

# MEaSURES Lagrangian and Eulerian sea ice products

Product format specification

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ASF Satellite Facility

## ABSTRACT

This product format specification defines the MEaSURES Lagrangian and Eulerian sea ice products generated at the Alaska Satellite Facility. It contains the definition for the ISO compliant XML metadata.



## Document Preparation

The document was prepared with contributions from  
Rudi Gens

## Document Change Log

Revision	Date	Page	Change Description	Reason for change
1.0 Draft	09/01/2014	all	Initial Draft	



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## **1 Document structure**

The document is structured as follows:

Chapter 1 introduces the structure and scope of the document.

Chapter 2 summarizes the product packaging.

Chapter 3 defines the elements of the ISO compliant XML metadata.



## 2 Product packaging

The naming convention for the Lagrangian and Eulerian products follows as base name of this pattern: PnpppSYDDDDddd.TF (e.g. R1001a06337181.DP)

Component	Definition	Example
Pn	platform and number ("R1", "E1", "E2")	R1
ppp	product ID	1
S	data stream ID (a-z, A-Z)	a
YY	start year of the product	[20]06
DDD	start Julian day of the product	337
ddd	duration (in days) that the product spans	181
T	product type, according to the code described in the following table	D
F	file type ("P" for product, "M" for metadata)	P

This table summarizes the various product type and corresponding codes

Product type	Code
Lagrangian ice motion	L
Backscatter histogram	B
Ice age/thickness histogram	T
Ice deformation	D
Eulerian ice motion	E
Area/open water fraction	C

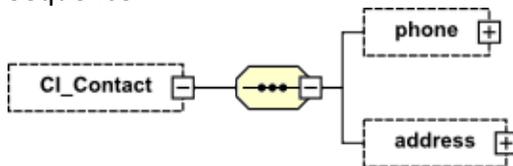
### 3 ISO XML metadata

The metadata is stored in an ISO metadata compliant XML format.

```
<?xml version="1.0" encoding="utf-8"?>
<gmd:DS_Series
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:gmd="http://www.isotc211.org/2005/gmd"
xmlns:gco="http://www.isotc211.org/2005/gco"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:eos="http://earthdata.nasa.gov/schema/eos"
xmlns:echo="http://www.echo.nasa.gov/ingest/schemas/operatations"
xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:gml="http://www.opengis.net/gml/3.2"
xmlns:gmi="http://www.isotc211.org/2005/gmi"
xmlns:gmx="http://www.isotc211.org/2005/gmx">
  <gmd:composedOf>
    <gmd:DS_DataSet>
      <gmd:has>
        <gmi:MI_Metadata>
          <gmd:fileIdentifier>
            <gco:CharacterString>R1001a06337181_DP.iso.xml</gco:CharacterString>
          </gmd:fileIdentifier>
          <gmd:language>
            <gco:CharacterString>eng</gco:CharacterString>
          </gmd:language>
          <gmd:characterSet>
            <gmd:MD_CharacterSetCode
codeList="http://www.isotc211.org/2005/resources/Codelist/gmxCodellists.xml#
MD_CharacterSetCode" codeListValue="utf8">utf8</gmd:MD_CharacterSetCode>
            </gmd:characterSet>
          <gmd:hierarchyLevel>
            <gmd:MD_ScopeCode
codeList="http://www.isotc211.org/2005/resources/Codelist/gmxCodellists.xml#
MD_ScopeCode" codeListValue="dataset">dataset</gmd:MD_ScopeCode>
            </gmd:hierarchyLevel>
          </gmi:MI_Metadata>
        </gmd:has>
      </gmd:DS_DataSet>
    </gmd:composedOf>
  </gmd:DS_Series>
```

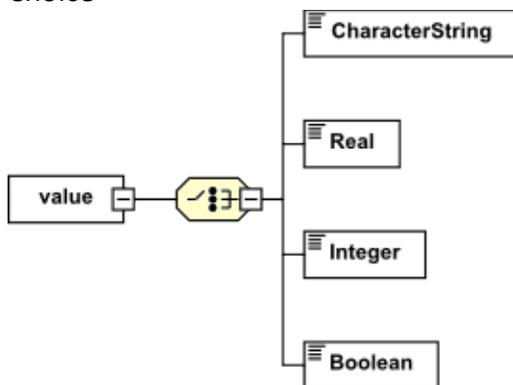
The graphical representation contains a number of compositors and components:

- Sequence



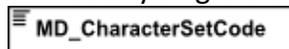
A sequence requires all child elements to be present in the given order, i.e. in this case the **phone** component needs to be in XML file before the **address** component.

- Choice



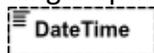
A choice allows only one of the child elements to be present, i.e. value can be a character string, floating point number, integer number or Boolean.

- Mandatory single element



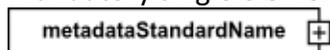
An element with solid border indicates that the element is required. The absence of a number range implies a minimum and maximum occurrence of the element of 1.

- Single optional element



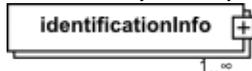
An element with dashed border indicates that the element is optional. The absence of a number range implies a minimum occurrence of 0 and a maximum occurrence of 1.

- Mandatory single element containing children



The solid border indicates a mandatory element. The plus sign means complex content, i.e. it contains at least one child element.

- Mandatory multiple element containing child elements

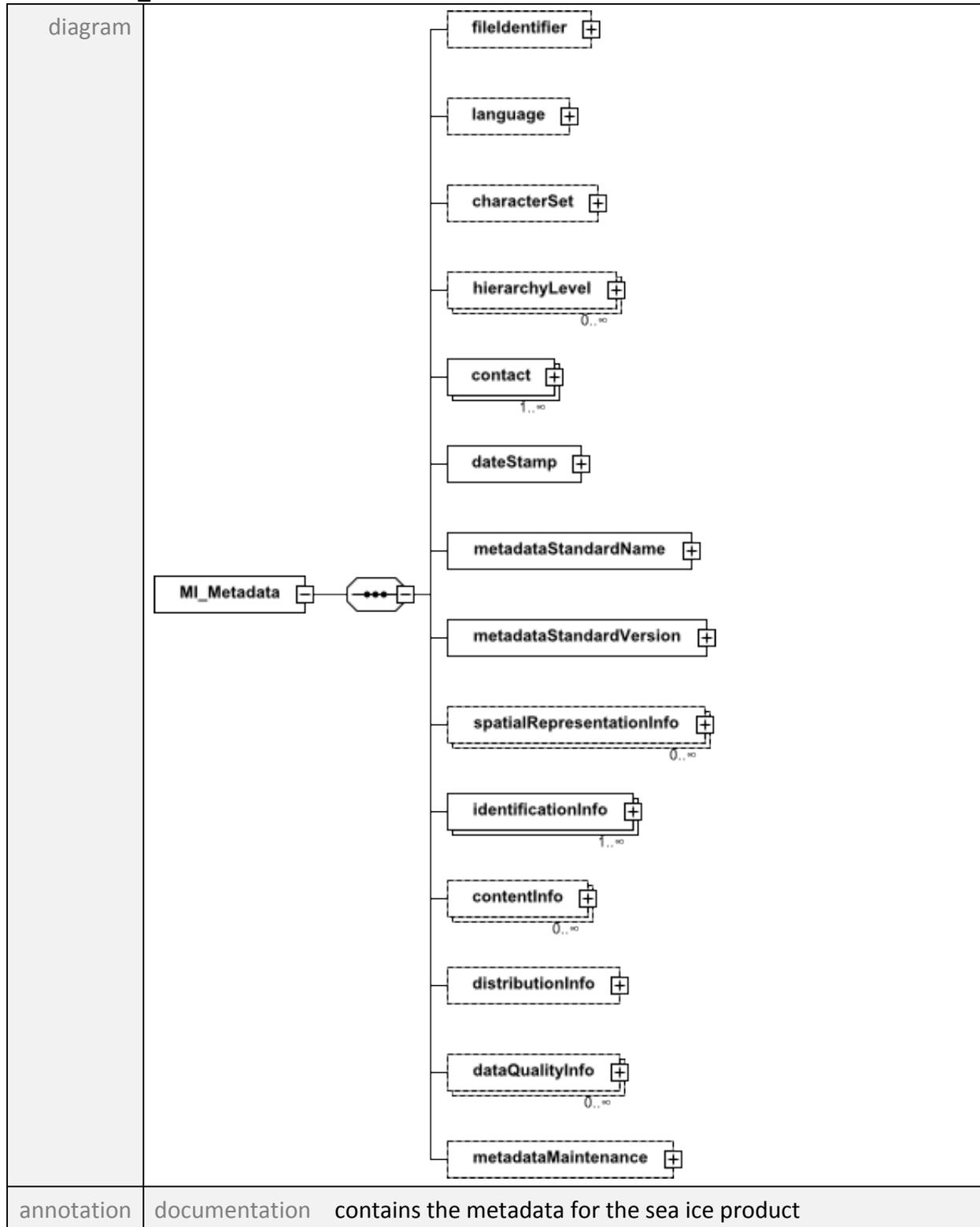


The solid border indicates a mandatory element. The plus sign means complex content, i.e. it contains at least one child element. The number range 1..∞ indicates a minimum occurrence of 1 and an unbounded maximum occurrence.

The structure is outlined in more detail below.

