

Alaska Data Integration work group ISO Metadata Data Dictionary

***ISO 19115-2
Data Level Metadata***



Photo courtesy of USGS

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Summary: Data dictionary report of ISO 19115 ADlwG data metadata.

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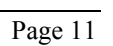
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gmd:CI_Address

<i>Code</i>	Address
<i>Description Text</i>	Location of the responsible individual or organization.

Attributes

Name	Code	Data Type	Multiplicity
gmd:deliveryPoint	delPoint	gco:CharacterString	0..*
gmd:city	city	gco:CharacterString	0..1
gmd:administrativeArea	adminArea	gco:CharacterString	0..1
gmd:postalCode	postCode	gco:CharacterString	0..1
gmd:country	gmd:country	gco:CharacterString	
gmd:electronicMailAddresses	eMailAdd	gco:CharacterString	0..*

Attribute: gmd:deliveryPoint

<i>Code</i>	delPoint
<i>Description Text</i>	Address line for the location.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:city

<i>Code</i>	city
<i>Description Text</i>	City of the location.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:administrativeArea

<i>Code</i>	adminArea
<i>Description Text</i>	State, province of the location.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:postalCode

<i>Code</i>	postCode
<i>Description Text</i>	ZIP or other postal code.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:country

<i>Code</i>	gmd:country
<i>Description Text</i>	Country of the physical address.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 3166

Attribute: gmd:electronicMailAddress

<i>Code</i>	eMailAdd
<i>Description Text</i>	Address of the electronic mailbox of the responsible organization or individual.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:CI_Citation

<i>Code</i>	Citation
<i>Description Text</i>	Standardized resource reference.

Attributes

Name	Code	Data Type	Multiplicity
gmd:title	resTitle	gco:CharacterString	1..1
gmd:date	resRefDate	gmd:CI_Date	1..*
gmd:edition	resEd	gco:CharacterString	0..1
gmd:citedResponsibleParty	citRespParty	gmd:CI_ResponsibleParty	0..*
gmd:presentationForm	presForm	codeList	
gmd:ISBN	isbn	gco:CharacterString	0..1
gmd:ISSN	issn	gco:CharacterString	0..1

Attribute: gmd:title

<i>Code</i>	resTitle
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<i>Description Text</i>	Name by which the cited resource is known.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:date

<i>Code</i>	resRefDate
<i>Description Text</i>	Reference date for the cited resource.
<i>Data Type</i>	gmd:CI_Date
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

Attribute: gmd:edition

<i>Code</i>	resEd
<i>Description Text</i>	Version of the cited resource.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:citedResponsibleParty

<i>Code</i>	citRespParty
<i>Description Text</i>	Name and position for an individual.
<i>Data Type</i>	gmd:CI_ResponsibleParty
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:presentationForm

<i>Code</i>	presForm
<i>Description Text</i>	Mode in which the resource is represented.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	CI_PresentationFormCode

Attribute: gmd:ISBN

<i>Code</i>	isbn
<i>Description Text</i>	International Standard Book Number.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:ISSN

<i>Code</i>	issn
<i>Description Text</i>	International Standard Serial Number.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:CI_Contact

<i>Code</i>	Contact
<i>Description Text</i>	Information required to enable contact with the responsible person and/or organization.

Attributes

Name	Code	Data Type	Multiplicity
gmd:phone	cntPhone	gmd:CI_Telephone	0..1
gmd:address	cntAddress	gmd:CI_Address	0..1
gmd:onlineResource	contOnlineRes	gmd:CI_OnlineResource	0..1
gmd:contactInstructions	contInstr	gco:CharacterString	0..1

Attribute: gmd:phone

<i>Code</i>	cntPhone
<i>Description Text</i>	Telephone number at which the organization or individual may be contacted.
<i>Data Type</i>	gmd:CI_Telephone
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:address

<i>Code</i>	cntAddress
<i>Description Text</i>	Physical and email address at which the organization or individual may be contacted.
<i>Data Type</i>	gmd:CI_Address
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:onlineResource

<i>Code</i>	contOnlineRes
<i>Description Text</i>	On-line information that can be used to contact the individual or organization.
<i>Data Type</i>	gmd:CI_OnlineResource
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:contactInstructions

<i>Code</i>	contInstr
<i>Description Text</i>	Supplemental instructions on how or when to contact the individual or organization.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:CI_Date

<i>Code</i>	DateRef
<i>Description Text</i>	References date and event used to describe it.

Attributes

Name	Code	Data Type	Multiplicity
gmd:date	refDate	gco:Date	1..1
gmd:dateType	refDateType	codeList	

Attribute: gmd:date

<i>Code</i>	refDate
<i>Description Text</i>	Reference date for the cited resource.
<i>Data Type</i>	gco:Date
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:dateType

<i>Code</i>	refDateType
<i>Description Text</i>	Event used for reference date.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	CI_DateTypeCode

gmd:CI_OnlineResource

<i>Code</i>	OnlineRes
<i>Description Text</i>	Information about on-line sources from which the dataset, specification, or community profile name and extended metadata elements can be obtained.

Attributes

Name	Code	Data Type	Multiplicity
gmd:linkage	linkage	gmd:URL	1..1
gmd:name	orName	gco:CharacterString	0..1
gmd:description	orDesc	gco:CharacterString	0..1

gmd:function	orFunc	codelist	
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Attribute: gmd:linkage

<i>Code</i>	linkage
<i>Description Text</i>	Location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme such as http://www.statkart.no/isotc211.
<i>Data Type</i>	gmd:URL
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:name

<i>Code</i>	orName
<i>Description Text</i>	Name of the online resource.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:description

<i>Code</i>	orDesc
<i>Description Text</i>	Detailed text description of what the online resource is/does.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:function

<i>Code</i>	orFunc
<i>Description Text</i>	Code for function performed by the online resource.
<i>Data Type</i>	codelist
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	CI_OnLineFunctionCode

gmd:CI_ResponsibleParty

<i>Code</i>	RespParty
<i>Description Text</i>	Identification of, and means of communication with, person(s) and organizations associated with the dataset. Note: This instance identifies the party responsible for the metadata record.

Attributes

Name	Code	Data Type	Multiplicity
gmd:individualName	rpIndName	gco:CharacterString	0..1
gmd:organizationName	rpOrgName	gco:CharacterString	0..1

gmd:positionName	rpPosName	ng gco:CharacterStri	0..1
gmd:contactInfo	rpCntInfo	ng gmd:CI_Contact	0..1
gmd:role	gmd:role	codeList	

Attribute: gmd:individualName

<i>Code</i>	rpIndName
<i>Description Text</i>	Name of the responsible person – surname, given name, title separated by a delimiter.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:organizationName

<i>Code</i>	rpOrgName
<i>Description Text</i>	Name of the responsible organization.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:positionName

<i>Code</i>	rpPosName
<i>Description Text</i>	Role or position of the responsible person.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:contactInfo

<i>Code</i>	rpCntInfo
<i>Description Text</i>	Address of the responsible party.
<i>Data Type</i>	gmd:CI_Contact
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:role

<i>Code</i>	gmd:role
<i>Description Text</i>	Function performed by the responsible party.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	CI_RoleCode

gmd:CI_Telephone

Code Telephone
Description Text Telephone numbers for contacting the responsible individual or organization.

Attributes

Name	Code	Data Type	Multiplicity
gmd:voice	voiceNum	gco:CharacterString	0..*
gmd:facsimile	faxNum	gco:CharacterString	0..*

Attribute: gmd:voice

<i>Code</i>	voiceNum
<i>Description Text</i>	Telephone number by which individuals can speak to the responsible organization or individual.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:facsimile

<i>Code</i>	faxNum
<i>Description Text</i>	Telephone number of a facsimile machine for the responsible organization or individual.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:contentInformation

Code ContInfo
Description Text The block contains a brief description of the dataset and information about how to locate the provider and/or ISO FeatureCatalogue.
 Choose a subtype.

gmd:EX_BoundingPolygon

Code BoundPoly
Description Text Boundary enclosing the dataset, expressed as the closed set of (x,y) coordinates of the polygon (last point replicates the first point).

Attributes

Name	Code	Data Type	Multiplicity
gmd:extentTypeCode	exTypeCode	gco:Boolean	0..1
gmd:polygon	polygon	choose polygon	1..*

		subtype	
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Attribute: gmd:extentTypeCode

<i>Code</i>	exTypeCode
<i>Description Text</i>	Indication of whether the bounding polygon encompasses an area covered by the data or an area where the data is not present.
<i>Data Type</i>	gco:Boolean
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:polygon

<i>Code</i>	polygon
<i>Description Text</i>	Set of points defining the bounding polygon.
<i>Data Type</i>	choose polygon subtype
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

gmd:EX_Extent

<i>Code</i>	Extent
<i>Description Text</i>	Information about horizontal, vertical, and temporal extent.
	count(description + geographicElement + temporalElement + verticalElement) > 0

Attributes

Name	Code	Data Type	Multiplicity
gmd:description	exDesc	gco:CharacterString	0..1
gmd:geographicElement	geoEle	choose geographicElement subtype	0..*
gmd:temporalElement	tempEle	gmd:EX_TemporalExtent	0..*
gmd:verticalElement	vertEle	gmd:EX_VerticalExtent	0..*

Attribute: gmd:description

<i>Code</i>	exDesc
<i>Description Text</i>	Spatial and temporal extent for the referring object.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:geographicElement

<i>Code</i>	geoEle
<i>Description Text</i>	Provides geographic component of the extent of the referring object.
<i>Data Type</i>	choose geographicElement subtype
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:temporalElement

<i>Code</i>	tempEle
<i>Description Text</i>	Provides temporal component of the extent of the referring object.
<i>Data Type</i>	gmd:EX_TemporalExtent
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:verticalElement

<i>Code</i>	vertEle
<i>Description Text</i>	Provides vertical component of the extent of the referring object.
<i>Data Type</i>	gmd:EX_VerticalExtent
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:EX_GeographicBoundingBox

<i>Code</i>	GeoBndBox
<i>Description Text</i>	Geographic position of the dataset. Note: This is only an approximate reference so specifying the coordinate reference system is unnecessary.

