, a concept can be referenced by several terms, each communicating a different connotation or level of emphasis.

The issues associated with language extend far beyond day-to-day communication. Every field of endeavour, from engineering to cookery, has its own vocabulary. To participate in discussions on a subject, it is necessary to understand both the terms and the context in which they are used. Imprecise usage (for example, by using two terms interchangeably when, in fact, they have distinctly different connotations) may have unfortunate consequences.

The risks compound considerably when translating terminology from one language (for example, English) to another (for example, Mandarin Chinese). The different cultures, language structures and character sets can present difficulties in ensuring that terminological entries in both languages have precisely the same meaning.

This document specifies requirements for the development of terminological entries in the field of geographic information. Its scope includes the development of concepts, the content and drafting of terminological entries, and the presentation of terminological records. It also includes guidelines for the cultural and linguistic adaptation of terminological entries based on the provisions of ISO 10241-2.

This document applies the provisions of ISO 19135-1 to the registration of geospatial concepts. A schema for the establishment of multi-lingual terminology registers is provided. The provisions of ISO 19135-1 regarding the management and maintenance of registers are also applied.

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Geographic information — Terminology

1 Scope

This document specifies requirements for the collection, management and publication of terminology in the field of geographic information.

The scope of this document includes

— selection of concepts, harmonization of concepts and development of concept systems,

— structure and content of terminological entries,

— term selection,

— definition preparation,

— cultural and linguistic adaptation,

— layout and formatting requirements in rendered documents, and

— establishment and management of terminology registers.

This document is applicable to International Standards and Technical Specifications in the field of geographic information.

2 Conformance

2.1 Conformance class overview

This document defines two aggregate conformance classes, namely

— terminological entry – for preparing and publishing terminological entries, and

— terminology register – for establishing and managing terminology registers.

Any terminological entry or terminology register claiming conformance with this document shall comply with its respective aggregate conformance class and shall satisfy the associated abstract test suite requirements described in Annex A.

2.2 Terminological entry conformance class

2.2.1 Terminological entry aggregated conformance classes

The terminological entry conformance class is an aggregate of five distinct conformance classes, namely

— selection and harmonization of concepts,

— terminological entry content,

— terminological entry drafting,

— cultural and linguistic adaptation, and

— layout and formatting of terminological entries.

The characteristics of the terminological entry conformance class are defined in Table 1.

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