

DIN EN ISO/IEC 19788-1:2026-03 (E)

Information technology for learning, education and training - Metadata for learning resources - Part 1: Framework (ISO/IEC 19788-1:2024)

Contents	Page
Foreword.....	vi
Introduction.....	vii
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	2
4 Abbreviated terms.....	9
5 Digital access.....	9
6 MLR Resource classes.....	10
6.1 General.....	10
6.2 Resource class specification attributes.....	10
6.2.1 Attribute "Identifier".....	10
6.2.2 Attribute "Canonical identifier".....	11
6.2.3 Attribute "Label".....	11
6.2.4 Attribute "Name".....	12
6.2.5 Attribute "Definition".....	12
6.2.6 Attribute "Subclass of".....	12
6.2.7 Attribute "Note".....	13
6.3 Resource class specification template.....	13
6.4 Example of a resource class specification.....	13
7 MLR Properties.....	14
7.1 General.....	14
7.2 Property specification attributes.....	14
7.2.1 Attribute "Identifier".....	14
7.2.2 Attribute "Canonical identifier".....	15
7.2.3 Attribute "Label".....	15
7.2.4 Attribute "Name".....	16
7.2.5 Attribute "Definition".....	16
7.2.6 Attribute "Domain".....	17
7.2.7 Attribute "Codomain".....	17
7.2.8 Attribute "Linguistic indicator".....	17
7.2.9 Attribute "Content value rules".....	18
7.2.10 Attribute "Refines".....	19
7.2.11 Attribute "Example(s)".....	19
7.2.12 Attribute "Note(s)".....	19
7.2.13 Attribute "Best practice(s)".....	20
7.2.14 Attribute "Status".....	20
7.3 Essential vs non-essential attributes.....	20
7.4 Property specification template.....	21
7.5 Aggregation of properties.....	21
7.6 Example of a property specification.....	22
7.6.1 General.....	22
7.6.2 Property specification.....	22
7.6.3 Associated content value rule set.....	23
8 MLR Vocabularies.....	23
8.1 General.....	23
8.2 Vocabulary specification attributes.....	23
8.2.1 Attribute "Identifier".....	23
8.2.2 Attribute "Canonical identifier".....	24

8.2.3	Attribute "Label"	24
8.2.4	Attribute "Name"	25
8.2.5	Attribute "Open/closed"	25
8.2.6	Attribute "Extension of"	25
8.2.7	Attribute "Set of terms"	26
8.3	Vocabulary specification template	26
8.4	User extensions of MLR vocabularies	27
8.5	Example of vocabulary specifications	27
8.5.1	General	27
8.5.2	Vocabulary "Opportunity types"	27
8.5.3	Vocabulary "Extended opportunity types"	28
9	MLR Data elements	28
9.1	General	28
9.2	Data element specification attributes	29
9.2.1	Attribute "Property identifier"	29
9.2.2	Attribute "Subject"	29
9.2.3	Attribute "Content value"	29
9.2.4	Attribute "Language code"	30
9.3	Data element specification template	30
9.4	Examples of MLR data elements	30
9.4.1	EXAMPLE 1	30
9.4.2	EXAMPLE 2 (content value of the data element from a vocabulary)	30
10	MLR Records	30
10.1	General	30
10.2	MLR record: Components	31
10.2.1	Component "Identifier"	31
10.2.2	Component "Resource"	31
10.2.3	Component "Content"	31
11	MLR Application profiles	31
11.1	General	31
11.2	Application profile specification attributes	32
11.2.1	Attribute "Identifier"	32
11.2.2	Attribute "Canonical identifier"	32
11.2.3	Attribute "Label"	33
11.2.4	Attribute "Name"	33
11.2.5	Attribute "Description"	34
11.2.6	Attribute "Extension of"	34
11.2.7	Attribute "List of identifiers of templates for property constraints"	34
11.3	Application profile specification template	34
11.4	Constraint on properties	35
11.5	Constraint on properties template	35
11.5.1	Shape of the constraint on properties template	35
11.5.2	Content of the constraint on properties template	35
11.6	Example	36
11.6.1	Example of the specification of an application profile	37
11.6.2	Example of the specification of property constraints	37
11.6.3	Example of a Conditions Table	37
11.7	Ordered list of items	38
11.8	Global content value rule sets	38
11.9	Extension of an application profile	38
11.10	Documents specifying application profiles	39
12	Documents based on this document	39
12.1	New parts of the ISO/IEC 19788 series	39
12.2	Documents beyond ISO/IEC 19788 based on this standard	39
12.2.1	Documents specifying application profiles	39
12.2.2	Documents specifying MLR entities	39

13	Generic resource classes and LET related classes	40
13.1	General	40
13.2	Generic resource classes	40
13.2.1	Class "Resource"	40
13.2.2	Class "Information Resource"	40
13.2.3	Class "Web Resource"	41
13.2.4	Class "Representation"	41
13.3	Other resource classes	42
13.3.1	Class "Person"	42
13.3.2	Class "Learning Resource"	42
14	Generic properties	42
14.1	General	42
14.2	Properties whose domain is class "Resource"	43
14.2.1	Property "has Description"	43
14.2.2	Property "name"	43
14.3	Properties whose domain is class "Information Resource"	44
14.3.1	Property "describes"	44
14.3.2	Property "has representation"	45
14.4	Property whose domain is class "Web Resource"	45
14.4.1	Property "location"	45
14.5	Properties whose domain is class "Representation"	46
14.5.1	Property "character encoding"	46
14.5.2	Property "media type"	47
14.5.3	Property "refers to"	47
14.5.4	Property "represents"	48
15	Generic content value rule sets	48
15.1	General	48
15.2	MLR String	49
15.3	BCP 47	49
15.4	Boolean	49
15.5	Date	49
15.6	Date & Time	50
15.7	Duration	50
15.8	HTTP IRI	50
15.9	IRI	50
15.10	MEDIA TYPE	51
15.11	Time interval	51
15.12	JSON string	52
Annex A	(normative) Language equivalents for names and labels	53
Annex B	(normative) MLR identifiers	54
Annex C	(normative) MLR canonical identifiers and additional constraints on MLR specifications	58
Annex D	(normative) Rules for all parts of ISO/IEC 19788	65
Annex E	(normative) UML class diagram of generic and other resource classes and related properties	69
Annex F	(informative) UML class diagrams for this document	70
Annex G	(informative) Contents of documents specifying application profiles	73
Annex H	(informative) Contents for documents beyond ISO/IEC 19788 specifying MLR entities	75
Annex I	(informative) Principles governing the development of ISO/IEC 19788	77
Bibliography		79