Attributes

Name	Code	Data Type	Multiplicity
gmd:extentTypeCode	exTypeCode	gco:Boolean	0..1
gmd:westBoundLongitude	westBL	gco:Decimal	1..1
gmd:eastBoundLongitude	eastBL	gco:Decimal	1..1
gmd:southBoundLatitude	southBL	gco:Decimal	1..1
gmd:northBoundLatitude	northBL	gco:Decimal	1..1

Attribute: gmd:extentTypeCode

<i>Code</i>	exTypeCode
<i>Description Text</i>	Indication of whether the bounding polygon encompasses an area covered by the data or an area where the data is not present.
<i>Data Type</i>	gco:Boolean
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:westBoundLongitude

<i>Code</i>	westBL
<i>Description Text</i>	Western-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east).
<i>Data Type</i>	gco:Decimal
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:eastBoundLongitude

<i>Code</i>	eastBL
<i>Description Text</i>	Eastern-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east).
<i>Data Type</i>	gco:Decimal
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:southBoundLatitude

<i>Code</i>	southBL
<i>Description Text</i>	Southern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north).
<i>Data Type</i>	gco:Decimal
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:northBoundLatitude

<i>Code</i>	northBL
<i>Description Text</i>	Northern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north).
<i>Data Type</i>	gco:Decimal
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gmd:EX_GeographicDescription

<i>Code</i>	GeoDesc
<i>Description Text</i>	Not described in this model.

gmd:EX_TemporalExtent

<i>Code</i>	TempExtent
<i>Description Text</i>	Date and Time for the content of the dataset

Attributes

Name	Code	Data Type	Multiplicity
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gmd:extent	exTemp	choose TM_Primitive subtype	1..1
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Attribute: gmd:extent

<i>Code</i>	exTemp
<i>Description Text</i>	Choose subtype.
<i>Data Type</i>	choose TM_Primitive subtype
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gmd:EX_VerticalExtent

<i>Code</i>	VertExtent
<i>Description Text</i>	Vertical domain of dataset.

Attributes

Name	Code	Data Type	Multiplicity
gmd:minimumValue	vertMinVal	Real	1..1
gmd:maximumValue	vertMaxValue	Real	1..1
gmd:verticalCRS	vertCRS	(none)	1..1

Attribute: gmd:minimumValue

<i>Code</i>	vertMinVal
<i>Description Text</i>	Lowest vertical extent contained in the dataset.
<i>Data Type</i>	Real
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:maximumValue

<i>Code</i>	vertMaxValue
<i>Description Text</i>	Highest vertical extent contained in the dataset.
<i>Data Type</i>	Real
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:verticalCRS

<i>Code</i>	vertCRS
<i>Description Text</i>	Coordinate reference system for the vertical axis.
<i>Data Type</i>	(none)
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gmd:geographicElement

<i>Code</i>	GeoExtent
<i>Description Text</i>	Geographic area of the dataset.

gmd:identificationInfo

<i>Code</i>	Ident
<i>Description Text</i>	Basic information required to uniquely identify a resource, choose a subtype.

gmd:LI_Lineage

<i>Code</i>	Lineage
<i>Description Text</i>	Non-quantitative quality information ... Information about the events or source data used in constructing the data specified by the scope or lack of knowledge about lineage. count (processStep + source) > 0

Attributes

Name	Code	Data Type	Multiplicity
gmd:statement	statement	gco:CharacterString	0..1
gmd:processStep	prcStep	gmd:LI_ProcessStep	0..*
gmd:source	dataSource	gmd:LI_Source	0..*

Attribute: gmd:statement

<i>Code</i>	statement
<i>Description Text</i>	General explanation of the data producer's knowledge about the lineage of a dataset.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:processStep

<i>Code</i>	prcStep
<i>Description Text</i>	Information about events in the life of a dataset specified by the scope.
<i>Data Type</i>	gmd:LI_ProcessStep
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:source

<i>Code</i>	dataSource
<i>Description Text</i>	Information about the source data used in creating the data specified by the scope.

<i>Data Type</i>	gmd:LI_Source
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:LI_ProcessStep

<i>Code</i>	ProcessStep
<i>Description Text</i>	Information about an event or transformation in the life of a dataset including the process used to maintain the dataset.

Attributes

Name	Code	Data Type	Multiplicity
gmd:description	stepDesc	gco:CharacterString	1..1
gmd:rationale	stepRat	gco:CharacterString	0..1
gmd:dateTime gmd:processor	stepDateTm stepPorc	gco:DateTime gmd:CI_Responsi bleParty	0..*

Attribute: gmd:description

<i>Code</i>	stepDesc
<i>Description Text</i>	Description of the event, including related parameters or tolerances.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:rationale

<i>Code</i>	stepRat
<i>Description Text</i>	Requirement or purpose for the process step.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:dateTime

<i>Code</i>	stepDateTm
<i>Description Text</i>	Date and time or range of date and time on or over which the process step occurred.
<i>Data Type</i>	gco:DateTime
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 8601

Attribute: gmd:processor

<i>Code</i>	stepPorc
<i>Description Text</i>	Identification of, and means of communication with, person(s) and organization(s) associated with the process step.
<i>Data Type</i>	gmd:CI_ResponsibleParty
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:LI_Source

<i>Code</i>	Source
<i>Description Text</i>	Information about the source data used in creating the data specified by the scope.

Attributes

Name	Code	Data Type	Multiplicity
gmd:description	srcDesc	gco:CharacterString	0..1
gmd:sourceCitation	srcCitatn	gmd:CI_Citation	0..1
gmd:sourceStep	srcStep	gmd:LI_ProcessStep	0..*

Attribute: gmd:description

<i>Code</i>	srcDesc
<i>Description Text</i>	Detailed description of the level of the source data.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:sourceCitation

<i>Code</i>	srcCitatn
<i>Description Text</i>	Recommended reference to be used for the source data.
<i>Data Type</i>	gmd:CI_Citation
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:sourceStep

<i>Code</i>	srcStep
<i>Description Text</i>	Information about an event in the creation process for the source data.
<i>Data Type</i>	gmd:LI_ProcessStep
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:MD_BrowseGraphic

<i>Code</i>	BrowGraph
<i>Description Text</i>	Graphic that provides an illustration of the dataset (should include a legend for the graphic) e.g. a physical data model.

Attributes

Name	Code	Data Type	Multiplicity
gmd:fileName	bgFileName	gco:CharacterString	1..1
gmd:fileDescription	bgFileDesc	gco:CharacterString	0..1
gmd:fileType	bgFileType	gco:CharacterString	0..1

Attribute: gmd:fileName

<i>Code</i>	bgFileName
<i>Description Text</i>	Name of the file that contains a graphic that provides an illustration of the dataset.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:fileDescription

<i>Code</i>	bgFileDesc
<i>Description Text</i>	Text description of the illustration.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:fileType

<i>Code</i>	bgFileType
<i>Description Text</i>	Format in which the illustration is encoded; examples (PDF, JPEG, TIFF).
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:MD_Constraints

<i>Code</i>	Gmd:MDConstraints
<i>Description Text</i>	Restrictions on the access and use of a resource or metadata.

Attributes

Name	Code	Data Type	Multiplicity
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<code>gmd:useLimitation</code>	<code>useLimit</code>	<code>gco:CharacterString</code>	1..*
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Attribute: gmd:useLimitation

<i>Code</i>	<code>useLimit</code>
<i>Description Text</i>	Limitation affecting the fitness for use of the resource or metadata – Example, “not to be used for navigation”.
<i>Data Type</i>	<code>gco:CharacterString</code>
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

gmd:MD_CoverageDescription

<i>Code</i>	<code>Gmd:MDCoverageDescription</code>
<i>Description Text</i>	Note: Not defined in this model.

gmd:MD_DataIdentification

<i>Code</i>	<code>DataIdent</code>
<i>Description Text</i>	Information required to identify a dataset.

graphicOverview attribute uses tag attribute `xlink:href=""` to specify link to browse graphic file.

descriptiveKeywords attribute uses tag attribute `xlink:href=""` to specify link to thesaurus.

Attributes

Name	Code	Data Type	Multiplicity
<code>gmd:citation</code>	<code>idCitation</code>	<code>gmd:CI_Citation</code>	1..1
<code>gmd:abstract</code>	<code>idAbs</code>	<code>gco:CharacterString</code>	1..1
<code>gmd:purpose</code>	<code>idPurp</code>	<code>gco:CharacterString</code>	0..1
<code>gmd:credit</code>	<code>idCredit</code>	<code>gco:CharacterString</code>	0..*
<code>gmd:status</code>	<code>idStatus</code>	<code>codeList</code>	
<code>gmd:pointOfContact</code>	<code>idPoC</code>	<code>gmd:CI_Responsi bleParty</code>	0..*
<code>gmd:resourceMaintenance</code>	<code>resMaintenance</code>	<code>gmd:MD_Mainte nanceInformation</code>	0..*
<code>gmd:graphicOverview</code>	<code>graphOver</code>	<code>gmd:MD_Browse Graphic</code>	0..*
<code>gmd:resourceFormat</code>	<code>dsFormat</code>	<code>gmd:MD_Format</code>	0..*
<code>gmd:descriptiveKeywords</code>	<code>descKeys</code>	<code>gmd:MD_Keywo rds</code>	0..*
<code>gmd:resourceSpecificUsage</code>	<code>idSpecUse</code>	<code>gmd:MD_Usage</code>	0..*

<code>gmd:resourceConstraints</code>	<code>resConst</code>	choose resourceConstraints subtype	0..*
<code>gmd:taxonomy</code>	<code>taxonomy</code>	<code>gmd:MD_Taxonomy</code> <code>codeList</code>	0..1
<code>gmd:spatialRepresentationType</code>	<code>spatRpType</code>		
<code>gmd:spatialResolution</code>	<code>dataScale</code>	<code>gmd:MD_Resolution</code>	0..*
<code>gmd:language</code>	<code>dataLang</code>	<code>gco:CharacterString</code> enumeration	
<code>gmd:topicCategory</code>	<code>tpCat</code>	<code>gco:CharacterString</code>	0..1
<code>gmd:environmentDescription</code>	<code>envirDesc</code>		
<code>gmd:extent</code>	<code>dataExt</code>	<code>gmd:EX_Extent</code>	0..*
<code>gmd:supplementalInformation</code>	<code>suppInfo</code>	<code>gco:CharacterString</code>	0..1

