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

Part 1:
Framework

AMENDMENT 1

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Technologies de l'information — Métadonnées pour ressources d'apprentissage —

Partie 1: Charpente

AMENDEMENT 1

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Foreword

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The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training*.

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Page 3, replace ISO/IEC 19788-1:2011, subclause 3.16 with

> **3.16**
> **domain**
> <data element specification> **resource class** (3.31) whose **resource**s (3.30) may be described by the property related to the **data element specification** (3.14) under consideration
>
> NOTE   The information concerning the domain of a data element specification is provided as the value of its attribute "Domain".

Page 4, replace ISO/IEC 19788-1:2011, subclause 3.28 with

> **3.28**
> **codomain**
> <data element specification> **resource class** (3.31) to which the **content value**s (3.10) of the **data element** (3.11) instances of the **data element specification** (3.14) under consideration belong, or set of **literal**s (3.21) comprising the **string** (3.35) representations of the permissible values of the data element instances of the data element specification under consideration
>
> NOTE   The information concerning the codomain of a data element specification is provided as the values of its attributes "Codomain" and "Content value rules".

Page 5, replace ISO/IEC 19788-1:2011, subclause 3.29 with

> **3.29**
> **refine**
> <data element specification> has an associated property which is a sub-property of the property associated with
>
> EXAMPLE 1   Property "is son of" refines property "is child of".
>
> EXAMPLE 2   Property "has mother" refines property "has parent".
>
> NOTE 1   Data element specification DES1 refines data element specification DES2 if the extension of the property (say p1) related to DES1 is a subset of the extension of the property (say p2) related to DES2. This condition can be expressed as "p1(x,y) implies p2(x,y)", that is "if x and y are p1-related, then x and y are p2-related".
>
> NOTE 2   If data element specification DES1 refines data element specification DES2, then the property (or relation) associated with DES1 is said to refine the property (or relation) associated with DES2.

Page 6, in clause 4 replace

> MLR-1 ISO/IEC 19788-1:2010(E), *Information technology — Learning, education and training — Metadata for learning resources — Part 1: Framework* (this document)

with

> MLR-1 ISO/IEC 19788-1:2011(E), *Information technology — Learning, education and training — Metadata for learning resources — Part 1: Framework* (this document)

Page 8, in subclause 6.2 replace

> • **Range** (data element range)

with

> • **Codomain** (data element codomain)

Page 9, delete rule [R0003].

Page 9, in subclause 6.2.2.1, replace

> [R0007] Each data element property name assigned to data elements in ISO/IEC 19788 shall be unique (considering all parts of ISO/IEC 19788), although it may have multiple equivalent names in different languages.

with

> [R0007] In any language: For all DESs the values of the "Property name" attribute shall be unique across all DESs (from all parts of ISO/IEC 19788, all editions) with the same values for the attributes "Domain" and "Codomain".
>
> Note: Said otherwise: In any given language, for any DES the triple (property name, domain, codomain) associated with the DES constitutes a global (within ISO/IEC 19788) appellation of the DES (the primary global identifier being provided by the DES attribute "Identifier")

Page 10, replace the title of subclause 6.2.6 with

> **Data element specification attribute Codomain**

Page 10, in subclause 6.2.6, replace

> **Attribute** that serves to specify the **range** of **data element**s obeying this specification.

with

> **Attribute** that serves to specify the **codomain** of **data element**s obeying this specification.

Page 10, replace the title of subclause 6.2.6.1 with

> **Rule set for the attribute "Codomain"**

Page 10, in subclause 6.2.7, replace

When the range of a data element is a set of literals

with

When the codomain of a data element is a set of literals

Page 10, in rule [R0016] replace

Condition: When the range of a data element

with

Condition: When the codomain of a data element

Page 10, replace [R0017] with

> **[R0017]** The value of this attribute is a **rule set**.
>
> Rules of the form indicated below are examples.
> • The codomain of the **data element** is the set of all **literal**s denoting values of a given datatype.
> • The codomain of the data elements is the set of all literals that conform to a datatype provided in ISO/IEC 11404:2007

Page 11, in subclause 6.2.8.1, replace

> **[R0018]** The obligation status of this attribute is **conditional**.
>
>
> Condition: If the data element specification is a refinement of another data element specification, then a value has to be provided for this attribute.

with

> **[R0018]** The obligation status of this attribute is **conditional**.
>
> Condition: If the data element specification is a refinement of another data element specification from the ISO/IEC 19788 multipart Standard, then the identifier of that DES has to be provided with this attribute.