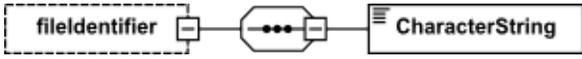


element **MI\_Metadata**



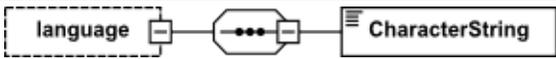
### 3.1 fileIdentifier

#### element MI Metadata/fileIdentifier

diagram	
type	<b>xs:string</b>
annotation	documentation file name of the sea ice product XML file

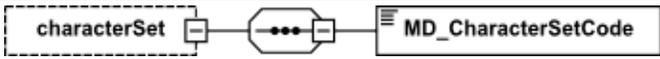
### 3.2 language

#### element MI Metadata/language

diagram	
type	<b>xs:string</b>
annotation	documentation language of the metadata record

### 3.3 characterSet

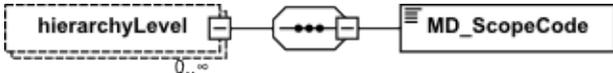
#### element MI Metadata/characterSet

diagram																											
type	<b>characterSetCode</b>																										
facets	<table border="0"> <tr><td>enumeration</td><td>ucs2</td></tr> <tr><td>enumeration</td><td>ucs4</td></tr> <tr><td>enumeration</td><td>utf7</td></tr> <tr><td>enumeration</td><td><b>utf8</b></td></tr> <tr><td>enumeration</td><td>utf16</td></tr> <tr><td>enumeration</td><td>8859part1</td></tr> <tr><td>enumeration</td><td>8859part2</td></tr> <tr><td>enumeration</td><td>8859part3</td></tr> <tr><td>enumeration</td><td>8859part4</td></tr> <tr><td>enumeration</td><td>8859part5</td></tr> <tr><td>enumeration</td><td>8859part6</td></tr> <tr><td>enumeration</td><td>8859part7</td></tr> <tr><td>enumeration</td><td>8859part8</td></tr> </table>	enumeration	ucs2	enumeration	ucs4	enumeration	utf7	enumeration	<b>utf8</b>	enumeration	utf16	enumeration	8859part1	enumeration	8859part2	enumeration	8859part3	enumeration	8859part4	enumeration	8859part5	enumeration	8859part6	enumeration	8859part7	enumeration	8859part8
enumeration	ucs2																										
enumeration	ucs4																										
enumeration	utf7																										
enumeration	<b>utf8</b>																										
enumeration	utf16																										
enumeration	8859part1																										
enumeration	8859part2																										
enumeration	8859part3																										
enumeration	8859part4																										
enumeration	8859part5																										
enumeration	8859part6																										
enumeration	8859part7																										
enumeration	8859part8																										

	enumeration	8859part9		
	enumeration	8859part10		
	enumeration	8859part11		
	enumeration	8859part12		
	enumeration	8859part13		
	enumeration	8859part14		
	enumeration	8859part15		
	enumeration	8859part16		
	enumeration	jis		
	enumeration	shiftJIS		
	enumeration	eucJP		
	enumeration	usAscii		
	enumeration	ebcdic		
	enumeration	eucKR		
	enumeration	big6		
	enumeration	GB2312		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_CharacterSetCode
	codeListValue	<b>characterSetCode</b>	required	value from code list
annotation	documentation	name of the character coding standard used in the resource		

### 3.4 hierarchyLevel

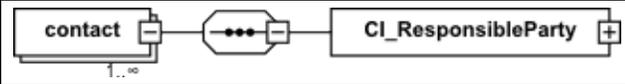
#### element **MI\_Metadata/hierarchyLevel**

diagram			
type	<b>scopeCode</b>		
facets	enumeration	attribute	
	enumeration	attributeType	
	enumeration	collectionHardware	
	enumeration	collectionSession	
	enumeration	<b>dataset</b>	
	enumeration	series	
	enumeration	nonGeographicDataset	

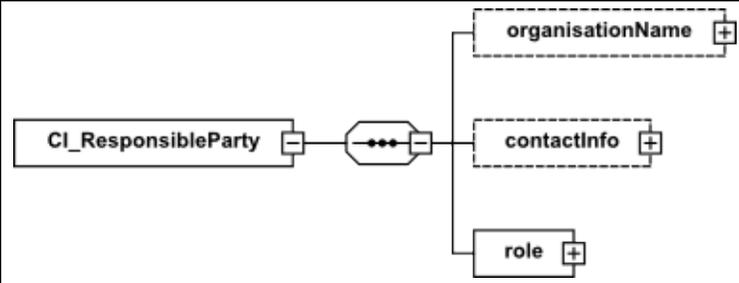
	enumeration	dimensionGroup		
	enumeration	feature		
	enumeration	featureType		
	enumeration	propertyType		
	enumeration	fieldSession		
	enumeration	software		
	enumeration	service		
	enumeration	model		
	enumeration	tile		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_ScopeCode
	codeListValue	<b>scopeCode</b>	required	value from code list
annotation	documentation	class of information to which the referencing entity applies		

### 3.5 contact

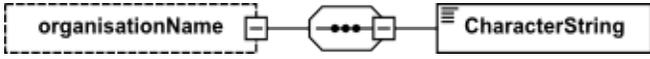
#### element MI\_Metadata/contact

diagram			
annotation	documentation	contact information	

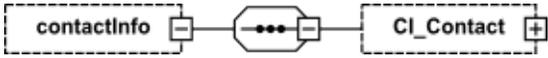
#### element MI\_Metadata/contact/CI\_ResponsibleParty

diagram			
annotation	documentation	responsible party details	

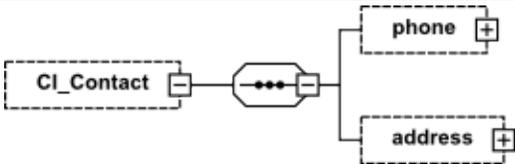
element **MI\_Metadata/contact/CI\_ResponsibleParty/organisationName**

diagram	
type	<b>xs:string</b>
annotation	documentation name of the responsible organization

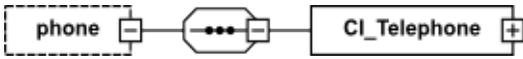
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo**

diagram	
annotation	documentation contact information

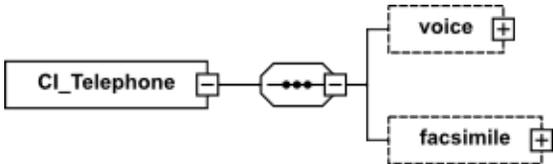
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact**

diagram									
attribute	<table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>id</td> <td><b>xs:string</b></td> <td>required</td> <td>ID for ASF contact information</td> </tr> </tbody> </table>	Name	Type	Use	Annotation	id	<b>xs:string</b>	required	ID for ASF contact information
Name	Type	Use	Annotation						
id	<b>xs:string</b>	required	ID for ASF contact information						
annotation	documentation contact information details								

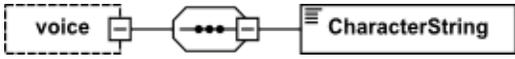
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone**

diagram	
annotation	documentation contact phone information

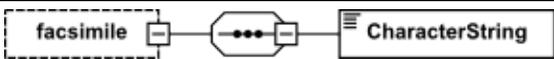
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/CI\_Telephone**

diagram	
annotation	documentation contact telephone information details

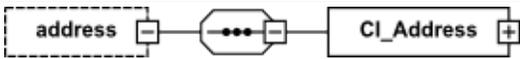
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/CI\_Telephone/voice**

diagram	
type	<b>xs:string</b>
annotation	documentation contact phone number

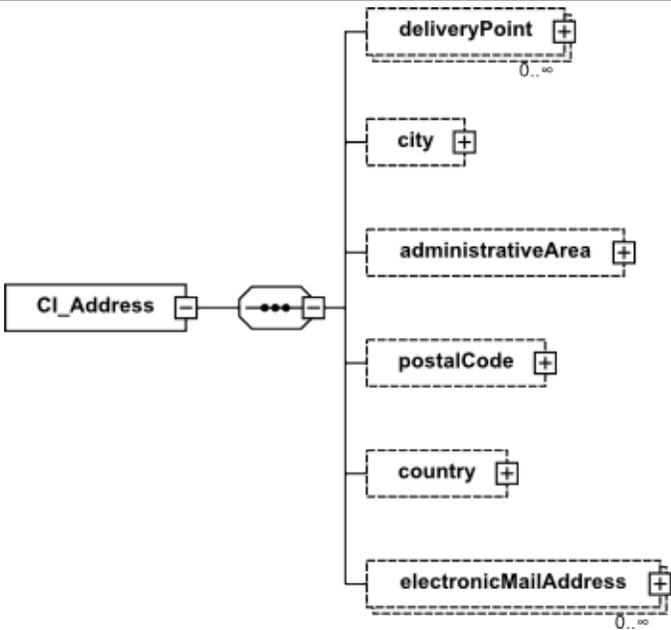
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/CI\_Telephone/facsimile**

diagram	
type	<b>xs:string</b>
annotation	documentation contact fax number

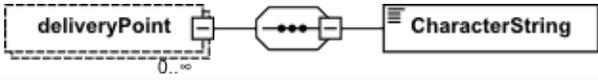
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address**

diagram	
annotation	documentation contract address

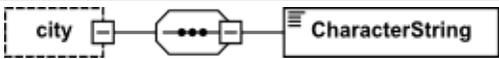
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address**

diagram	
annotation	documentation contact address details

element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/deliveryPoint**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: street

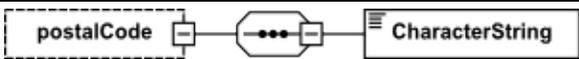
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/city**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: city

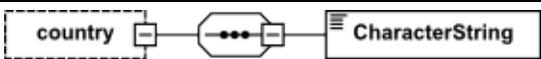
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/administrativeArea**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: administrative area

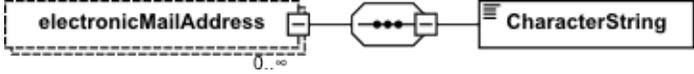
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/postalCode**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: postal code

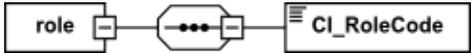
element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/country**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: country

element **MI\_Metadata/contact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/electronicMailAddress**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: email address

element **MI\_Metadata/contact/CI\_ResponsibleParty/role**

diagram																											
type	<b>roleCode</b>																										
facets	<table border="0"> <tr><td>enumeration</td><td>resourceProvider</td></tr> <tr><td>enumeration</td><td>custodian</td></tr> <tr><td>enumeration</td><td>owner</td></tr> <tr><td>enumeration</td><td>sponsor</td></tr> <tr><td>enumeration</td><td>user</td></tr> <tr><td>enumeration</td><td>distributor</td></tr> <tr><td>enumeration</td><td>originator</td></tr> <tr><td>enumeration</td><td><b>pointOfContact</b></td></tr> <tr><td>enumeration</td><td><b>principalInvestigator</b></td></tr> <tr><td>enumeration</td><td>processor</td></tr> <tr><td>enumeration</td><td>publisher</td></tr> <tr><td>enumeration</td><td>author</td></tr> <tr><td>enumeration</td><td>collaborator</td></tr> </table>	enumeration	resourceProvider	enumeration	custodian	enumeration	owner	enumeration	sponsor	enumeration	user	enumeration	distributor	enumeration	originator	enumeration	<b>pointOfContact</b>	enumeration	<b>principalInvestigator</b>	enumeration	processor	enumeration	publisher	enumeration	author	enumeration	collaborator
enumeration	resourceProvider																										
enumeration	custodian																										
enumeration	owner																										
enumeration	sponsor																										
enumeration	user																										
enumeration	distributor																										
enumeration	originator																										
enumeration	<b>pointOfContact</b>																										
enumeration	<b>principalInvestigator</b>																										
enumeration	processor																										
enumeration	publisher																										
enumeration	author																										
enumeration	collaborator																										
attribute	<table border="0"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>codeList</td> <td><b>xs:string</b></td> <td>required</td> <td>CI_RoleCode</td> </tr> <tr> <td>codeListValue</td> <td><b>roleCode</b></td> <td>required</td> <td>value from code list</td> </tr> </tbody> </table>	Name	Type	Use	Annotation	codeList	<b>xs:string</b>	required	CI_RoleCode	codeListValue	<b>roleCode</b>	required	value from code list														
Name	Type	Use	Annotation																								
codeList	<b>xs:string</b>	required	CI_RoleCode																								
codeListValue	<b>roleCode</b>	required	value from code list																								
annotation	documentation function performed by the responsible party																										