Attribute: gmd:citation

<i>Code</i>	<code>idCitation</code>
<i>Description Text</i>	Citation data for the resource(s).
<i>Data Type</i>	<code>gmd:CI_Citation</code>
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:abstract

<i>Code</i>	<code>idAbs</code>
<i>Description Text</i>	Brief narrative summary of the content of the resource(s).
<i>Data Type</i>	<code>gco:CharacterString</code>
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:purpose

<i>Code</i>	<code>idPurp</code>
<i>Description Text</i>	Summary of the intentions with which the resource(s) was developed.
<i>Data Type</i>	<code>gco:CharacterString</code>
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:credit

<i>Code</i>	<code>idCredit</code>
<i>Description Text</i>	Recognition of those who contributed to the resource(s).
<i>Data Type</i>	<code>gco:CharacterString</code>

<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:status

<i>Code</i>	idStatus
<i>Description Text</i>	Status of the resource(s).
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_ProgressCode

Attribute: gmd:pointOfContact

<i>Code</i>	idPoC
<i>Description Text</i>	Identification of, and means of communication with, person(s) and organizations(s) associated with the resource(s).
<i>Data Type</i>	gmd:CI_ResponsibleParty
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:resourceMaintenance

<i>Code</i>	resMaintenance
<i>Description Text</i>	Provides information about the frequency of resource updates, and the scope of those updates.
<i>Data Type</i>	gmd:MD_MaintenanceInformation
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:graphicOverview

<i>Code</i>	graphOver
<i>Description Text</i>	Provides a graphic that illustrates the resource(s) (should include a legend for the graphic) (use for logical and physical data models); tag attribute xlink:href="" provides link to browse graphic.
<i>Data Type</i>	gmd:MD_BrowseGraphic
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:resourceFormat

<i>Code</i>	dsFormat
<i>Description Text</i>	Provides a description of the format of the resource(s).
<i>Data Type</i>	gmd:MD_Format
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:descriptiveKeywords

<i>Code</i>	descKeys
<i>Description Text</i>	Provides category keywords, their type, and reference source.
<i>Data Type</i>	gmd:MD_Keywords
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:resourceSpecificUsage

<i>Code</i>	idSpecUse
<i>Description Text</i>	Provides basic information about specific application(s) for which the resource(s) has/have been or is being used by different users.
<i>Data Type</i>	gmd:MD_Usage
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:resourceConstraints

<i>Code</i>	resConst
<i>Description Text</i>	Provides information about constraints which apply to the resource(s).
<i>Data Type</i>	choose resourceConstraints subtype
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:taxonomy

<i>Code</i>	taxonomy
<i>Description Text</i>	Information on the taxa (1 or more) included in the data set, including keywords, taxonomic system and coverage information, and taxonomic classification system.
<i>Data Type</i>	gmd:MD_TaxonSys
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:spatialRepresentationType

<i>Code</i>	spatRpType
<i>Description Text</i>	Method used to spatially represent geographic information – NOTE: the data file type.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_SpatialRepresentationTypeCode

Attribute: gmd:spatialResolution

<i>Code</i>	dataScale
<i>Description Text</i>	Factor which provides a general understanding of the density of spatial data in the dataset.
<i>Data Type</i>	gmd:MD_Resolution
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*

<i>Domain</i>	<None>
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Attribute: gmd:language

<i>Code</i>	dataLang
<i>Description Text</i>	Language(s) used within the dataset.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 639-2

Attribute: gmd:topicCategory

<i>Code</i>	tpCat
<i>Description Text</i>	Main theme(s) of the dataset – NOTE: only if hierarchy level equals ‘dataset’.
<i>Data Type</i>	enumeration
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_TopicCategoryCode

Attribute: gmd:environmentDescription

<i>Code</i>	envirDesc
<i>Description Text</i>	Description of the dataset in the producer’s processing environment, including items such as the software, the computer, the computer operating system, file name, and the dataset size.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:extent

<i>Code</i>	dataExt
<i>Description Text</i>	Extent information including the bounding box, bounding polygon, vertical, and temporal extent of the dataset. Note: Use only if hierarchy level equals ‘dataset’.
<i>Data Type</i>	gmd:EX_Extent
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:supplementalInformation

<i>Code</i>	supplInfo
<i>Description Text</i>	Any other descriptive information about the dataset.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:MD_DigitalTransferOptions

<i>Code</i>	Gmd:MDDigitalTransferOptions
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Description Text Technical means and media by which a resource is obtained from the distributor.

Attributes

Name	Code	Data Type	Multiplicity
gmd:onLine	onLineSrc	gmd:CI_OnlineResource	0..*
gmd:offLine	offLineSrc	gmd:MD_Medium	0..1

Attribute: gmd:onLine

<i>Code</i>	onLineSrc
<i>Description Text</i>	Information about online sources from which the resource can be obtained.
<i>Data Type</i>	gmd:CI_OnlineResource
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:offLine

<i>Code</i>	offLineSrc
<i>Description Text</i>	Information about offline media on which the resource can be obtained.
<i>Data Type</i>	gmd:MD_Medium
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:MD_Distribution

Code Distrib

Description Text Information about the distributor of and options for obtaining the resource.

Attributes

Name	Code	Data Type	Multiplicity
gmd:distributor	distributor	gmd:MD_Distributor	1..*

Attribute: gmd:distributor

<i>Code</i>	distributor
<i>Description Text</i>	Provides information about the distributor.
<i>Data Type</i>	gmd:MD_Distributor
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

gmd:MD_Distributor

Code Distributor

Description Text Information about the distributor.

Attributes

Name	Code	Data Type	Multiplicity
gmd:distributorContact	distorCont	gmd:CI_Responsi bleParty	1..1
gmd:distributionOrderProc ess	distorOrdPrc	gmd:MD_Standar dOrderProcess	0..*
gmd:distributorFormat	distorFormat	gmd:MD_Format	0..*
gmd:distributorTransferOp tions	distorTran	gmd:MD_Digital TransferOptions	0..*

Attribute: gmd:distributorContact

<i>Code</i>	distorCont
<i>Description Text</i>	Party from whom the resource may be obtained. Note: This list need not be exhaustive.
<i>Data Type</i>	gmd:CI_ResponsibleParty
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:distributionOrderProcess

<i>Code</i>	distorOrdPrc
<i>Description Text</i>	Provides information about how the resource may be obtained and related instructions and fee information.
<i>Data Type</i>	gmd:MD_StandardOrderProcess
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:distributorFormat

<i>Code</i>	distorFormat
<i>Description Text</i>	Provides information about the format used by the distributor.
<i>Data Type</i>	gmd:MD_Format
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:distributorTransferOptions

<i>Code</i>	distorTran
<i>Description Text</i>	Provides information about the technical means and media used by the distributor.
<i>Data Type</i>	gmd:MD_DigitalTransferOptions
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:MD_ExtendedElementInformation*Code* Gmd:MDExtendedElementInformation*Description Text* New metadata element, not found in ISO 19115, which is required to describe geographic data.**Attributes**

Name	Code	Data Type	Multiplicity
name	extEleName	gco:CharacterString	1..1
shortName	extShortName	gco:CharacterString	0..1
definition	extEleDef	gco:CharacterString	1..1
obligation	extEleOb	MD_ObligationCode	0..1
dataType	eleDataType	MD_DatatypeCode	1..1
maximumOccurrence	extEleMxOc	gco:CharacterString	0..1
parentEntity	extEleParEnt	gco:CharacterString	1..*
rule	extEleRule	gco:CharacterString	1..1
rationale	extEleRat	gco:CharacterString	0..*
source	extEleSrc	CI_ResponsibleParty	1..*

Attribute: name

<i>Code</i>	extEleName
<i>Description Text</i>	
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: shortName

<i>Code</i>	extShortName
<i>Description Text</i>	
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: definition

<i>Code</i>	extEleDef
<i>Description Text</i>	
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: obligation

<i>Code</i>	extEleOb
<i>Description Text</i>	
<i>Data Type</i>	MD_ObligationCode
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: dataType

<i>Code</i>	eleDataType
<i>Description Text</i>	
<i>Data Type</i>	MD_DatatypeCode
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: maximumOccurrence

<i>Code</i>	extEleMxOc
<i>Description Text</i>	
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: parentEntity

<i>Code</i>	extEleParEnt
<i>Description Text</i>	
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

Attribute: rule

<i>Code</i>	extEleRule
<i>Description Text</i>	
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: rationale

<i>Code</i>	extEleRat
<i>Description Text</i>	
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: source

<i>Code</i>	extEleSrc
<i>Description Text</i>	
<i>Data Type</i>	CI_ResponsibleParty
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

gmd:MD_FeatureCatalogueDescription

<i>Code</i>	FetCatDesc
<i>Description Text</i>	Information identifying the feature catalogue or the conceptual schema for the dataset. The tag includes the uuid=" " parameter containing the GUID of the referenced schema.

Attributes

Name	Code	Data Type	Multiplicity
gmd:complianceCode	compCode	gco:Boolean	1..1
gmd:language	gmd:language	gco:CharacterString	
gmd:includedWithDataset	incWithDS	gco:Boolean	
gmd:featureCatalogueCitation	catCitation	gmd:CI_Citation	

Attribute: gmd:complianceCode

<i>Code</i>	compCode
<i>Description Text</i>	Indication of whether or not the cited feature catalogue complies with AIO 19110.
<i>Data Type</i>	gco:Boolean
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	<None>

Attribute: gmd:language

<i>Code</i>	gmd:language
<i>Description Text</i>	Language(s) used within the catalogue.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 3166

Attribute: gmd:includedWithDataset

<i>Code</i>	incWithDS
<i>Description Text</i>	Indication of whether or not the feature catalogue is included with the dataset.
<i>Data Type</i>	gco:Boolean
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:featureCatalogueCitation

<i>Code</i>	catCitation
<i>Description Text</i>	Complete bibliographic reference to one or more external feature catalogues.
<i>Data Type</i>	gmd:CI_Citation
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	<None>

gmd:MD_Format

<i>Code</i>	Format
<i>Description Text</i>	Description of the computer language construct that specifies the representation of the data objects in a record, file, message, storage device or transmission channel.

