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INCITS/ISO 19137:2007 (R2017)

INCITS/ISO 19137-2007  
(ISO 19137:2007, IDT)

# American National Standard

*Geographic information —  
Core profile of the spatial schema*

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**Developed by**



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## Geographic information — Core profile of the spatial schema

*Information géographique — Profil minimal du schéma spatial*



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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.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard 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 19137 was prepared by Technical Committee ISO/TC 211, *Geographic information/Geomatics*.

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## Introduction

This International Standard provides a core profile of the geometry part of the spatial schema specified in ISO 19107 that is easy to understand and has a low cost of implementation. The profile is intentionally small and limited in order to increase the chance of gaining widespread market acceptance.

A simple topology package extension of the profile might be developed as a future part of this International Standard. Many user communities have requirements that go beyond the capabilities provided by this International Standard, and they may define custom profiles.

While ISO 19136 also implements a profile of ISO 19107, it is a comprehensive profile, not a core profile.

This International Standard supports data types for geometric primitives of 0, 1 and 2 dimensions. It satisfies the conformance test A.1.1.3 of ISO 19107:2003. It is in conformance class 1 of ISO 19106.

Annex A lists some specifications that were supported by this International Standard at the time of its publication. Annex B specifies an abstract test suite for determining whether an application schema or profile is conformant to the core profile. Annex C discusses how to extend the core profile. Annex D presents two examples.