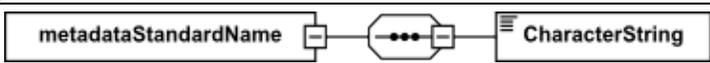
### 3.6 dateStamp

#### element MI Metadata/dateStamp

diagram	
type	<b>xs:date</b>
annotation	documentation date that the metadata was last updated

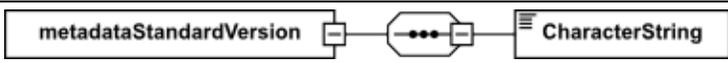
### 3.7 metadataStandardName

#### element MI Metadata/metadataStandardName

diagram	
type	<b>xs:string</b>
annotation	documentation name of the metadata standard

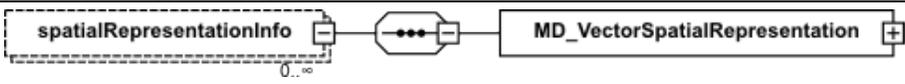
### 3.8 metadataStandardVersion

#### element MI Metadata/metadataStandardVersion

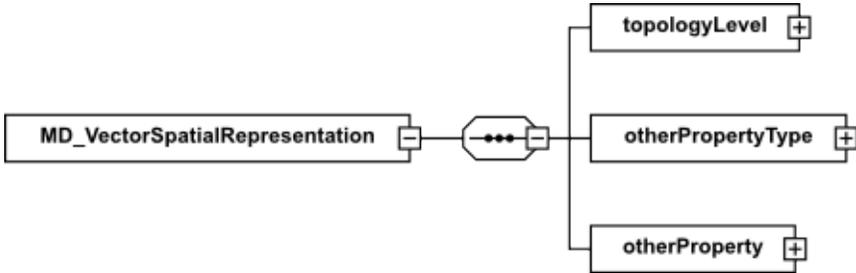
diagram	
type	<b>xs:string</b>
annotation	documentation version of the metadata standard

### 3.9 spatialRepresentationInfo

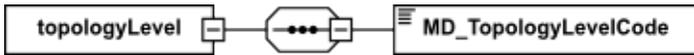
#### element MI Metadata/spatialRepresentationInfo

diagram	
annotation	documentation spatial representation information

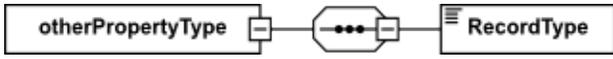
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation**

diagram	
annotation	documentation vector spatial representation details

element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/topologyLevel**

diagram																	
type	<b>topologyLevelCode</b>																
facets	<table border="0"> <tr><td>enumeration</td><td><b>geometryOnly</b></td></tr> <tr><td>enumeration</td><td>topology1D</td></tr> <tr><td>enumeration</td><td>planarGraph</td></tr> <tr><td>enumeration</td><td>fullPlanarGraph</td></tr> <tr><td>enumeration</td><td>surfaceGraph</td></tr> <tr><td>enumeration</td><td>fullSurfaceGraph</td></tr> <tr><td>enumeration</td><td>topology3D</td></tr> <tr><td>enumeration</td><td>abstract</td></tr> </table>	enumeration	<b>geometryOnly</b>	enumeration	topology1D	enumeration	planarGraph	enumeration	fullPlanarGraph	enumeration	surfaceGraph	enumeration	fullSurfaceGraph	enumeration	topology3D	enumeration	abstract
enumeration	<b>geometryOnly</b>																
enumeration	topology1D																
enumeration	planarGraph																
enumeration	fullPlanarGraph																
enumeration	surfaceGraph																
enumeration	fullSurfaceGraph																
enumeration	topology3D																
enumeration	abstract																
attribute	<table border="0"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>codeList</td> <td><b>xs:string</b></td> <td>required</td> <td>MD_TopologyLevelCode</td> </tr> <tr> <td>codeListValue</td> <td><b>topologyLevelCode</b></td> <td>required</td> <td>value from code list</td> </tr> </tbody> </table>	Name	Type	Use	Annotation	codeList	<b>xs:string</b>	required	MD_TopologyLevelCode	codeListValue	<b>topologyLevelCode</b>	required	value from code list				
Name	Type	Use	Annotation														
codeList	<b>xs:string</b>	required	MD_TopologyLevelCode														
codeListValue	<b>topologyLevelCode</b>	required	value from code list														
annotation	documentation function performed by the responsible party																
type	<b>xs:int</b>																
annotation	documentation degree of complexity of the spatial relationships																

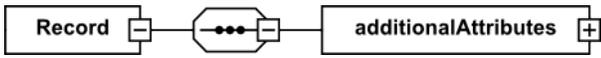
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherPropertyType**

diagram				
type	<b>xs:string</b>			
attribute	Name	Type	Use	Annotation
	href	<b>xlink:href</b>	required	EOS Additional Attributes
annotation	documentation	other property type – EOS additional attributes		

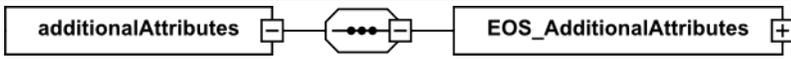
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty**

diagram				
annotation	documentation	other property – additional attributes		

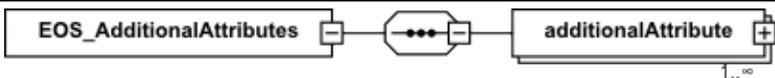
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record**

diagram				
annotation	documentation	other property record		

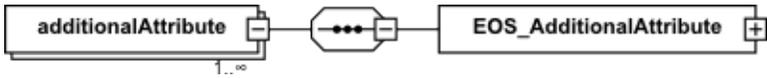
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes**

diagram				
annotation	documentation	additional attributes		

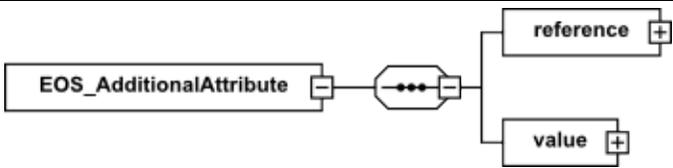
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes**

diagram				
annotation	documentation	EOS additional attributes		

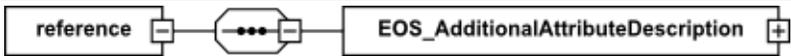
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute**

diagram	
annotation	documentation additionalAttribute

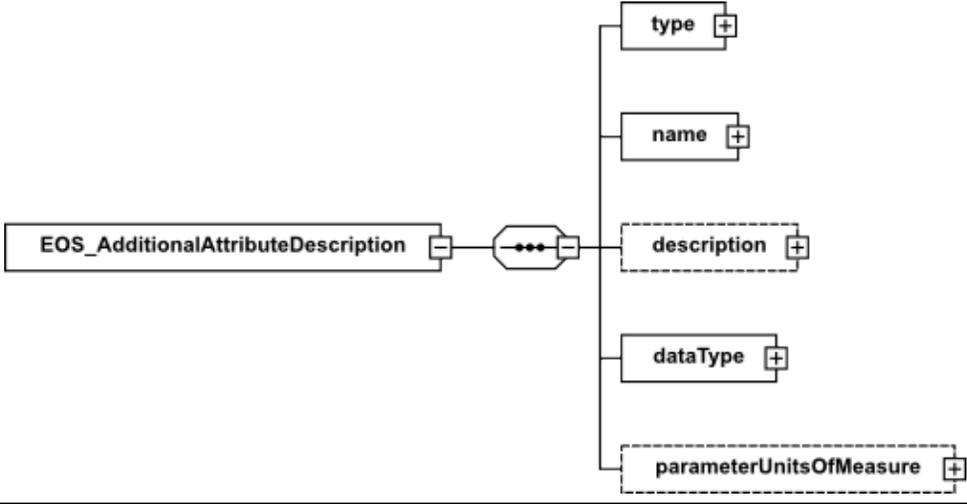
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute**

diagram	
annotation	documentation EOS_AdditionalAttribute

element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference**

diagram	
annotation	documentation additional attribute reference

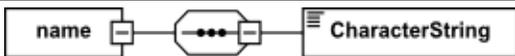
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription**

diagram	
annotation	documentation cell geometry

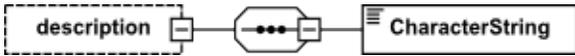
element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/type**

diagram				
type	<b>additionalAttributeTypeCode</b>			
facets	enumeration	<b>spatialInformation</b>		
	enumeration	<b>acquisitionInformation</b>		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	EOS_AdditionalAttributeTypeCode
	codeListValue	<b>EOS_AdditionalAttributeTypeCode</b>	required	value of code list
annotation	documentation additional attribute: type			

element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/name**

diagram	
type	<b>xs:string</b>
annotation	documentation additional attribute: name

element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/description**

diagram	
type	<b>xs:string</b>
annotation	documentation additional attribute: description

element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/dateTime**

diagram																					
type	<b>additionalAttributeDataTypeCode</b>																				
facets	<table border="0"> <tr><td>enumeration</td><td>STRING</td></tr> <tr><td>enumeration</td><td>FLOAT</td></tr> <tr><td>enumeration</td><td>INT</td></tr> <tr><td>enumeration</td><td>BOOLEAN</td></tr> <tr><td>enumeration</td><td>DATE</td></tr> <tr><td>enumeration</td><td>TIME</td></tr> <tr><td>enumeration</td><td>DATETIME</td></tr> <tr><td>enumeration</td><td>DATE_STRING</td></tr> <tr><td>enumeration</td><td>TIME_STRING</td></tr> <tr><td>enumeration</td><td>DATETIME_STRING</td></tr> </table>	enumeration	STRING	enumeration	FLOAT	enumeration	INT	enumeration	BOOLEAN	enumeration	DATE	enumeration	TIME	enumeration	DATETIME	enumeration	DATE_STRING	enumeration	TIME_STRING	enumeration	DATETIME_STRING
enumeration	STRING																				
enumeration	FLOAT																				
enumeration	INT																				
enumeration	BOOLEAN																				
enumeration	DATE																				
enumeration	TIME																				
enumeration	DATETIME																				
enumeration	DATE_STRING																				
enumeration	TIME_STRING																				
enumeration	DATETIME_STRING																				

attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b> <b>additionalAttribute</b>	required	EOS_AdditionalAttribute DataTypeCode
	codeListValue	<b>DataTypeCode</b>	required	value of code list
annotation	documentation	additional attribute: data type		

element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/parameterUnitsOfMeasure**