Attributes

Name	Code	Data Type	Multiplicity
gmd:name	formatName	gco:CharacterString	1..1
gmd:version	formatVersion	gco:CharacterString	1..1

Attribute: gmd:name

<i>Code</i>	formatName
<i>Description Text</i>	Name of the data transfer format(s).
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:version

<i>Code</i>	formatVersion
<i>Description Text</i>	Version of the format (date, number, etc.)
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gmd:MD_Keywords

<i>Code</i>	Keywords
<i>Description Text</i>	Keywords, their type and reference source.

Attributes

Name	Code	Data Type	Multiplicity
gmd:keyword	gmd:keyword	gco:CharacterString	1..*
gmd:type	keyTyp	codeList	
gmd:thesaurusName	thesaName	gmd:CI_Citation	0..1

Attribute: gmd:keyword

<i>Code</i>	gmd:keyword
<i>Description Text</i>	Commonly used word(s) or formalized word(s) or phrase(s) used to describe the subject.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

Attribute: gmd:type

<i>Code</i>	keyTyp
<i>Description Text</i>	Subject matter used to group similar keywords.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_KeywordTypeCode

Attribute: gmd:thesaurusName

<i>Code</i>	thesaName
<i>Description Text</i>	Name of the formally registered thesaurus or a similar authoritative source of keywords; tag attribute xlink:href="" provides link to online thesaurus.
<i>Data Type</i>	gmd:CI_Citation
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:MD_LegalConstraints

<i>Code</i>	LegConsts
<i>Description Text</i>	Restrictions and legal prerequisites for accessing and using the resource or metadata.
	count(accessConstraints + useConstraints + otherConstraints) > 0

Attributes

Name	Code	Data Type	Multiplicity
gmd:accessConstraints	accessConsts	codeList	

gmd:useConstraints gmd:otherConstraints	useConsts othConsts	codeList gco:CharacterString	0..*
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Attribute: gmd:accessConstraints

<i>Code</i>	accessConsts
<i>Description Text</i>	Access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource or metadata.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_RestrictionCode

Attribute: gmd:useConstraints

<i>Code</i>	useConsts
<i>Description Text</i>	Constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations or warnings on using the resource or metadata.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_RestrictionCode

Attribute: gmd:otherConstraints

<i>Code</i>	othConsts
<i>Description Text</i>	Other restrictions and legal prerequisites for accessing and using the resource or metadata.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:MD_MaintenanceInformation

<i>Code</i>	Gmd:MDMaintenanceInformation
<i>Description Text</i>	Information about the scope and frequency of updating.

Attributes

Name	Code	Data Type	Multiplicity
gmd:maintenanceAndUpdateFrequency	maintFreq	codeList	
gmd:maintenanceNote	maintNote	gco:CharacterString	0..*
gmd:contact	gmd:contact	gmd:CI_ResponsibleParty	0..*

Attribute: gmd:maintenanceAndUpdateFrequency

<i>Code</i>	maintFreq
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<i>Description Text</i>	Frequency with which changes and additions are made to the resource is completed.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_MaintenanceFrequencyCode

Attribute: gmd:maintenanceNote

<i>Code</i>	maintNote
<i>Description Text</i>	Information regarding specific requirements for maintaining the resource.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:contact

<i>Code</i>	gmd:contact
<i>Description Text</i>	Identification of, and means of communicating with, person(s) and organization(s) with responsibility for maintaining the metadata.
<i>Data Type</i>	gmd:CI_ResponsibleParty
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:MD_Medium

<i>Code</i>	Medium
<i>Description Text</i>	Information about the media on which the resource can be distributed.

Attributes

Name	Code	Data Type	Multiplicity
gmd:name	medName	codeList	0..1
gmd:mediumFormat	medFormat	codeList	
gmd:mediumNote	gmd:mediumNote	gco:CharacterString	

Attribute: gmd:name

<i>Code</i>	medName
<i>Description Text</i>	Name of the medium on which the resource can be received.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_MediumNameCode

Attribute: gmd:mediumFormat

<i>Code</i>	medFormat
<i>Description Text</i>	Method used to write to the medium.
<i>Data Type</i>	codeList

<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_MediumFormatCode

Attribute: gmd:mediumNote

<i>Code</i>	gmd:mediumNote
<i>Description Text</i>	Description of other limitations or requirements for using the medium.
<i>Data Type</i>	geo:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:MD_MetadataExtensionInformation

<i>Code</i>	MdExInfo
<i>Description Text</i>	Information describing metadata extensions.

This block will be automatically populated by the writer for ISOBio and ADIwg Project Metadata data standards; other extensions will need to be specified through the JSON content. The standard taxonomic extension block is available from NOAA.

Attributes

Name	Code	Data Type	Multiplicity
gmd:extensionOnLineResource	extOnRes	CI_OnlineResource	0..1
gmd:extendedElementInformation	extEleInfo	MD_ExtendedElementInformation	0..*

Attribute: gmd:extensionOnLineResource

<i>Code</i>	extOnRes
<i>Description Text</i>	
<i>Data Type</i>	CI_OnlineResource
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:extendedElementInformation

<i>Code</i>	extEleInfo
<i>Description Text</i>	
<i>Data Type</i>	MD_ExtendedElementInformation
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gmd:MD_RepresentativeFraction

<i>Code</i>	RepFract
<i>Description Text</i>	Derived from ISO 19103 Scale where MD_Representative Fraction.denominator =

1/Scale.measure And Scale.targetUnits = Scale.sourceUnits.

Attributes

Name	Code	Data Type	Multiplicity
gmd:denominator	rDenom	gco:Integer	1..1

Attribute: gmd:denominator

<i>Code</i>	rDenom
<i>Description Text</i>	The number below the line in a vulgar fraction.
<i>Data Type</i>	gco:Integer
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gmd:MD_Resolution

<i>Code</i>	Resol
<i>Description Text</i>	Level of detail expressed as a scale factor or a ground distance. Attribute tag uom=" " for distance allows qualification of units of measure.
	count(equivalentScale + distance) = 1

Attributes

Name	Code	Data Type	Multiplicity
gmd:equivalentScale	equScale	gmd:MD_RepresentativeFraction	0..1
gmd:distance	scaleDist	gco:Distance	0..1

Attribute: gmd:equivalentScale

<i>Code</i>	equScale
<i>Description Text</i>	Level of detail expressed as the scale of a comparable hardcopy map or chart.
<i>Data Type</i>	gmd:MD_RepresentativeFraction
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:distance

<i>Code</i>	scaleDist
<i>Description Text</i>	Ground sample distance.
<i>Data Type</i>	gco:Distance
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:MD_SecurityConstraints

<i>Code</i>	SecConsts
<i>Description Text</i>	Handling restrictions imposed on the resource or metadata for national security or similar security concerns.

Attributes

Name	Code	Data Type	Multiplicity
gmd:classification	class	codeList	0..1
gmd:userNote	userNote	gco:CharacterString	
gmd:classificationSystem	classSys	gco:CharacterString	0..1
gmd:handlingDescription	handDesc	gco:CharacterString	0..1

Attribute: gmd:classification

<i>Code</i>	class
<i>Description Text</i>	Name of the handling restrictions on the resource or metadata.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_ClassificationCode

Attribute: gmd:userNote

<i>Code</i>	userNote
<i>Description Text</i>	Explanation of the application of the legal constraints or other restrictions and legal prerequisites for obtaining and using the resource or metadata.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:classificationSystem

<i>Code</i>	classSys
<i>Description Text</i>	Name of the classification system.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:handlingDescription

<i>Code</i>	handDesc
<i>Description Text</i>	Additional information about the restrictions on handling the resource or metadata.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1

<i>Domain</i>	<None>
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gmd:MD_ServiceIdentification

<i>Code</i>	Gmd:MDSERVICEIdentification
<i>Description Text</i>	Note: Not described in this model.

gmd:MD_StandardOrderProcess

<i>Code</i>	StanOrdProc
<i>Description Text</i>	Common ways in which the resource may be obtained or received, and related instructions and fee information.

Attributes

Name	Code	Data Type	Multiplicity
gmd:fees	resFees	gco:CharacterString	0..1
gmd:plannedAvailableDate Time	planAvDtTm	gco:DateTime	
gmd:orderingInstructions	ordInstr	gco:CharacterString	0..1
gmd:turnaround	ordTurn	gco:CharacterString	0..1

Attribute: gmd:fees

<i>Code</i>	resFees
<i>Description Text</i>	Fees and terms for retrieving the resource, including monetary units (as specified in ISO 4217).
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:plannedAvailableDateTime

<i>Code</i>	planAvDtTm
<i>Description Text</i>	Date and time when the resource will be available.
<i>Data Type</i>	gco:DateTime
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 8601

Attribute: gmd:orderingInstructions

<i>Code</i>	ordInstr
<i>Description Text</i>	General instructions, terms and services provided by the distributor.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1

<i>Domain</i>	<None>
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Attribute: gmd:turnaround

<i>Code</i>	ordTurn
<i>Description Text</i>	Typical turnaround time for the filling of an order.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:MD_TaxonCI

<i>Code</i>	Gmd:MDTaxonCI
<i>Description Text</i>	Information about the range of taxa addressed in the data set or collection. It is recommended that one provide information starting from the taxonomic rank of kingdom, to a level which reflects the data set or collection being documented. The levels of Kingdom, Division/Phylum, class, Order, Family, Genus, and Species should be included as ranks as appropriate.

