AS ISO/IEC 19788.7:2019

Information technology — Learning, education and training — Metadata for learning resources

Part 7: Bindings

AS ISO/IEC 19788.7:2019

This Australian Standard™ was prepared by the Australian members of the Joint Technical Committee IT-019, Information and Documentation, Information Technology — Learning, Education, Training and Research. It was approved on behalf of the Council of Standards Australia on 26 August 2019.

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Australian Library and Information Association
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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee IT-019, Information and Documentation, Information Technology — Learning, Education, Training and Research.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide RDF mappings of the different MLR entities introduced in the MLR framework (AS/NZS ISO/IEC 19788-1 and its amendment): data element specifications (DESs), resource classes (RCs), data elements (DEs), application profiles (APs), MLR records and data element group specifications (DEGSs).

This document associates HTTP IRIs (linguistically neutral and linguistic) to conceptual MLR entities denoted by MLR identifiers. This is needed for the management of MLR entities and their versions.

This document provides excerpts of an OWL 2 DL ontology for the resource classes and data element specifications (properties) introduced in the AS ISO/IEC 19788 and AS/NZS ISO/IEC 19788 series.

This Standard is identical with, and has been reproduced from, ISO/IEC 19788-7:2019, *Information technology — Learning, education and training — Metadata for learning resources — Part 7: Bindings*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

Contents

1) The version of RDF used in this document is RDF 1.1 (see http://www.w3.org/TR/rdf11-concepts/).

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.

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 document 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 and IEC 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) or the IEC list of patent declarations received (see http://patents.iec.ch).

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

For an explanation of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training.*

A list of all parts in the ISO/IEC 19788 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The primary purpose of the ISO/IEC 19788 series is to facilitate: (1) the description of a learning resource by providing a standards-based approach to the identification and specification of the metadata elements required to describe a learning resource, e.g. as a metadata learning resource (MLR) record; and (2) the search, discovery, acquisition, evaluation, and use of learning resources, for instance by learners, instructors or automated software processes.

The ISO/IEC 19788 series is modularly structured with all subsequent parts corresponding to a specified set of user requirements for the identification and specification of metadata elements having a particular focus and intended use in the description of a learning resource. This includes categories of metadata elements focused on technical perspectives, pedagogical aspects, availability and intellectual property aspects, bindings, etc.

This document maps the different ISO/IEC 19788-1 constructs to machine readable/understandable entities. This document also proposes global (non-linguistic) identifiers for MLR entities and localized (linguistic) identifiers for the same MLR entities.

The primary purpose of the ISO/IEC 19788 series is to specify elements and their attributes for the description of learning resources. This includes the rules governing the identification of data elements and the specification of their attributes.

The ISO/IEC 19788 series provides data elements for the description of learning resources and resources directly related to learning resources.

The ISO/IEC 19788 series provides principles, rules and structures for the specification of the description of a learning resource; it identifies and specifies the attributes of a data element as well as the rules governing their use. The key principles stated in ISO/IEC 19788-1 are informed by a user requirements-driven context with the aim of supporting multilingual and cultural adaptability requirements from a global perspective.

ISO/IEC 19788-1 is information technology neutral and defines a set of common approaches, i.e. methodologies and constructs, which apply to the development of the subsequent parts of the ISO/IEC 19788 series.

Australian Standard®

Information technology — Learning, education and training — Metadata for learning resources

Part 7: Bindings

IMPORTANT — All links that are in regular font and blue/underlined are true links. Any other links (especially in courier font) should not be considered functional.

1 Scope

This document provides RDF mappings of the different MLR entities introduced in the MLR framework (ISO/IEC 19788-1 and its amendment): data element specifications (DESs), resource classes (RCs), data elements (DEs), application profiles (APs), MLR records and data element group specifications (DEGSs).

This document associates HTTP IRIs (linguistically neutral and linguistic) to **conceptual** MLR entities denoted by MLR identifiers. This is needed for the management of MLR entities and their versions.

Moreover, this document provides excerpts of an OWL 2 DL ontology for the resource classes and data element specifications (properties) introduced in the ISO/IEC 19788 series.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 639-2, *Codes for the representation of names of languages — Part 2: Alpha-3 code*

ISO 639-3,[1)] *Codes for the representation of names of languages — Part 3: Alpha-3 code for comprehensive coverage of languages*

ISO 3166-1,[2)] *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes*

ISO 15924,[3)] *Information and documentation — Codes for the representation of names of scripts*

ISO/IEC 11404, [4)], *Information technology — General-Purpose Datatypes (GPD)*

ISO/IEC 19788-1:2011, [5)] *Information technology — Learning, education and training — Metadata for learning resources — Part 1: Framework*

ISO/IEC 19788-1:2011/Amd 1:2014, *Information technology — Learning, education and training — Metadata for learning resources — Part 1: Framework/Amendment 1*

ISO/IEC 19788-2, *Information technology — Learning, education and training — Metadata for learning resources — Part 2: Dublin Core elements*

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1) The name and contact information of the Registration Authority for this ISO 639-3 can be found at http://www.iso.org/mara.

2) Alpha-2 codes available at http://www.iso.org/iso/country_codes/iso_3166_code_lists/country_names_and_code_elements.htm.

3) Codes available at http://www.unicode.org/iso15924/codelists.html.

4) Freely available at http://standards.iso.org/ittf/PubliclyAvailableStandards/index.html.

5) Freely available at http://standards.iso.org/ittf/PubliclyAvailableStandards/index.html.