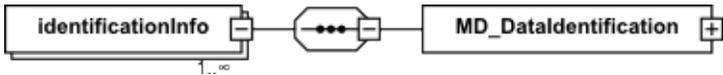
diagram	
type	<b>xs:string</b>
annotation	documentation additional attribute: parameter units of measure

element **MI\_Metadata/spatialRepresentationInfo/MD\_VectorSpatialRepresentation/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/value**

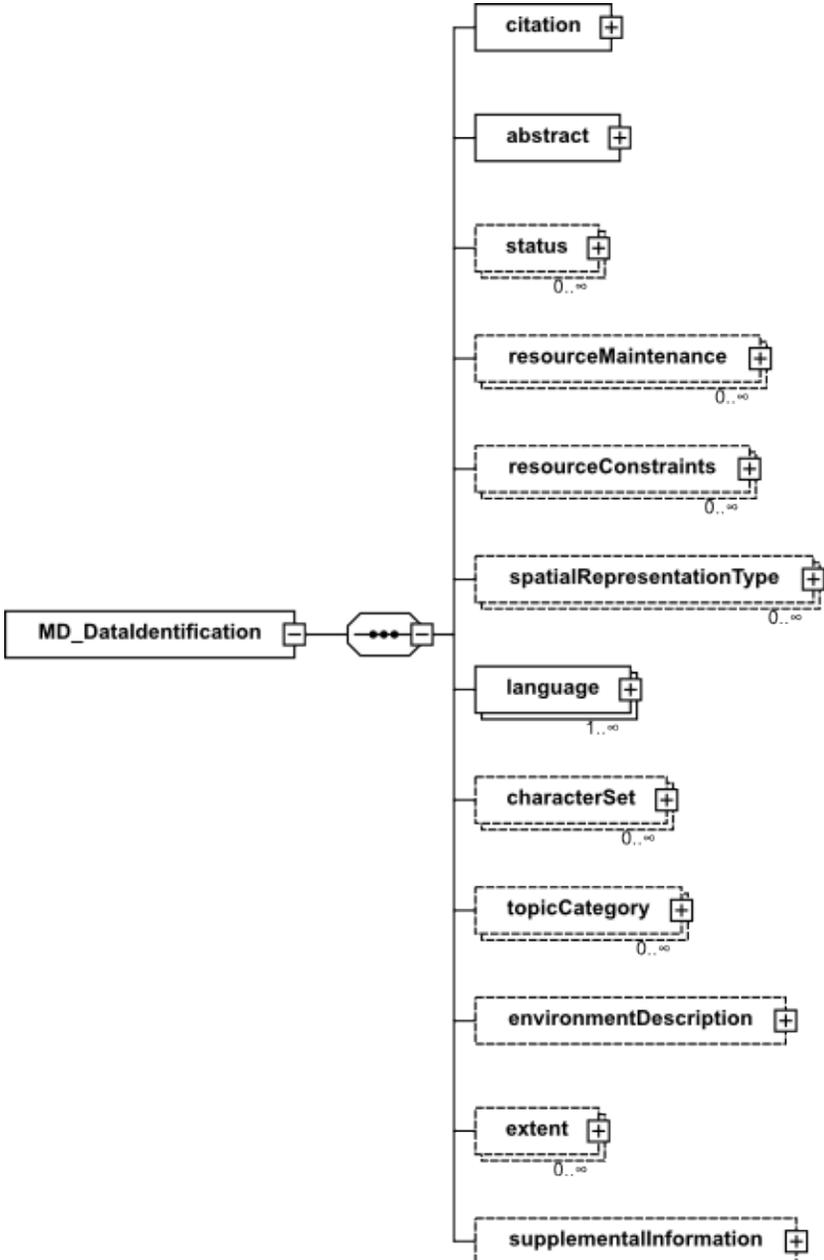
diagram	
type	<b>xs:string</b>
annotation	documentation additional attribute: value

### 3.10 identificationInfo

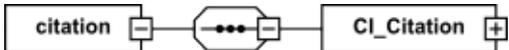
element **MI\_Metadata/identificationInfo**

diagram	
annotation	documentation dataset identification information

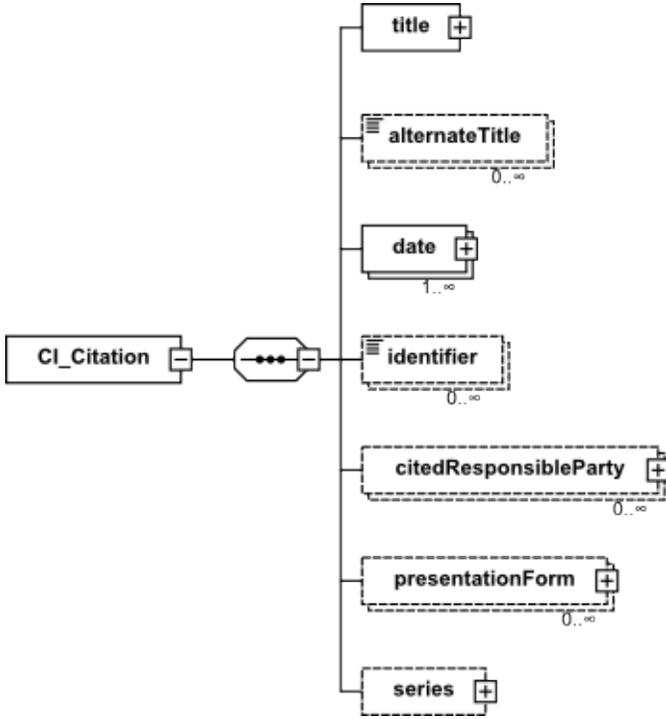
element **MI\_Metadata/identificationInfo/MD\_DataIdentification**

<p>diagram</p>	
<p>annotation</p>	<p>documentation data identification details</p>

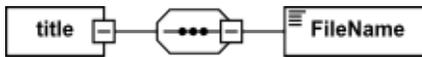
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation**

<p>diagram</p>	
<p>annotation</p>	<p>documentation data citation</p>

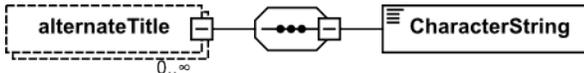
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation**

diagram	 <p>The diagram shows the structure of the CI_Citation element. It is a container element (rectangle with a small square on the left) that contains a sequence container (hexagon with three dots). This sequence container contains the following elements in order: title (rectangle with a plus sign), alternateTitle (dashed rectangle with a plus sign and cardinality 0..∞), date (rectangle with a plus sign and cardinality 1..∞), identifier (dashed rectangle with a plus sign and cardinality 0..∞), citedResponsibleParty (dashed rectangle with a plus sign and cardinality 0..∞), presentationForm (dashed rectangle with a plus sign and cardinality 0..∞), and series (rectangle with a plus sign).</p>
annotation	documentation data citation details

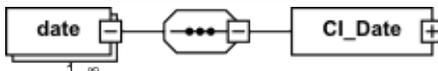
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/title**

diagram	 <p>The diagram shows the structure of the CI_Citation/title element. It is a container element (rectangle with a small square on the left) that contains a sequence container (hexagon with three dots) which contains the element FileName (rectangle with a plus sign).</p>
type	<b>xs:string</b>
annotation	documentation data citation: title

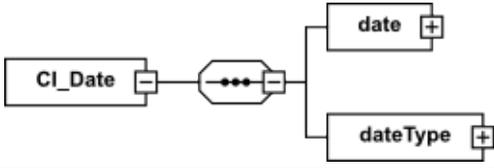
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/alternateTitle**

diagram	 <p>The diagram shows the structure of the CI_Citation/alternateTitle element. It is a container element (rectangle with a small square on the left) that contains a sequence container (hexagon with three dots) which contains the element CharacterString (rectangle with a plus sign). The alternateTitle element is shown as a dashed box with a cardinality of 0..∞.</p>
type	<b>xs:string</b>
annotation	documentation data citation: alternateTitle

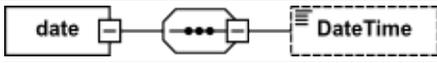
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/date**

diagram	 <p>The diagram shows the structure of the CI_Citation/date element. It is a container element (rectangle with a small square on the left) that contains a sequence container (hexagon with three dots) which contains the element CI_Date (rectangle with a plus sign). The date element is shown as a dashed box with a cardinality of 1..∞.</p>
annotation	documentation data citation: date

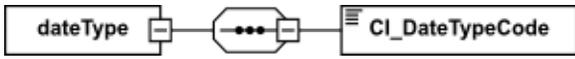
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/date/CI\_Date**

diagram	
annotation	documentation data citation: date details

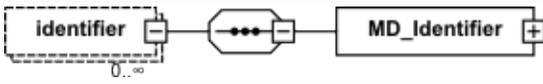
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/date/CI\_Date/date**

diagram	
type	<b>xs:date</b>
annotation	documentation date time stamp – e.g. 2014-01-29T23:47:03.000000Z

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/date/CI\_Date/dateType**

diagram													
type	<b>dateTypeCode</b>												
facets	enumeration <b>creation</b> enumeration publication enumeration revision												
attribute	<table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>codeList</td> <td><b>xs:string</b></td> <td>required</td> <td>CI_DateTypeCode</td> </tr> <tr> <td>codeListValue</td> <td><b>dataTypeCode</b></td> <td>required</td> <td>value of code list</td> </tr> </tbody> </table>	Name	Type	Use	Annotation	codeList	<b>xs:string</b>	required	CI_DateTypeCode	codeListValue	<b>dataTypeCode</b>	required	value of code list
Name	Type	Use	Annotation										
codeList	<b>xs:string</b>	required	CI_DateTypeCode										
codeListValue	<b>dataTypeCode</b>	required	value of code list										
annotation	documentation type of date stamp												

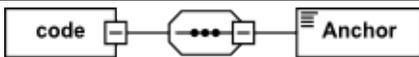
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/identifier**

diagram	
annotation	documentation data set identifier

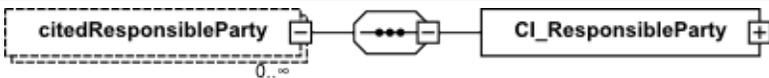
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/identifier/MD\_Identifier**

diagram	
annotation	documentation data set identifier: details

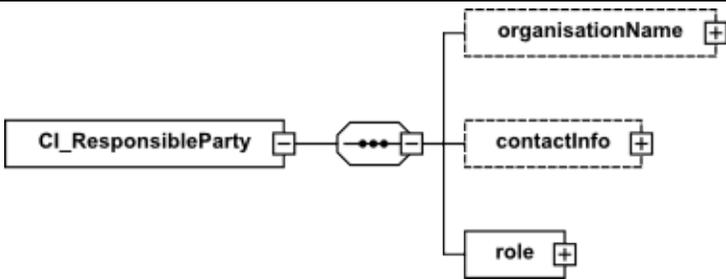
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/identifier/MD\_Identifier/code**

diagram																	
attribute	<table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>href</td> <td><b>xlink</b></td> <td>required</td> <td>URL</td> </tr> <tr> <td>title</td> <td><b>xlink</b></td> <td>required</td> <td>DOI</td> </tr> <tr> <td>actuate</td> <td><b>xlink</b></td> <td>required</td> <td>on request</td> </tr> </tbody> </table>	Name	Type	Use	Annotation	href	<b>xlink</b>	required	URL	title	<b>xlink</b>	required	DOI	actuate	<b>xlink</b>	required	on request
Name	Type	Use	Annotation														
href	<b>xlink</b>	required	URL														
title	<b>xlink</b>	required	DOI														
actuate	<b>xlink</b>	required	on request														
annotation	documentation data identification code: DOI																