Attributes

Name	Code	Data Type	Multiplicity
gmd:common	gmd:common	gco:CharacterString	0..*
gmd:taxonrn	gmd:taxonrn	gco:CharacterString	0..1
gmd:taxonrv	gmd:taxonrv	gco:CharacterString	0..1
gmd:taxonCI	gmd:taxonCI	gmd:MD_TaxonCI	0..1

Attribute: gmd:common

<i>Code</i>	gmd:common
<i>Description Text</i>	Specification of applicable common names. These common names may be general descriptions of a group of organisms if appropriate (e.g. insects, vertebrate, grasses, waterfowl, vascular plants, etc.).
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:taxonrn

<i>Code</i>	gmd:taxonrn
<i>Description Text</i>	Name of the taxonomic rank for which the Taxon_Rank_Value is provided. See the example included in the definition of Taxonomic_Classification. Example: "Kingdom", "Division", "Phylum", "Subphylum", "SuperClass", "Class", "SubClass", "InfraClass", "Superorder", "Order", "Suborder", "Infraorder", "Superfamily", "Family", "Subfamily", "Tribe", "Subtribe", "Genus", "Species".

<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:taxonrv

<i>Code</i>	gmd:taxonrv
<i>Description Text</i>	Taxonomic rank value of the taxon being described.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:taxonCI

<i>Code</i>	gmd:taxonCI
<i>Description Text</i>	
<i>Data Type</i>	gmd:MD_TaxonCI
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmd:MD_TaxonSys

<i>Code</i>	Gmd:MDTaxonSys
<i>Description Text</i>	Documentation of taxonomic sources, procedures, and treatments.

Attributes

Name	Code	Data Type	Multiplicity
gmd:classSys	gmd:classSys	gmd:CI_Citation	1..*
gmd:taxongen	gmd:taxongen	gco:CharacterString	0..1
gmd:idref	gmd:idref	gco:nilReason	0..*
gmd:obs	gmd:obs	gmd:CI_Responsi bleParty	0..*
gmd:taxonpro	gmd:taxonpro	gco:CharacterString	1..1
gmd:voucher	gmd:voucher	gmd:MD_Vouch ers	0..1
gmd:taxonCI	gmd:taxonCI	gmd:MD_Taxon CI	1..1

Attribute: gmd:classSys

<i>Code</i>	gmd:classSys
<i>Description Text</i>	Information about the classification system or authority used.
<i>Data Type</i>	gmd:CI_Citation
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*

<i>Domain</i>	<None>
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Attribute: gmd:taxongen

<i>Code</i>	gmd:taxongen
<i>Description Text</i>	Description of the range of taxa addressed in the data set or collection. For example, "all vascular plants were identified to family or species, mosses and lichens were identified as moss or lichen".
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:idref

<i>Code</i>	gmd:idref
<i>Description Text</i>	Information on any non-authoritative materials (e.g. field guides) useful for reconstructing the actual process.
<i>Data Type</i>	gco:nilReason
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:obs

<i>Code</i>	gmd:obs
<i>Description Text</i>	Information about the individual(s) responsible for the identification(s) of the specimens or sightings. etc.
<i>Data Type</i>	gmd:CI_ResponsibleParty
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:taxonpro

<i>Code</i>	gmd:taxonpro
<i>Description Text</i>	Description of the methods used for taxonomic identification. Could include specimen processing, comparison with museum materials, keys, and key characters, chemical or genetic analyses, etc.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:voucher

<i>Code</i>	gmd:voucher
<i>Description Text</i>	Information about the voucher.
<i>Data Type</i>	gmd:MD_Vouchers
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:taxonCI

<i>Code</i>	gmd:taxonCI
<i>Description Text</i>	Information about the range of taxa addressed in the data set or collection. It is recommended that one provide information starting from the taxonomic rank of kingdom, to a level which reflects the data set or collection being documented. The levels of Kingdom, Division/Phylum, class, Order, Family, Genus, and Species should be included as ranks as appropriate.
<i>Data Type</i>	gmd:MD_TaxonCI
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gmd:MD_Usage

<i>Code</i>	Usage
<i>Description Text</i>	Brief Description of ways in which the resource(s) is/are currently or have been used.

Attributes

Name	Code	Data Type	Multiplicity
gmd:specificUsage	specUsage	gco:CharacterString	1..1
gmd:userDeterminedLimitations	usrDetLim	gco:CharacterString	0..1
gmd:userContactInfo	usrCntInfo	gmd:CI_ResponsibleParty	1..*

Attribute: gmd:specificUsage

<i>Code</i>	specUsage
<i>Description Text</i>	Brief description of the resource and/or resource series usage.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:userDeterminedLimitations

<i>Code</i>	usrDetLim
<i>Description Text</i>	Applications, determined by the user for which the resource and/or resource series is not suitable.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:userContactInfo

<i>Code</i>	usrCntInfo
<i>Description Text</i>	Identification of and means of communicating with the person(s) and organization(s) using the resource(s).
<i>Data Type</i>	gmd:CI_ResponsibleParty

<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

gmd:MD_Vouchers

<i>Code</i>	Gmd:MDVouchers
<i>Description Text</i>	Information on the types of specimen, the repository, and the individuals who identified the vouchers.

Attributes

Name	Code	Data Type	Multiplicity
gmd:specimen	gmd:specimen	gco:CharacterString	1..1
gmd:reposit	gmd:reposit	gmd:CI_ResponsibleParty	1..1

Attribute: gmd:specimen

<i>Code</i>	gmd:specimen
<i>Description Text</i>	Word or phrase describing the type of specimen collected (e.g. herbarium specimens, blood samples, photographs, individuals, or batches). Example: "herbarium specimens", "blood samples", "photographs", "individuals", "free text".
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:reposit

<i>Code</i>	gmd:reposit
<i>Description Text</i>	Information about the curator or contact person and/or agency responsible for the specimens.
<i>Data Type</i>	gmd:CI_ResponsibleParty
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gmd:polygon

<i>Code</i>	gmd:polygon
<i>Description Text</i>	An abstract class for defining multiple GML geometries not all of which are defined in this model.
	Not defined: MultiSolid, CompositeSolid, Solid, GeometricComplex, Tin, OrientableSurface, MultiPoint, Composite Curve, TriangulatedSurface, MultiSurface, Orientable Curve, CompositeSurface, MultiCurve, RectifiedGrid, Surface, Grid, Curve, PolyhedralSurface

gmd:resourceConstraints

Code consts
Description Text Choose subtype.

gmd_MD_ImageDescription

Code GmdMdImageDescription
Description Text Note: Not defined in this model.

gmi:MI_CoverageDescription

Code Gmi:MICoverageDescription
Description Text Note: Not defined in this model.

gmi:MI_ImageDescription

Code Gmi:MIImageDescription
Description Text Note: Not defined in this model.

gmi:MI_Metadata

Code Metadata
Description Text Root entity which defines metadata about a resource or resources.

Attributes

Name	Code	Data Type	Multiplicity
gmd:fileIdentifier	mdFileID	gco:CharacterString (GUID)	0..1
gmd:language	mdLang	gco:CharacterString	
gmd:characterSet	mdChar	codeList	
gmd:parentIdentifier	mdParentID	gco:CharacterString	0..1
gmd:hierarchyLevel	gmd:hierarchyLevel	codeList	
gmd:contact	mdContact	gmd:CI_Responsi bleParty	1..*
gmd:dateStamp	mdDateSt	gco:Date	1..1
gmd:metadataStandardName	mdStanName	gco:CharacterString	0..1
gmd:metadataStandardVersion	mdStanVer	gco:CharacterString	0..1
gmd:dataSetURI	dataSetURII	gco:CharacterString	0..1
gmd:referenceSystemInfo	refSysInfo	attributes	0..*
gmd:metadataExtensionInfo	gmd:metadataExtensionInfo	gmd:MD_MetadataExtensionInformation	0..*

gmd:identificationInfo	dataIdInfo	choose identificationInfo subtype	1..*
gmd:contentInfo	contInfo	choose contentInfo subtype	0..*
gmd:distributionInfo	distInfo	gmd:MD_Distrib ution	0..1
gmd:dataQualityInfo	dqInfo	gmd:DQ_DataQu ality	0..*
gmd:metadataMaintenance	mdMaint	gmd:MD_Mainte nanceInformation	0..1

Attribute: gmd:fileIdentifier

<i>Code</i>	mdFileID
<i>Description Text</i>	Unique identifier for this metadata file.
<i>Data Type</i>	gco:CharacterString (GUID)
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:language

<i>Code</i>	mdLang
<i>Description Text</i>	Language used for documenting metadata.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 639-2

Attribute: gmd:characterSet

<i>Code</i>	mdChar
<i>Description Text</i>	Full name of the character coding standard used for the metadata set.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_CharacterSetCode

Attribute: gmd:parentIdentifier

<i>Code</i>	mdParentID
<i>Description Text</i>	File identifier of the metadata to which this metadata is a subset (child).
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:hierarchyLevel

<i>Code</i>	gmd:hierarchyLevel
<i>Description Text</i>	Scope to which the metadata applies.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_ScopeCode

Attribute: gmd:contact

<i>Code</i>	mdContact
<i>Description Text</i>	Party responsible for metadata information (metadata custodian).
<i>Data Type</i>	gmd:CI_ResponsibleParty
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

Attribute: gmd:dateStamp

<i>Code</i>	mdDateSt
<i>Description Text</i>	Date that the metadata was created.
<i>Data Type</i>	gco:Date
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

Attribute: gmd:metadataStandardName

<i>Code</i>	mdStanName
<i>Description Text</i>	Name of the metadata standard used.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:metadataStandardVersion

<i>Code</i>	mdStanVer
<i>Description Text</i>	Version (profile) of the metadata standard used.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:dataSetURI

<i>Code</i>	dataSetURII
<i>Description Text</i>	Uniform Resource Identifier (URI) of the dataset to which the metadata applies.
<i>Data Type</i>	gco:CharacterString
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:referenceSystemInfo

<i>Code</i>	refSysInfo
<i>Description Text</i>	Description of the spatial and temporal reference systems used in the dataset.
<i>Data Type</i>	attributes
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:metadataExtensionInfo

