# INTERNATIONAL STANDARD

ISO/IEC 20944-2

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### Information technology — Metadata Registries Interoperability and Bindings (MDR-IB) —

Part 2: Coding bindings

Technologies de l'information — Interopérabilité et liaisons des registres de métadonnées (MDR-IB) —

Partie 2: Liaisons de codage





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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 20944-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

ISO/IEC 20944 consists of the following parts, under the general title *Information technology* — *Metadata Registries Interoperability and Bindings (MDR-IB)*:

- Part 1: Framework, common vocabulary, and common provisions for conformance
- Part 2: Coding bindings
- Part 3: API bindings
- Part 4: Protocol bindings
- Part 5: Profiles

#### Introduction

The ISO/IEC 20944 series of International Standards provides the bindings and their interoperability for metadata registries, such as those specified in the ISO/IEC 11179 series of International Standards.

This part of ISO/IEC 20944 contains provisions that are common to coding bindings (Clauses 4-10) and the coding bindings themselves (Clause 11 onward). The coding bindings have commonality in their conceptualization of data instances and their internal structures. For example, common features include:

- using datatypes to characterize the nature and operations upon data;
- using ISO/IEC 11404 to define and declare datatypes;
- using common aggregate structures, such as array and record, to describe sets of data;
- using common navigation descriptions to reference components within a set of data.

The individual coding bindings each incorporate a mapping of common data semantics to their individual binding requirements.

# Information technology — Metadata Registries Interoperability and Bindings (MDR-IB) —

# Part 2: Coding bindings

#### 1 Scope

The ISO/IEC 20944 series of International Standards describes codings, application programming interfaces (APIs), and protocols for interacting with an ISO/IEC 11179 metadata registry (MDR).

This part of ISO/IEC 20944 specifies provisions that are common across coding bindings for the ISO/IEC 20944 series. This part of ISO/IEC 20944 includes the individual coding bindings themselves.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 11404:2007, Information technology — General-Purpose Datatypes (GPD)

ISO/IEC 20944-1:2013, Information technology — Metadata Registries Interoperability and Bindings (MDR-IB) — Framework, common vocabulary, and common provisions for conformance