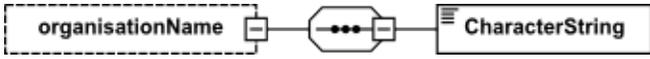
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/citedResponsibleParty**

diagram	
annotation	documentation data citation: cited responsible party

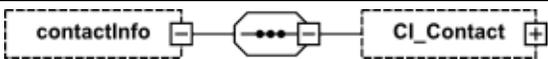
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/citedResponsibleParty/CI\_ResponsibleParty**

diagram	
annotation	documentation data citation: cited responsible party details

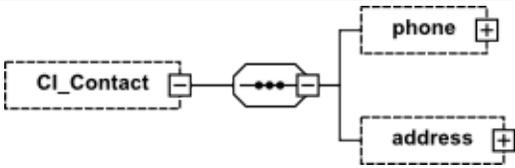
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/organisationName**

diagram	
type	xs:string
annotation	documentation name of the responsible organization

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo**

diagram	
annotation	documentation contact information

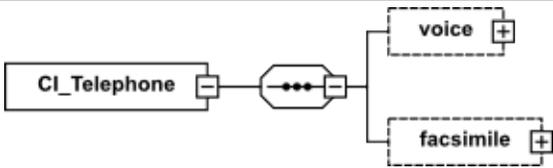
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact**

diagram	
annotation	documentation contact information details

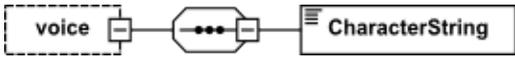
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone**

diagram	
annotation	documentation contact phone information

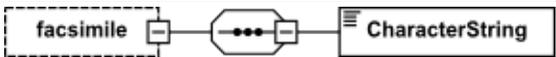
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/  
CI\_Telephone**

diagram	
annotation	documentation contact telephone information details

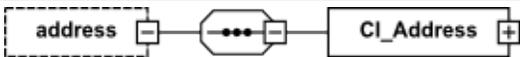
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/  
CI\_Telephone/voice**

diagram	
type	<b>xs:string</b>
annotation	documentation contact phone number

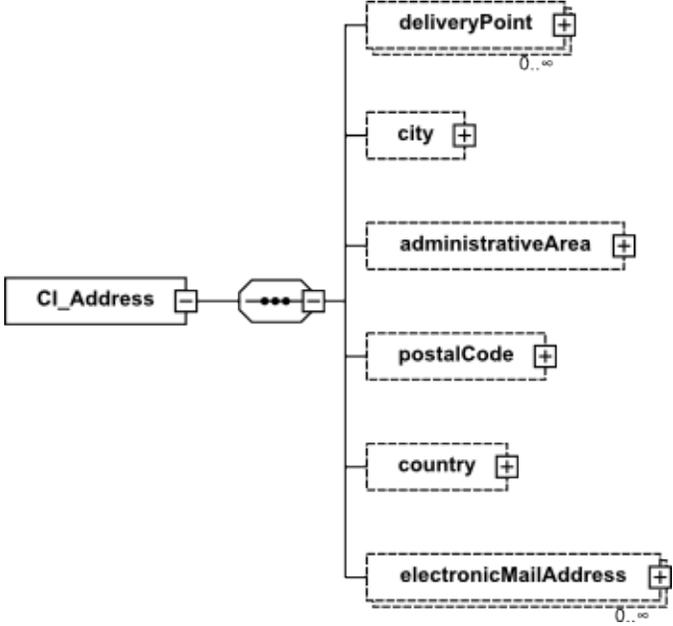
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/  
CI\_Telephone/facsimile**

diagram	
type	<b>xs:string</b>
annotation	documentation contact fax number

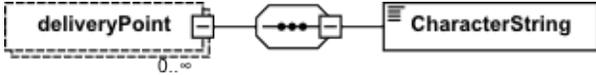
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/address**

diagram	
annotation	documentation contact address information

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/  
CI\_Address**

diagram	 <p>The diagram shows the structure of the CI_Address element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (indicated by a circle with three dots). The elements are: deliveryPoint (dashed box, 0..∞), city (dashed box), administrativeArea (dashed box), postalCode (dashed box), country (dashed box), and electronicMailAddress (dashed box, 0..∞). Each element has a small square on its left side and a plus sign on its right side.</p>
annotation	documentation contact address information details

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/  
CI\_Address/deliveryPoint**

diagram	 <p>The diagram shows the structure of the deliveryPoint element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (indicated by a circle with three dots). The element is: CharacterString (rectangle with a small square on the left). The deliveryPoint element has a dashed border and a plus sign on its right side.</p>
type	<b>xs:string</b>
annotation	documentation contact address: street

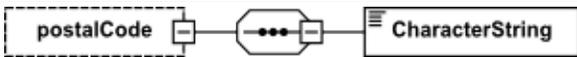
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/  
CI\_Address/city**

diagram	 <p>The diagram shows the structure of the city element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (indicated by a circle with three dots). The element is: CharacterString (rectangle with a small square on the left).</p>
type	<b>xs:string</b>
annotation	documentation contact address: city

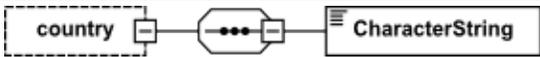
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/administrativeArea**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: administrative area

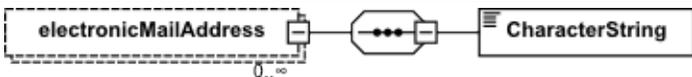
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/postalCode**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: postal code

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/country**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: country

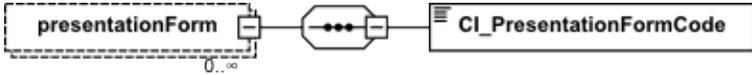
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/citedResponsibleParty/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/electronicMailAddress**

diagram	
type	<b>xs:string</b>
annotation	documentation contact address: email address

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
citedResponsibleParty/CI\_ResponsibleParty/role**

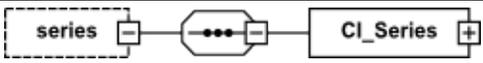
diagram				
type	<b>roleCode</b>			
facets	enumeration	resourceProvider		
	enumeration	custodian		
	enumeration	owner		
	enumeration	sponsor		
	enumeration	user		
	enumeration	<b>distributor</b>		
	enumeration	<b>originator</b>		
	enumeration	pointOfContact		
	enumeration	principallInvestigator		
	enumeration	processor		
	enumeration	publisher		
	enumeration	author		
	enumeration	collaborator		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	CI_RoleCode
	codeListValue	<b>roleCode</b>	required	value from code list
annotation	documentation	function performed by the responsible party		

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/  
presentationForm**

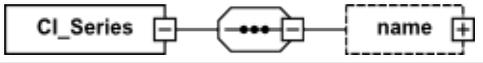
diagram				
type	<b>presentationFormCode</b>			
facets	enumeration	<b>documentDigital</b>		
	enumeration	documentHardcopy		
	enumeration	imageDigital		
	enumeration	imageHardcopy		
	enumeration	mapDigital		
	enumeration	mapHardcopy		
	enumeration	modelDigital		

	enumeration	modelHardcopy		
	enumeration	profileDigital		
	enumeration	profileHardcopy		
	enumeration	tableDigital		
	enumeration	tableHardcopy		
	enumeration	videoDigital		
	enumeration	videoHardcopy		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	require	CI_PresentationFormCode
	codeListValue	<b>presentationFormCode</b>	require	value of code list
annotation	documentation	presentation form		

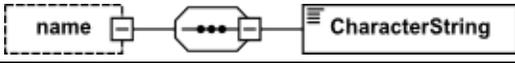
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/series**

diagram	
annotation	documentation series the dataset belongs to

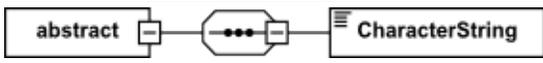
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/series/CI\_Series**

diagram	
annotation	documentation series details

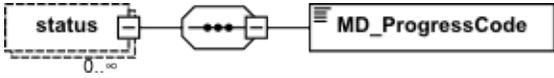
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/citation/CI\_Citation/series/CI\_Series/name**

diagram	
type	<b>xs:string</b>
annotation	documentation name of the data series

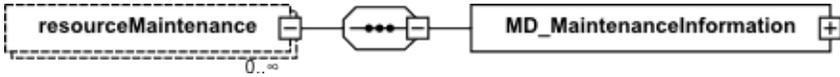
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/abstract**

diagram	
type	<b>xs:string</b>
annotation	documentation abstract describing the data

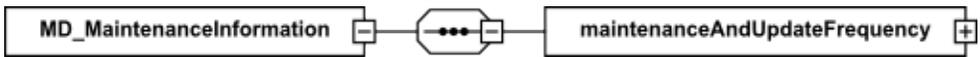
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/status**

diagram				
type	<b>progressCode</b>			
facets	enumeration	<b>completed</b>		
	enumeration	historicalArchive		
	enumeration	obsolete		
	enumeration	onGoing		
	enumeration	planned		
	enumeration	required		
	enumeration	underDevelopment		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_ProgressCode
	codeListValue	<b>progressCode</b>	required	value of code list
annotation	documentation	status of the dataset or progress of a review		

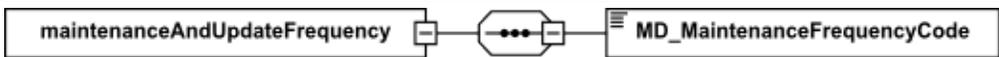
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/resourceMaintenance**

diagram				
annotation	documentation	resource maintenance information		

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/resourceMaintenance/MD\_MaintenanceInformation**

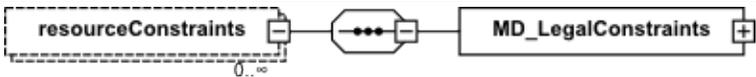
diagram				
annotation	documentation	metadata maintenance details		

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/resourceMaintenance/MD\_MaintenanceInformation/maintenanceAndUpdateFrequency**