<i>Code</i>	gmd:metadataExtensionInfo
<i>Description Text</i>	Information describing the extension to metadata – NOTE: required to include TAXON for biological extension.
<i>Data Type</i>	gmd:MD_MetadataExtensionInformation
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:identificationInfo

<i>Code</i>	dataIdInfo
<i>Description Text</i>	Basic information about the resource(s) to which the metadata applies.
<i>Data Type</i>	choose identificationInfo subtype
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..*
<i>Domain</i>	<None>

Attribute: gmd:contentInfo

<i>Code</i>	contInfo
<i>Description Text</i>	Provides information about the feature catalogue and describes the coverage and image data characteristics – NOTE: Provides the link to ISO 19110 entity and attribute information.
<i>Data Type</i>	choose contentInfo subtype
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:distributionInfo

<i>Code</i>	distInfo
<i>Description Text</i>	Provides information about the distributor of and options for obtaining the resource(s).
<i>Data Type</i>	gmd:MD_Distribution
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:dataQualityInfo

<i>Code</i>	dqInfo
<i>Description Text</i>	Provides overall assessment of quality of a resource(s).
<i>Data Type</i>	gmd:DQ_DataQuality
<i>Mandatory</i>	No

<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gmd:metadataMaintenance

<i>Code</i>	mdMaint
<i>Description Text</i>	Provides information about the frequency of metadata updates, and the scope of those updates.
<i>Data Type</i>	gmd:MD_MaintenanceInformation
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

gmi:QE_CoverageResult

<i>Code</i>	Gmi:QECoverageResult
<i>Description Text</i>	Not defined on model.

gmi:QE_Usability

<i>Code</i>	Usability
<i>Description Text</i>	Degree of adherence of a dataset to a specific set of user requirements.

Attributes

Name	Code	Data Type	Multiplicity
gmd:nameOfMeasure	measName	gco:CharacterString [0..n]	
gmd:measureIdentification	measId	gmd:MD_Identifier [0..1]	
gmd:measureDescription	measDesc	gco:CharacterString [0..1]	
gmd:dateTime	measDateTime	gco:DateTime [0..n]	
gmd:result	measResult	gmd:DQ_Result [M..2]	

Attribute: gmd:nameOfMeasure

<i>Code</i>	measName
<i>Description Text</i>	Name of the test applied to the data.
<i>Data Type</i>	gco:CharacterString [0..n]
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	<None>

Attribute: gmd:measureIdentification

<i>Code</i>	measId
<i>Description Text</i>	Code identifying a registered standard procedure.
<i>Data Type</i>	gmd:MD_Identifier [0..1]

<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	<None>

Attribute: gmd:measureDescription

<i>Code</i>	measDesc
<i>Description Text</i>	Description of the measure.
<i>Data Type</i>	gco:CharacterString [0..1]
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	<None>

Attribute: gmd:dateTime

<i>Code</i>	measDateTime
<i>Description Text</i>	Data or range of dates on which a data quality measure was applied.
<i>Data Type</i>	gco:DateTime [0..n]
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	<None>

Attribute: gmd:result

<i>Code</i>	measResult
<i>Description Text</i>	Value (or set of values) obtained from applying a data quality measure or the outcome of evaluating the obtained value (or set of values) against a specified acceptable conformance quality level.
<i>Data Type</i>	gmd:DQ_Result [M..2]
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	<None>

gml:GenericMetaData

<i>Code</i>	GenMetaData
<i>Description Text</i>	The GenericMetaData class allows specification of additional attributes to a Point. There are over 600+ attributes from the GMD, GCO, and GML namespaces which are allowed. 3 of these related to specifying temporal information for the Point are included in this model.

Attributes

Name	Code	Data Type	Multiplicity
gco:date gml:TimeInstant	genMetaDate genTimeInst	gco:DateTime gml:TimeInstant [0..1]	0..1
gml:TimePeriod	genTimePerd	gml:TimePeriod [0..1]	0..1
gmd:MD_ScopeCode gmd:DS_InitiativeTypeCo	MD_ScopeCode gmd:DSInitiativeTypeCode	codeList codelist	

de			
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Attribute: gco:date

<i>Code</i>	genMetaDate
<i>Description Text</i>	Date string.
<i>Data Type</i>	gco:DateTime
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 8601

Attribute: gml:TimeInstant

<i>Code</i>	genTimeInst
<i>Description Text</i>	A discrete instant in time (date, time, UTC offset).
<i>Data Type</i>	gml:TimeInstant [0..1]
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:TimePeriod

<i>Code</i>	genTimePerd
<i>Description Text</i>	A period of time marked by a beginning and ending datetime.
<i>Data Type</i>	gml:TimePeriod [0..1]
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gmd:MD_ScopeCode

<i>Code</i>	MD_ScopeCode
<i>Description Text</i>	Class of information to which the referencing entity applies.
<i>Data Type</i>	codeList
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	MD_ScopeCode

Attribute: gmd:DS_InitiativeTypeCode

<i>Code</i>	gmd:DSInitiativeTypeCode
<i>Description Text</i>	Type of aggregation activity in which datasets are related.
<i>Data Type</i>	odelist
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	DS_InitiativeTypeCode

gml:LinearRing

<i>Code</i>	LineRing
<i>Description Text</i>	A LinearRing must contain 4 or more points with the last being equal to the first to close the ring. The points can be defined either as discrete points using <gml:pos> or a set of coordinates using <gml:coordinates>.

ISO requires either the pos (position), posList, pointProperty, pointRep, or the coordinates element. The ADIwg standard allows only the coordinates element and thus it has been marked 'required'.

Attributes

Name	Code	Data Type	Multiplicity
gml:coordinates	lineRingCoord	longitude latitude [elevation]	1..1

Attribute: gml:coordinates

<i>Code</i>	lineRingCoord
<i>Description Text</i>	A sequence of longitude, latitude, and optional elevation tuples for each point in the linear ring; separate longitude, latitude, and elevation by commas; separate tuples by a space; must have 4 or more tuples.
<i>Data Type</i>	longitude latitude [elevation]
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gml:LineString

Code

Gml:LineString

Description Text

A LineString can be defined either as discrete points using <gml:pos> or a set of coordinates using <gml:coordinates>.

Attribute gml:id="" is required. Type is string and it must be unique within the metadata record. Attributes srsDimension="" and srsName="" are recommended (srs = spatial reference system). srsDimension is the number of dimensions for the coordinates (usually 2 or 3) and srsName is the crs or epsg system identifier.

ISO requires either the pos (position), posList, pointProperty, pointRep, or the coordinates element. The ADIwg standard allows only the coordinates element and thus it has been marked 'required'.

Attributes

Name	Code	Data Type	Multiplicity
gml:metaDataProperty	lineStrMetaProp	gml:GenericMeta Data	0..*
gml:description	lineStrDesc	string	0..1
gml:name	lineStrName	name	0..*
gml:coordinates	lineStrCoord	longitude latitude [elevation]	1..1

Attribute: gml:metaDataProperty

<i>Code</i>	lineStrMetaProp
<i>Description Text</i>	A metadata property native to another class but associated with the Line String class to

<i>Data Type</i>	define some characteristic of the Line String.
<i>Mandatory</i>	gml:GenericMetaData
<i>Multiplicity</i>	No
<i>Domain</i>	0..*
	<None>

Attribute: gml:description

<i>Code</i>	lineStrDesc
<i>Description Text</i>	Description of the line string.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:name

<i>Code</i>	lineStrName
<i>Description Text</i>	Name for the line string.
<i>Data Type</i>	name
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gml:coordinates

<i>Code</i>	lineStrCoord
<i>Description Text</i>	A sequence of longitude, latitude, and optional elevation tuples for each point in the line string; separate longitude, latitude, and elevation by commas; separate tuples by a space; must have 4 or more tuples.
<i>Data Type</i>	longitude latitude [elevation]
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gml:MultiGeometry

<i>Code</i>	MultiGeo
<i>Description Text</i>	A collection of geometries sharing some common traits.

Attribute gml:id="" is required. Type is string and it must be unique within the metadata record. Attributes srsDimension="" and srsName="" are recommended (srs = spatial reference system). srsDimension is the number of dimensions for the coordinates (usually 2 or 3) and srsName is the crs or epsg system identifier.

ISO requires either the geometryMembers or the geometryMember element. The ADIwg standard allows only the geometryMembers element and thus it has been marked 'required'.

Attributes

Name	Code	Data Type	Multiplicity
gml:description	multiGeoDesc	string	0..1

gml:name	multiGeoName	string	0..*
gml:geometryMembers	multiGeoMbr	choose polygon subtype	1..1

Attribute: gml:description

<i>Code</i>	multiGeoDesc
<i>Description Text</i>	Description of the multi-geometry collection.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:name

<i>Code</i>	multiGeoName
<i>Description Text</i>	Name for the multi-geometry collection.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gml:geometryMembers

<i>Code</i>	multiGeoMbr
<i>Description Text</i>	One or more geometries that comprise the multi-geometry collection.
<i>Data Type</i>	choose polygon subtype
<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gml:Point

<i>Code</i>	Gml:Point
<i>Description Text</i>	A geographic or geometric point. Attribute gml:id="" is required. Type is string and it must be unique within the metadata record. Attributes srsDimension="" and srsName="" are recommended (srs = spatial reference system). srsDimension is the number of dimensions for the coordinates (usually 2 or 3) and srsName is the crs or epsg system identifier.

gml:identifier > is a local or controlled identifier for the point. The codeSpace="" attribute must be present. codeSpace is of type URL and contains the link to the authority assigning the point's identifier e.g. <http://www.gtnp.org> for Global Terrestrial Network for Permafrost. If no URL is available, the codeSpace attribute must still appear but can be blank.

ISO requires either the coordinates or the pos (position) element. The ADIwg standard allows only the coordinates element and thus it has been marked 'required'.