Page 12, in subclause 6.3 and 6.4, replace

Range (mandatory)

with

Codomain (mandatory)

Page 12, add the following text and rules below the table, at the end of subclause 6.3:

> DES attributes are either essential or non-essential. The essential attributes being those that are essential to capture the "essence" of the DES. Two DESs are considered identical when they have the same values for their essential attributes. Minor changes that do not change the meaning are allowed, that is, they don't require the creation of a new DES.
>
> For DESs (subclause 6.2 and 6.3), the essential attributes are:
>
> - Identifier
> - Property name

  - Definition
  - Linguistic indicator
  - Domain
  - Codomain
  - Content value rules

The non-essential attributes are:

  - Refines
  - Example(s)
  - Note(s)

Any Type 1 MLR Part or Type 2 MLR Part reusing DESs from other parts can add non-essential attributes to those.

[**R0055**] The value of attribute "Property name" shall be provided in French, English and Russian.

[**R0056**] The value of attribute "Definition" shall be provided in French, English and Russian.

Page 12, in subclause 6.4, replace

Domain (mandatory)	*Learning Resource* *(ISO_IEC_19788-1:2010::RC0002)*

with

Domain (mandatory)	*Learning Resource* *(ISO_IEC_19788-1:2011::RC0002)*

Page 12, in subclause 6.4, replace

Refines (conditional)	ISO_IEC_19788-2:2010::DES0900

with

Refines (conditional)	ISO_IEC_19788-2:2011::DES0900

Page 13, in subclause 7.1 replace

(3) *contentValue* is the actual information recorded as the content of the data element (its **content value**) that belongs to the **range** of the data element (as given in the data element specification);

with

(3) *contentValue* is the actual information recorded as the content of the data element (its **content value**) that belongs to the **codomain** of the data element (as given in the data element specification);

Page 13, Example 1, subclause 7.1, replace

ISO_IEC_19788-2:2010::DES0300

with

ISO_IEC_19788-2:2011::DES0100

Page 14, Example 2, 1st line of table, replace

ISO_IEC_19788-2:2010::DES0300

with

> ISO_IEC_19788-2:2011::DES0100

Page 14, Example 3, 1st line of table, replace

> ISO_IEC_19788-2:2010::DES0020

with

> http:// standards.iso.org/iso-iec/19788/-2/ed-1/en/clause/5.1/ (or urn:iso:std:iso-iec:19788:-2:ed-1:en:clause:5.1)

Page 14, Example3, transpose, in the table, the Predicate Line and the Subject Line

Page 15, in subclause 8.3, 1st line of table, replace

> ISO_IEC_19788-2:2010::RC0004

with

> ISO_IEC_19788-99:2099::RC0099

Page 15, in subclause 8.3, 4th line of table, replace

> ISO_IEC_19788-2:2010::RC0001 (*Learning Resource*)

with

> ISO_IEC_19788-1:2011::RC0002 (*Learning Resource*)

Page 15, in subclause 8.4.1 replace

> Identifier ISO_IEC_19788-1:2010::RC0001

with

> Identifier ISO_IEC_19788-1:2011::RC0001

Page 15, in subclause 8.4.2 replace

> Identifier ISO_IEC_19788-1:2010::RC0002

with

> Identifier ISO_IEC_19788-1:2011::RC0002

Page 15, in subclause 8.4.2, replace

> SubclassOf   ISO_IEC_19788-1:2010::RC0001 (Resource)

with

> SubclassOf   ISO_IEC_19788-1:2011::RC0001 (Resource)

Page 16, in subclause 8.4.3, replace

> Identifier ISO_IEC_19788-1:2010::RC0003

with