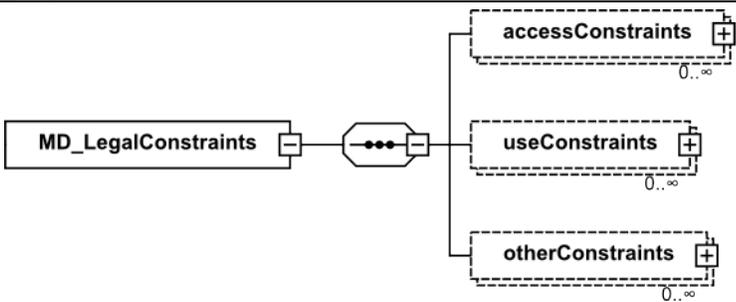
diagram				
type	<b>maintenanceFrequencyCode</b>			
facets	enumeration	continual		
	enumeration	daily		
	enumeration	weekly		

	enumeration	fortnightly		
	enumeration	monthly		
	enumeration	quarterly		
	enumeration	biannually		
	enumeration	annually		
	enumeration	<b>asNeeded</b>		
	enumeration	irregular		
	enumeration	notPlanned		
	enumeration	unknown		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_MaintenanceFrequencyCode
	codeListValue	<b>maintenance FrequencyCode</b>	required	value of code list
annotation	documentation	frequency with which modifications and deletions are made to the data after it is first produced		

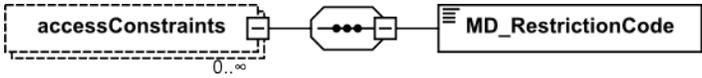
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/resourceConstraints**

diagram			
annotation	documentation	resource constraints	

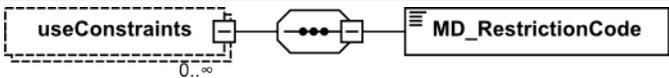
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/resourceConstraints/MD\_LegalConstraints**

diagram			
annotation	documentation	resource constraints details	

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/resourceConstraints/MD\_LegalConstraints/accessConstraints**

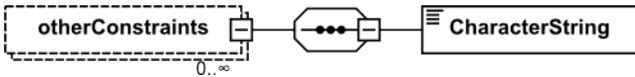
diagram				
type	<b>restrictionCode</b>			
facets	enumeration	copyright		
	enumeration	patent		
	enumeration	patentPending		
	enumeration	trademark		
	enumeration	license		
	enumeration	intellectualPropertyRights		
	enumeration	restricted		
	enumeration	<b>otherRestrictions</b>		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_RestrictionCode
	codeListValue	<b>restrictionCode</b>	required	value of code list
annotation	documentation	limitation(s) placed upon the access or use of the data		

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/resourceConstraints/MD\_LegalConstraints/useConstraints**

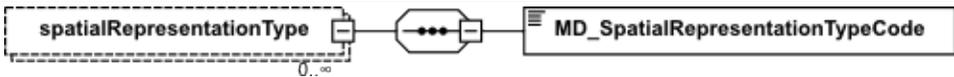
diagram				
type	<b>MD_RestrictionCode</b>			
facets	enumeration	copyright		
	enumeration	patent		
	enumeration	patentPending		
	enumeration	trademark		
	enumeration	license		
	enumeration	intellectualPropertyRights		
	enumeration	restricted		
	enumeration	<b>otherRestrictions</b>		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_RestrictionCode
	codeListValue	<b>restrictionCode</b>	required	value of code list

annotation	documentation limitation(s) placed upon the access or use of the data
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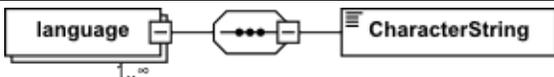
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/resourceConstraints/MD\_LegalConstraints/otherConstraints**

diagram	
type	<b>xs:string</b>
annotation	documentation resource constraints: other constraints

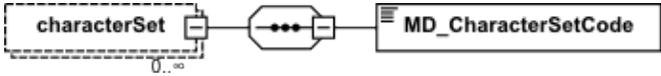
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/spatialRepresentationType**

diagram													
type	<b>spatialRepresentationTypeCode</b>												
facets	enumeration <b>vector</b> enumeration grid enumeration textTable enumeration tin enumeration stereoModel enumeration video												
attribute	<table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>codeList</td> <td><b>xs:string</b></td> <td>required</td> <td>MD_SpatialRepresentationTypeCode</td> </tr> <tr> <td>codeListValue</td> <td><b>spatialRepresentationTypeCode</b></td> <td>required</td> <td>value of code list</td> </tr> </tbody> </table>	Name	Type	Use	Annotation	codeList	<b>xs:string</b>	required	MD_SpatialRepresentationTypeCode	codeListValue	<b>spatialRepresentationTypeCode</b>	required	value of code list
Name	Type	Use	Annotation										
codeList	<b>xs:string</b>	required	MD_SpatialRepresentationTypeCode										
codeListValue	<b>spatialRepresentationTypeCode</b>	required	value of code list										
annotation	documentation method used to represent geographic information in the dataset												

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/language**

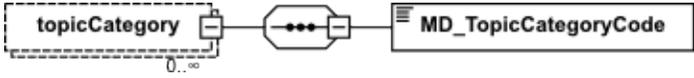
diagram	
type	<b>xs:language</b>
annotation	documentation language

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/characterSet**

diagram		
type	<b>characterSetCode</b>	
facets	enumeration	ucs2 ucs4 utf7 <b>utf8</b> utf16 8859part1 8859part2 8859part3 8859part4 8859part5 8859part6 8859part7 8859part8 8859part9 8859part10 8859part11 8859part12 8859part13 8859part14 8859part15 8859part16 jis shiftJIS eucJP usAscii ebcdic eucKR big6 GB2312

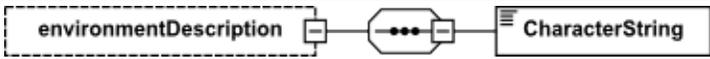
attribute	Name	Type	attribute	Name
	codeList	<b>xs:string</b>	required	MD_CharacterSetCode
	codeListValue	<b>characterSetCode</b>	required	value of code list
annotation	documentation	name of the character coding standard used in the resource		

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/topicCategory**

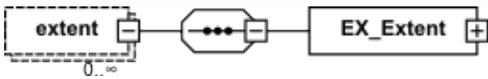
diagram				
type	<b>topicCategoryCode</b>			
facets	enumeration	farming		
	enumeration	biota		
	enumeration	boundaries		
	enumeration	climatologyMeteorologyAtmosphere		
	enumeration	economy		
	enumeration	elevation		
	enumeration	environment		
	enumeration	<b>geoscientificInformation</b>		
	enumeration	health		
	enumeration	imageBaseMapsEarthCover		
	enumeration	intelligenceMilitary		
	enumeration	inlandWaters		
	enumeration	location		
	enumeration	oceans		
	enumeration	planningCadastre		
	enumeration	society		
	enumeration	structure		
	enumeration	transportation		
	enumeration	utilitiesCommunication		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_TopicCategoryCode
	codeListValue	<b>topicCategoryCode</b>	required	value of code list

annotation	documentation	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
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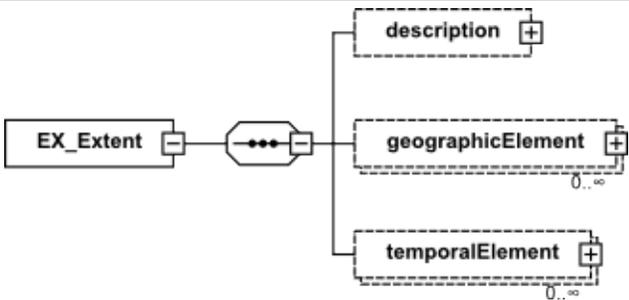
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/environmentDescription**

diagram		
type	<b>xs:string</b>	
annotation	documentation	description of the environment

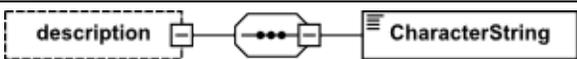
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent**

diagram		
annotation	documentation	geographic extent of dataset

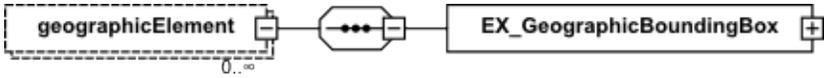
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent**

diagram		
annotation	documentation	geographic extent details

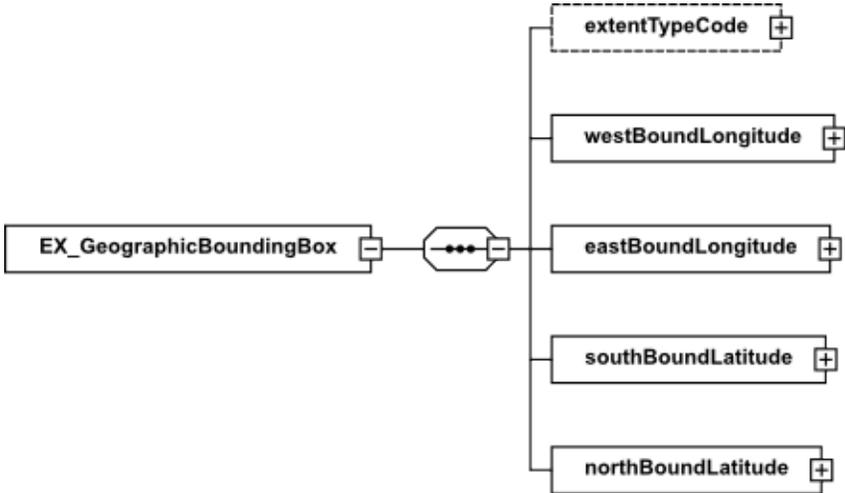
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/description**

diagram		
type	<b>xs:string</b>	
annotation	documentation	geographic extent: description

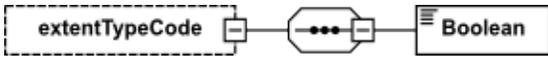
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/ geographicElement**

diagram	
annotation	documentation geographic extent: geographic elements

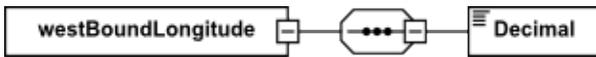
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/ geographicElement/EX\_GeographicBoundingBox**

diagram				
attribute	Name	Type	Use	Annotation
	id	xs:string	required	identifier
annotation	documentation	geographic extent: bounding box		

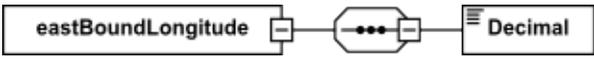
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/ geographicElement/EX\_GeographicBoundingBox/extentTypeCode**

diagram	
type	xs:Boolean
annotation	documentation geographic bounding box: extent type code

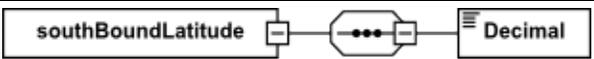
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/ geographicElement/EX\_GeographicBoundingBox/westBoundLongitude**

diagram	
type	xs:decimal
annotation	documentation geographic bounding box: west bound longitude