Attributes

Name	Code	Data Type	Multiplicity
------	------	-----------	--------------

gml:metaDataProperty	pointMetaProp	gml:GenericMeta Data	0..*
gml:description	pointDesc	string	0..1
gml:identifier	pointId	string	0..1
gml:name	pointName	string	0..*
gml:coordinates	pointCoord	longitude latitude [elevation]	1..1

Attribute: gml:metaDataProperty

<i>Code</i>	pointMetaProp
<i>Description Text</i>	A metadata property native to another class but associated with the Point class to define some characteristic of the point.
<i>Data Type</i>	gml:GenericMetaData
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gml:description

<i>Code</i>	pointDesc
<i>Description Text</i>	Description for the point.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:identifier

<i>Code</i>	pointId
<i>Description Text</i>	A local or controlled identifier for the point.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:name

<i>Code</i>	pointName
<i>Description Text</i>	Name for the point.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gml:coordinates

<i>Code</i>	pointCoord
<i>Description Text</i>	A sequence of longitude, latitude, and optional elevation tuples for a collection of individual points; separate longitude, latitude, and elevation by commas; separate tuples by a space.
<i>Data Type</i>	longitude latitude [elevation]

<i>Mandatory</i>	Yes
<i>Multiplicity</i>	1..1
<i>Domain</i>	<None>

gml:Polygon

<i>Code</i>	Polygon
<i>Description Text</i>	A Polygon can have 1 exterior and n interior rings.

Attribute gml:id="" is required. Type is string and it must be unique within the metadata record. Attributes srsDimension="" and srsName="" are recommended (srs = spatial reference system). srsDimension is the number of dimensions for the coordinates (usually 2 or 3) and srsName is the crs or epsg system identifier.

Attributes

Name	Code	Data Type	Multiplicity
gml:metaDataProperty	polyMetaProp	gml:GenericMeta Data	0..*
gml:description	polyDesc	string	0..1
gml:name	polyName	string	0..*
gml:exterior	polyExt	gml:LinearRing	0..1
gml:interior	polyInt	gml:LinearRing	0..*

Attribute: gml:metaDataProperty

<i>Code</i>	polyMetaProp
<i>Description Text</i>	A metadata property native to another class but associated with the Polygon class to define some characteristic of the polygon.
<i>Data Type</i>	gml:GenericMetaData
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gml:description

<i>Code</i>	polyDesc
<i>Description Text</i>	Description of polygon set.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:name

<i>Code</i>	polyName
<i>Description Text</i>	Name for polygon set.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

Attribute: gml:exterior

<i>Code</i>	polyExt
<i>Description Text</i>	Outer boundary ring.
<i>Data Type</i>	gml:LinearRing
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:interior

<i>Code</i>	polyInt
<i>Description Text</i>	Interior boundary ring – area of exclusion.
<i>Data Type</i>	gml:LinearRing
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..*
<i>Domain</i>	<None>

gml:TimeEdge

<i>Code</i>	Gml:TimeEdge
<i>Description Text</i>	Note: Not defined in this model. (same as TimePeriod)

gml:TimeInstant

<i>Code</i>	Gml:TimeInstant
<i>Description Text</i>	gml:TimeInstant implements ISO19108 TM_Instant and acts as a zero-dimensional geometric primitive that represents and identifiable position in time.

Attribute gml:id="" is required.

Attributes

Name	Code	Data Type	Multiplicity
gml:description	gml:description	string	0..1
gml:timePosition	gml:timePosition	gco:DateTime	

Attribute: gml:description

<i>Code</i>	gml:description
<i>Description Text</i>	No definition.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:timePosition

<i>Code</i>	gml:timePosition
<i>Description Text</i>	The method for identifying a temporal position is specific to each temporal reference system. gml:TimePeriod implements ISO 19108 TM_Period and acts as a one-dimensional geometric primitive that represents an identifiable extent in time.
<i>Data Type</i>	gco:DateTime

<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 8601

gml:TimeNode

<i>Code</i>	Gml:TimeNode
<i>Description Text</i>	Note: Not defined in this model. (same as TimeInstance)

gml:TimePeriod

<i>Code</i>	Gml:TimePeriod
<i>Description Text</i>	gml:TimePeriod implements ISO 19108 TM_Period and acts as a one-dimensional geometric primitive that represents an identifiable extent in time.
	Attribute gml:id="" is required.

Attributes

Name	Code	Data Type	Multiplicity
gml:description	gml:description	string	0..1
gml:beginPosition	gml:beginPosition	gco:DateTime	
gml:endPosition	gml:endPosition	gco:DateTime	

Attribute: gml:description

<i>Code</i>	gml:description
<i>Description Text</i>	No definition.
<i>Data Type</i>	string
<i>Mandatory</i>	No
<i>Multiplicity</i>	0..1
<i>Domain</i>	<None>

Attribute: gml:beginPosition

<i>Code</i>	gml:beginPosition
<i>Description Text</i>	No definition.
<i>Data Type</i>	gco:DateTime
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 8601

Attribute: gml:endPosition

<i>Code</i>	gml:endPosition
<i>Description Text</i>	No definition.
<i>Data Type</i>	gco:DateTime
<i>Mandatory</i>	No
<i>Multiplicity</i>	
<i>Domain</i>	ISO 8601

gml:TM_Primitive

<i>Code</i>	Gml:TMPrimitive
<i>Description Text</i>	Choose subtype.

gml:UnitDefinition

<i>Code</i>	Gml:UnitDefinition
<i>Description Text</i>	A UnitDefinition is a general definition of a unit of measure. This generic element is used only for units for which no relationship with other units or units systems is known.
	Not defined in this model.

svr:SV_ServiceIdentification

<i>Code</i>	Svr:SVServiceIdentification
<i>Description Text</i>	Note: Not described in this model.

CI_DateTypeCode

Name	Domain Code	Definition
CI_DateTypeCode	DateTypCd	Identification of when a given event occurred
creation	001	date identifies when the resource was brought into existence
publication	002	date identifies when the resource was issued
revision	003	date identifies when the resource was examined or re-examined and improved or amended

CI_OnLineFunctionCode

Name	Domain Code	Definition
CI_OnLineFunctionCode	OnFuncCd	function performed by the resource
download	001	online instructions for transferring data from one storage device or system to another
information	002	online information about the resource
offlineAccess	003	online instructions for requesting the resource from the provider
order	004	online order process for obtaining the resource
search	005	online search interface for seeking out information about the resource

CI_RoleCode

Name	Domain Code	Definition
CI_RoleCode	RoleCd	function performed by the responsible party
resourceProvider	001	party that supplies the resource
custodian	002	party that accepts accountability and responsibility for the data and ensures appropriate care and maintenance of the resource
owner	003	party that owns the resource
user	004	party that uses the resource
distributor	005	party that distributes the resource
originator	006	party who created the resource
pointOfContact	007	party who can be contacted for acquiring knowledge about or acquisition of the resource
principalInvestigator	008	key party responsible for gathering information and conduction research
processor	009	party who has processed the data in a manner such that the resource has been modified
publisher	010	party who published the resource
author	011	party who authored the resource

DS_InitiativeTypeCode**DS_initiativeTypeCode**

	Name	Domain Code	Definition
	Code Name	Code	Domain: definition
	Campaign	campaign	series of organized planned actions
	Collection	collection	accumulation of datasets assembled for a specific purpose
	Exercise	exercise	specific performance of a function or group of functions
	Experiment	experiment	process designed to find if something is effective or valid
	Investigation	investigation	search or systematic inquiry
	Mission	mission	specific operation of a data collection site
	Sensor	sensor	device or piece of equipment which detects or records
	Operation	operation	action that is part of a series of actions
	Platform	platform	vehicle or other support base that holds a sensor
	Process	process	method of doing something involving a number of steps
	Program	program	specific planned activity
	Project	project	organized undertaking, research, or development
	Study	study	examination or investigation
	Task	task	piece of work
	Trial	trial	process of testing to discover or demonstrate something

MD_CharacterSetCode

Name	Domain Code	Definition
MD_CharacterSetCode	CharSetCd	name of the character coding standard used for the resource
ucs2	001	16-bit fixed size Universal Character set, based on ISO/IEC 10646
ucs4	002	32-bit fixed size Universal Character set, based on ISO/IEC 10646
utf7	003	7-bit variable size UCS Transfer Format, based on ISO/IEC 10646
utf8	004	8-bit variable size UCS Transfer Format, based on ISO/IEC 10646
utf16	005	16-bit variable size UCS Transfer Format, based on ISO/IEC 10646
8859part1	006	ISO/IEC 8859-1, Information technology – 8-bit single-byte coded graphic character sets – Part 1: Latin alphabet No. 1
8859part2	007	ISO/IEC 8859-2, Information technology – 8-bit single-byte coded graphic character sets – Part 2: Latin alphabet No. 2
8859part3	008	ISO/IEC 8859-3, Information technology – 8-bit single-byte coded graphic character sets – Part 3: Latin alphabet No. 3
8859part4	009	ISO/IEC 8859-4, Information technology – 8-bit single-byte coded graphic character sets – Part 4: Latin alphabet No. 4
8859part5	010	ISO/IEC 8859-5, Information technology – 8-bit single-byte coded graphic character sets – Part 5: Latin/Cyrillic alphabet
8859part6	011	ISO/IEC 8859-6, Information technology – 8-bit single-byte coded graphic character sets – Part 6: Latin/Arabic alphabet
8859part7	012	ISO/IEC 8859-7, Information technology – 8-bit single-byte coded graphic character sets – Part 7: Latin/Greek alphabet

8859part8	013	ISO/IEC 8859-8, Information technology – 8-bit single-byte coded graphic character sets – Part 8: Latin/Hebrew
8859part9	014	ISO/IEC 8859-9, Information technology – 8-bit single-byte coded graphic character sets – Part 9: Latin alphabet No. 5
8859part10	015	ISO/IEC 8859-10, Information technology – 8-bit single-byte coded graphic character sets – Part 10: Latin alphabet No. 6
8859part11	016	ISO/IEC 8859-11, Information technology – 8-bit single-byte coded graphic character sets – Part 1: Latin/Thai alphabet
(reserved)	017	
8859part13	018	ISO/IEC 8859-13, Information technology – 8-bit single-byte coded graphic character sets – Part 13: Latin alphabet No. 7
8859part14	019	ISO/IEC 8859-14, Information technology – 8-bit single-byte coded graphic character sets – Part 14: Latin alphabet No. 8 (Celtic)
8859part15	020	ISO/IEC 8859-15, Information technology – 8-bit single-byte coded graphic character sets – Part 15: Latin alphabet No. 9
8859part16	021	ISO/IEC 8859-16, Information technology – 8-bit single-byte coded graphic character sets – Part 16: Latin alphabet No. 10
jis	022	Japanese code set used for electronic transmission
shiftJIS	023	Japanese code set used on MS-DOS based machines
eusJP	024	Japanese code set used on UNIX based machines
usAscii	025	United States ASCII code set (ISO 646 US)
ebcdic	026	IBM mainframe code set
ecuKR	027	Korean code set
big5	028	traditional Chinese code set used in Taiwan, Hong Kong of China and other areas
GB2312	029	simplified Chinese code set

MD_ClassificationCode

Name	Domain Code	Definition
MD_ClassificationCode	ClasscationCd	name of the handling restrictions on the dataset
unclassified	001	available for general disclosure
restricted	002	not for general disclosure
confidential	003	available for someone who can be entrusted with information
secret	004	kept or meant to be kept private, unknown, or hidden from all but a select group of people
topSecret	005	of the highest secrecy

MD_DatatypeCode

Name	Domain Code	Definition
MD_DatatypeCode	DatatypeCd	datatype of element or entity
class	001	descriptor of a set of objects that share the same attributes, operations, methods, relationships, and behaviors
codelist	002	flexible enumeration used for expressing a long list of values, can be extended

enumeration	003	data type whose instances form a list of named literal values, not extendable
codelistElement	004	permissible value for a codelist or enumeration
abstractClass	005	class that cannot be directly instantiated
aggregateClass	006	class that is composed of classes it is connected to by an aggregate relationship
specifiedClass	007	subclass that may be substituted for its superclass
datatypeClass	008	class with few or no operations; whose primary purpose is to hold the abstract state of another class for transmittal, storage, encoding or persistent storage
interfaceClass	009	named set of operations that characterize the behavior of an element
unionClass	010	class describing a selection of one of the specified types
metaClass	011	class whose instances are classes
typeClass	012	class used for specification of a domain of instances (objects), together with the operations applicable to the objects. A type may have attributes and associations
characterString	013	free text field
integer	014	numerical field
association	015	semantic relationship between two classes that involves connections among their instances

MD_KeywordTypeCode

Name	Domain Code	Definition
MD_KeywordTypeCode	KeyTypeCd	methods used to group similar keywords
discipline	001	keyword identifies a branch of instruction or specialized learning
place	002	keyword identifies a location
stratum	003	keyword identifies the layer(s) of any deposited substance
temporal	004	keyword identifies a time period related to the dataset
theme	005	keyword identifies a particular subject or topic
taxon	006	keyword identifies a taxonomic name
Instrument	ADlwg-001	keyword identifies an instrument

MD_MaintenanceFrequencyCode

Name	Domain Code	Definition
MD_MaintenanceFrequencyCode	MaintFreqCd	frequency with which modifications and deletions are made to the data after it is first produced
continual	001	data is repeatedly and frequently updated
daily	002	data is updated each day
weekly	003	data is updated on a weekly basis
fortnightly	004	data is updated every two weeks
monthly	005	data is updated each month

quarterly	006	data is updated every three months
biannually	007	data is updated twice each year
annually	008	data is updated every year
asNeeded	009	data is updated as deemed necessary
irregular	010	data is updated in intervals that are uneven in duration
notPlanned	011	there are no plans to update the data
unknown	012	frequency of maintenance for the data is not known

MD_MediumFormatCode

Name	Domain Code	Definition
MD_MediumFormatCode	MedFormCd	method used to write to the medium
cpio	001	CoPy In/Out (UNIX file format and command)
tar	002	Tape ARchive
highSierra	003	high sierra file system
iso9660	004	information processing – volume and file structure of CD_ROM
iso9660RockRidge	005	rock ridge interchange protocol (UNIX)
iso9660AppleHFS	006	hierarchical file system (Macintosh)

MD_MediumNameCode

Name	Domain Code	Definition
MD_MediumNameCode	MedNameCd	name of the medium
cdRom	001	read-only optical disk
dvd	002	digital versatile disk
dvdRom	003	digital versatile disk, read-only
3halfinchFloppy	004	3.5 inch magnetic disk
5quarterInchFloppy	005	5.25 inch magnetic disk
7trackTape	006	7 track magnetic tape
9trackTape	007	9 track magnetic tape
3480Cartridge	008	3480 cartridge tape drive
3490Cartridge	009	3490 cartridge tape drive
3580Cartridge	010	3580 cartridge tape drive
4mmCartridgeTape	011	4 millimeter magnetic tape
8mmCartridgeTape	012	8 millimeter magnetic tape
1quarterInchCartridge Tape	013	0.25 inch magnetic tape
digitalLinearTape	014	half inch cartridge streaming tape drive
online	015	direct compute linkage
satellite	016	linkage through a satellite communication system
telephoneLink	017	communication through a telephone network
hardcopy	018	pamphlet or leaflet giving descriptive information

MD_ObligationCode

Name	Domain Code	Definition
MD_ObligationCode	ObCd	obligation of the element or entity
mandatory	001	element is always required
optional	002	element is not required
conditional	003	element is required when a specific condition is met

MD_ProgressCode

Name	Domain Code	Definition
MD_ProgressCode	ProgCd	status of the dataset or progress of a review
completed	001	production of the data has been completed
historicalArchive	002	data has been stored in an offline storage facility
obsolete	003	data is no longer relevant
onGoing	004	data is continually being updated
planned	005	fixed date has been established upon or by which the data will be created or updated
required	006	data needs to be generated or updated
underdevelopment	007	data is currently in the process of being created

MD_RestrictionCode

Name	Domain Code	Definition
MD_RestrictionCode	RestrictCd	limitation(s) placed upon the access or use of the data
copyright	001	exclusive right to the publication, production, or sale of the rights to a literary, dramatic, musical, or artistic work, or to the use of a commercial print or label, granted by law for a specified period of time to an author, composer, artist, distributor
patent	002	government has granted exclusive right to make, sell, use or license an invention or discovery
patentPending	003	produced or sold information awaiting a patent
trademark	004	a name, symbol, or other device identifying a product, officially registered and legally restricted to the use of the owner or manufacturer
license	005	formal permission to do something
intellectualProperty Rights	006	rights to financial benefit from an control of distribution of non-tangible property that is a result of creativity
restricted	007	withheld from general circulation or disclosure
otherRestrictions	008	limitation not listed

MD_ScopeCode

Name	Domain Code	Definition
MD_ScopeCode	ScopeCd	class of information to which the referencing entity applies
attribute	001	information applies to the attribute class
attributeType	002	information applies to the characteristic of a feature
collectionHardware	003	information applies to the collection hardware class
collectionSession	004	information applies to the collection session
dataset	005	information applies to the dataset
series	006	information applies to the series
nonGeographicDataset	007	information applies to non-geographic data
dimensionGroup	008	information applies to a dimension group
feature	009	information applies to a feature
featureType	010	information applies to a feature type
propertyType	011	information applies to a property type
fieldSession	012	information applies to a field session
software	013	information applies to a computer program or routine
service	014	information applies to a capability which a service provider makes available to a service user entity through a set of interfaces that define a behavior, such as a use case
model	015	information applies to a copy or imitation of an existing or hypothetical object
tile	016	information applies to a tile, a spatial subset of geographic data

MD_SpatialRepresentationTypeCode

Name	Domain Code	Definition
MD_SpatialRepresentationTypeCode	SpatRepTypCd	method used to represent geographic information in the dataset
vector	001	vector data is used to represent geographic data
grid	002	grid data is used to represent geographic data
textTable	003	textual or tabular data is used to represent geographic data
tin	004	triangle irregular network
stereoModel	005	three-dimensional view formed by the intersecting homologous rays of an overlapping pair of images
video	006	scene from a video recording

MD_TopicCategoryCode

Name	Domain Code	Definition
MD_TopicCategoryCode	TopicCatCd	<p>high-level geographic data thematic classification to assist in the grouping and search of available geographic data sets. Can be used to group keywords as well. Listed examples are not exhaustive.</p> <p>NOTE It is understood there are overlaps between general categories and the user is encouraged to select the one most</p>

		appropriate
farming	001	rearing of animals and/or cultivation of plants
biota	002	flora and/or fauna in natural environment
boundaries	003	legal land descriptions
climatology Meteorology Atmosphere	004	processes and phenomena of the atmosphere
economy	005	economic activities, conditions and employment
elevation	006	height above or below sea level
environment	007	environment resources, protection and conservation
geoscientific Information	008	information pertaining to earth sciences
health	009	health, health services, human ecology, and safety
imageryBaseMaps EarthCover	010	base maps
intelligenceMilitary	011	military bases, structures, activities
inlandWaters	012	inland water features, drainage systems and their characteristics
location	013	positional information and services
oceans	014	features and characteristics of salt water bodies (excluding inland waters)
planningCadastre	015	information used for appropriate actions for future use of the land
society	016	characteristics of society and cultures
structure	017	man-made construction
transportation	018	means and aids for conveying persons and/or goods
utilitiesCommunication	019	energy, water and waste systems, and communications infrastructure and services

NOAA Defined SRS

Name	Definition
Spatial reference system	Spatial reference systems for which NOAA maintains ISO 19115 code blocks. Note: this is an ISO enumeration (not an ISO codeList).
NAD27	North American Datum 1927 EPSG::4267
NAD83	North American Datum 1983 EPSG::4269
Clarke1866	Clarke 1866 EPSG::7008
GRS80	Geodetic Reference System 1980 EPSG::7019
WGS84	World Geodetic System 1984 EPSG::4326 (default)
NAVD88	North American Vertical Datum EPSG::5103
MLW	Mean Low Water depth EPSG::5867
MLLW	Mean Lower Low Water depth EPSG::5866
MHW	Mean High Water height EPSG::5868
MHHW	Mean Higher High Water height EPSG::5869