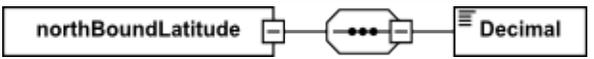
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/  
geographicElement/EX\_GeographicBoundingBox/eastBoundLongitude**

diagram	
type	<b>xs:decimal</b>
annotation	documentation geographic bounding box: east bound longitude

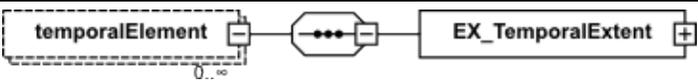
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/  
geographicElement/EX\_GeographicBoundingBox/southBoundLatitude**

diagram	
type	<b>xs:decimal</b>
annotation	documentation geographic bounding box: south bound latitude

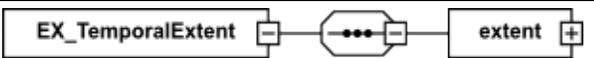
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/  
geographicElement/EX\_GeographicBoundingBox/northBoundLatitude**

diagram	
type	<b>xs:decimal</b>
annotation	documentation geographic bounding box: north bound latitude

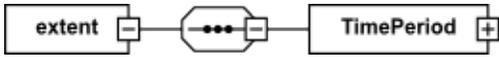
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/  
temporalElement**

diagram	
annotation	documentation geographic extent: temporal element

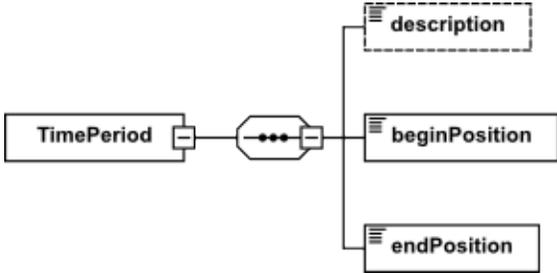
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/  
temporalElement/EX\_TemporalExtent**

diagram	
annotation	documentation temporal extent details

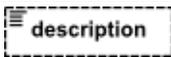
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/temporalElement/EX\_TemporalExtent/extent**

diagram	
annotation	documentation temporal extent

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/temporalElement/EX\_TemporalExtent/extent/TimePeriod**

diagram	
type	<b>xs:string</b>
annotation	documentation time period details

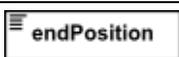
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/temporalElement/EX\_TemporalExtent/extent/TimePeriod/description**

diagram	
type	<b>xs:string</b>
annotation	documentation time period: description

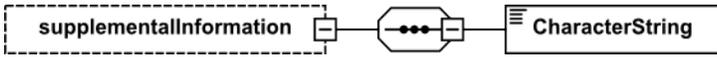
element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/temporalElement/EX\_TemporalExtent/extent/TimePeriod/beginPosition**

diagram	
type	<b>xs:string</b>
annotation	documentation time period: begin position

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/EX\_Extent/temporalElement/EX\_TemporalExtent/extent/TimePeriod/endPosition**

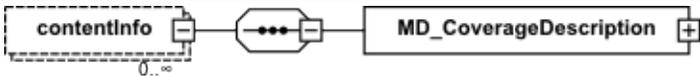
diagram	
type	<b>xs:string</b>
annotation	documentation time period: end position

element **MI\_Metadata/identificationInfo/MD\_DataIdentification/extent/supplementalInformation**

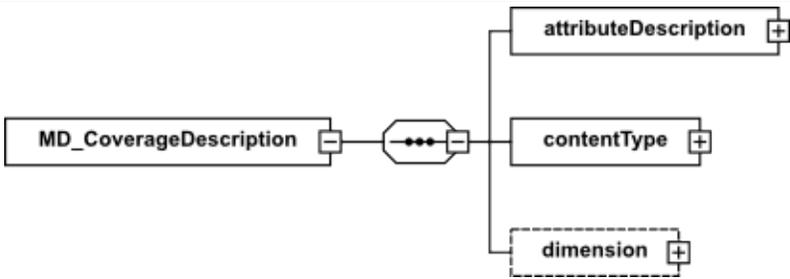
diagram	
annotation	documentation supplemental information

### 3.11 contentInfo

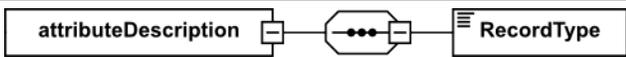
element **MI\_Metadata/contentInfo**

diagram	
annotation	documentation content information

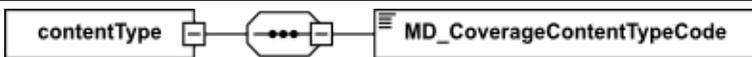
element **MI\_Metadata/contentInfo/MD\_CoverageDescription**

diagram	
annotation	documentation coverage description

element **MI\_Metadata/contentInfo/MD\_CoverageDescription/attributeDescription**

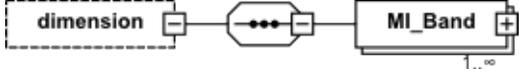
diagram	
type	<b>xs:string</b>
annotation	documentation attribute description

element **MI\_Metadata/contentInfo/MD\_CoverageDescription/contentType**

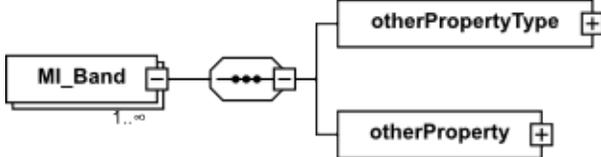
diagram	
type	<b>coverageContentTypeCode</b>
facets	enumeration image enumeration thematicClassification enumeration physicalMeasurement

	enumeration	referenceInformation		
	enumeration	auxiliaryData		
	enumeration	qualityInformation		
	enumeration	<b>modelResult</b>		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_CoverageContent TypeCode
	codeListValue	<b>coverageContentTypeCode</b>	required	value of code list
annotation	documentation	specific type of information represented in the cell		

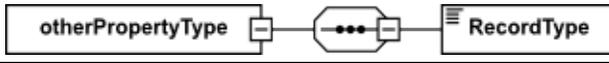
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension**

diagram				
annotation	documentation	band information		

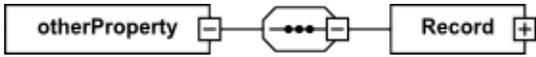
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band**

diagram				
annotation	documentation	band parameters		

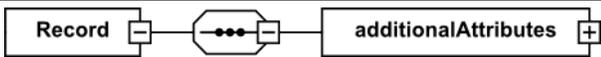
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherPropertyType**

diagram				
type	<b>xs:string</b>			
attribute	Name	Type	Use	Annotation
	href	<b>xlink:href</b>	required	EOS Additional Attributes
annotation	documentation	other property type – EOS additional attributes		

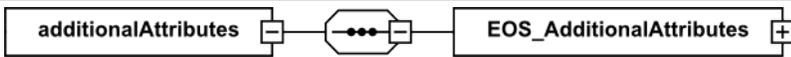
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/  
otherProperty**

diagram	
annotation	documentation other property – additional attributes

element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/  
otherProperty/Record**

diagram	
annotation	documentation other property record

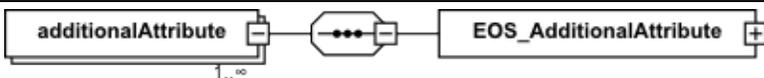
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/  
otherProperty/Record/additionalAttributes**

diagram	
annotation	documentation additional attributes

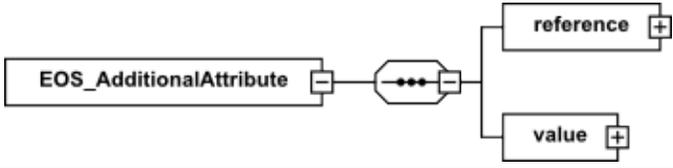
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/  
otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes**

diagram	
annotation	documentation EOS additional attributes

element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/  
otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/  
additionalAttribute**

diagram	
annotation	documentation additionalAttribute

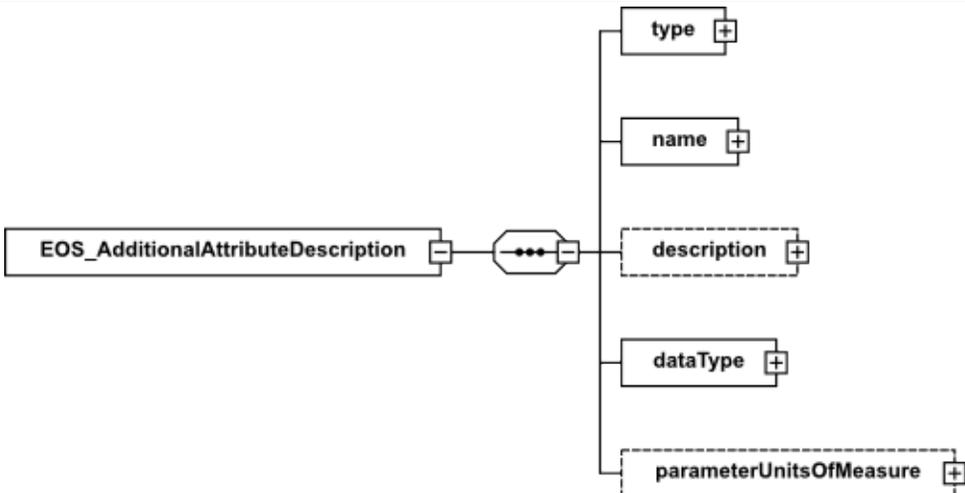
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute**

diagram	
annotation	documentation EOS_AdditionalAttribute

element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference**

diagram	
annotation	documentation additional attribute reference

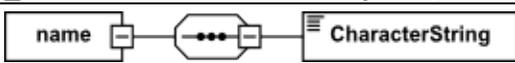
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription**

diagram	
annotation	documentation cell geometry

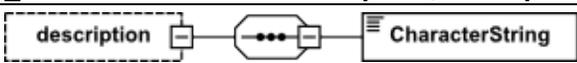
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/type**

diagram				
type	<b>additionalAttributeTypeCode</b>			
facets	enumeration	<b>spatialInformation</b>		
	enumeration	<b>acquisitionInformation</b>		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	EOS_AdditionalAttributeTypeCode
	codeListValue	<b>EOS_AdditionalAttributeTypeCode</b>	required	value of code list
annotation	documentation	additional attribute: type		

element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/name**

diagram				
type	<b>xs:string</b>			
annotation	documentation	additional attribute: name		

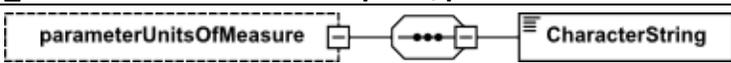
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/description**

diagram				
type	<b>xs:string</b>			
annotation	documentation	additional attribute: description		

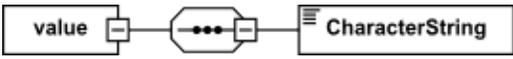
element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/dataType**

diagram				
type	<b>additionalAttributeDataTypeCode</b>			
facets	enumeration	STRING		
	enumeration	FLOAT		
	enumeration	INT		
	enumeration	BOOLEAN		
	enumeration	DATE		
	enumeration	TIME		
	enumeration	DATETIME		
	enumeration	DATE_STRING		
	enumeration	TIME_STRING		
	enumeration	DATETIME_STRING		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b> <b>additionalAttribute</b>	required	EOS_AdditionalAttribute DataTypeCode
	codeListValue	<b>DataTypeCode</b>	required	value of code list
annotation	documentation	additional attribute: data type		

element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/reference/EOS\_AdditionalAttributeDescription/parameterUnitsOfMeasure**

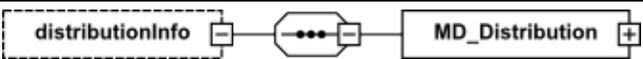
diagram				
type	<b>xs:string</b>			
annotation	documentation	additional attribute: parameter units of measure		

element **MI\_Metadata/contentInfo/MD\_CoverageDescription/dimension/MI\_Band/otherProperty/Record/additionalAttributes/EOS\_AdditionalAttributes/additionalAttribute/EOS\_AdditionalAttribute/value**

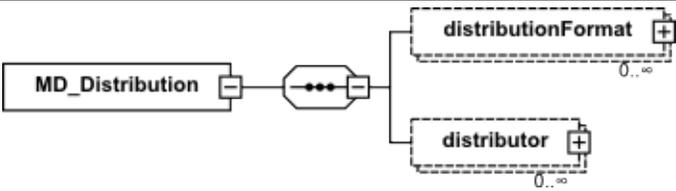
diagram	
type	xs:string
annotation	documentation additional attribute: value

### 3.12 distributionInfo

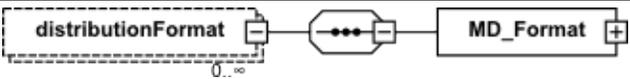
element **MI\_Metadata/distributionInfo**

diagram	
annotation	documentation distribution information

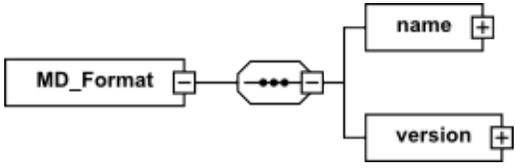
element **MI\_Metadata/distributionInfo/MD\_Distribution**

diagram	
annotation	documentation distribution information details

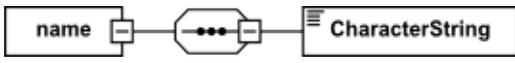
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributionFormat**

diagram	
annotation	documentation distribution format

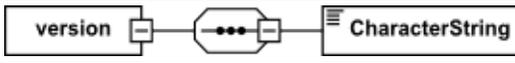
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributionFormat/MD\_Format**

diagram	
annotation	documentation distribution format details

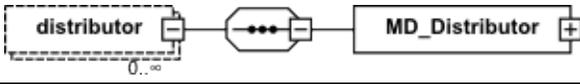
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributionFormat/MD\_Format/name**

diagram	
type	<b>xs:string</b>
annotation	documentation name of the data format

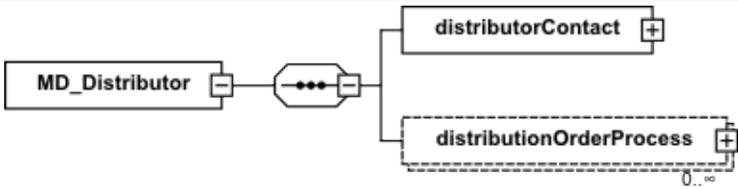
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributionFormat/MD\_Format/version**

diagram	
type	<b>xs:string</b>
annotation	documentation version of the data format

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor**

diagram	
annotation	documentation distributor information

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor**

diagram	
annotation	documentation distributor information details

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact**

diagram	
annotation	documentation distribution contact information

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty**

diagram	
annotation	documentation distribution: responsible party

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/organisationName**

diagram	
type	xs:string
annotation	documentation distribution: name of organization

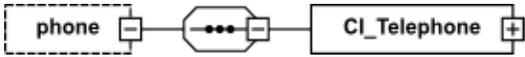
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo**

diagram	
annotation	documentation distribution contact information

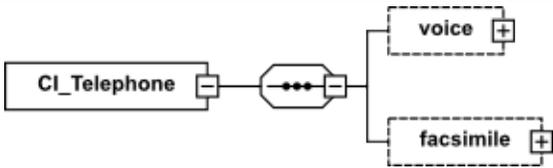
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact**

diagram	
annotation	documentation distribution contact information details

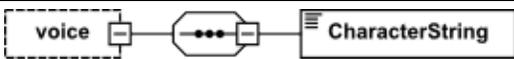
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone**

diagram	
annotation	documentation distribution contact: phone information

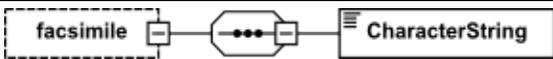
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/CI\_Telephone**

diagram	
annotation	documentation distribution contact: telephone information details

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/CI\_Telephone/voice**

diagram	
type	xs:string
annotation	documentation distribution contact: phone number

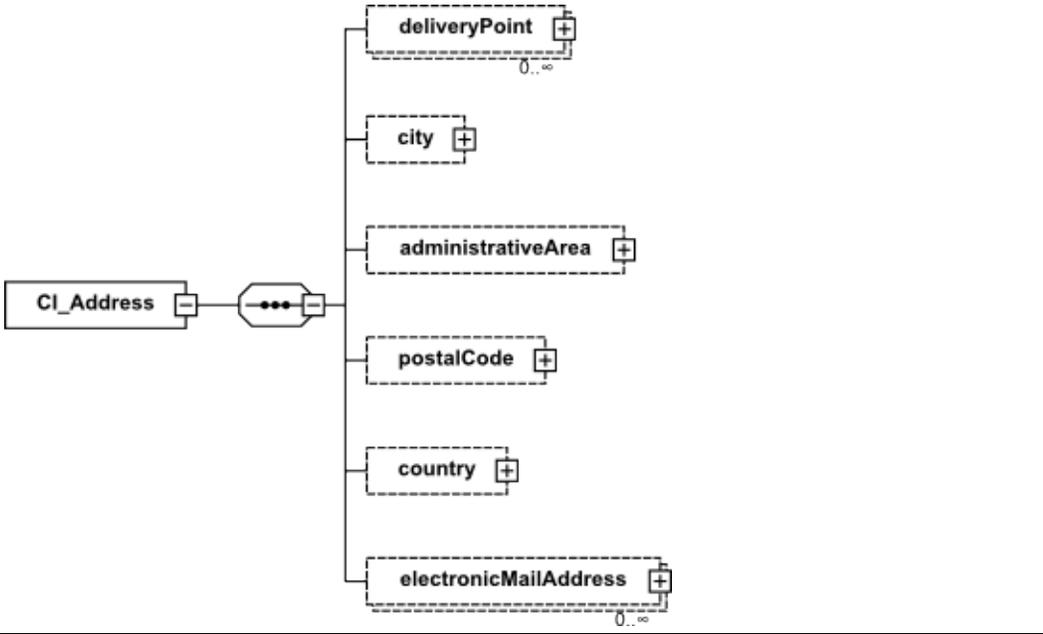
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/phone/CI\_Telephone/facsimile**

diagram	
type	xs:string
annotation	documentation distribution contact: fax number

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address**

diagram	
annotation	documentation distribution contact: address information

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address**

diagram	 <p>The diagram shows the structure of the CI_Address element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (indicated by a circle with three dots). The elements are: deliveryPoint (dashed box, 0..∞), city (dashed box), administrativeArea (dashed box), postalCode (dashed box), country (dashed box), and electronicMailAddress (dashed box, 0..∞). Each element has a small square on its left side and a plus sign on its right side.</p>
annotation	documentation distribution contact: address information details

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/deliveryPoint**

diagram	 <p>The diagram shows the structure of the deliveryPoint element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (indicated by a circle with three dots). The element is: CharacterString (rectangle with a small square on the left and a plus sign on the right). The deliveryPoint element has a dashed border and a 0..∞ cardinality indicator.</p>
type	<b>xs:string</b>
annotation	documentation distribution contact: physical address

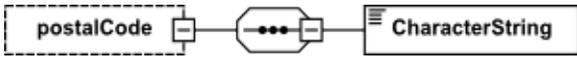
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/city**

diagram	 <p>The diagram shows the structure of the city element. It is a container element (rectangle with a small square on the left) that contains a sequence of elements (indicated by a circle with three dots). The element is: CharacterString (rectangle with a small square on the left and a plus sign on the right).</p>
type	<b>xs:string</b>
annotation	documentation distribution contact: city

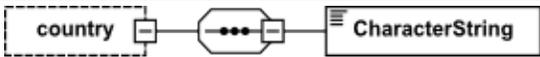
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/administrativeArea**

diagram	
type	<b>xs:string</b>
annotation	documentation distribution contact: administrative area

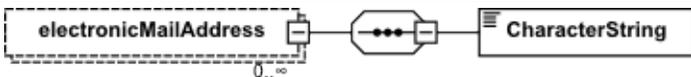
element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/postalCode**

diagram	
type	<b>xs:string</b>
annotation	documentation distribution contact: postal code

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/country**

diagram	
type	<b>xs:string</b>
annotation	documentation distribution contact: country

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/contactInfo/CI\_Contact/address/CI\_Address/electronicMailAddress**

diagram	
type	<b>xs:string</b>
annotation	documentation distribution contact: email address

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributorContact/CI\_ResponsibleParty/role**

diagram				
type	<b>roleCode</b>			
facets	enumeration	resourceProvider		
	enumeration	custodian		
	enumeration	owner		
	enumeration	sponsor		
	enumeration	user		
	enumeration	<b>distributor</b>		
	enumeration	originator		
	enumeration	pointOfContact		
	enumeration	principallInvestigator		
	enumeration	processor		
	enumeration	publisher		
	enumeration	author		
	enumeration	collaborator		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	CI_RoleCode
	codeListValue	<b>roleCode</b>	required	value from code list
annotation	documentation	function performed by the responsible party		

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributionOrderProcess**

diagram				
annotation	documentation	distribution order process information		

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributionOrderProcess/MD\_StandardOrderProcess**

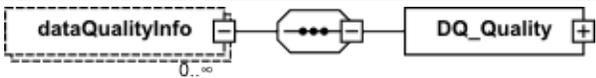
diagram				
annotation	documentation	distribution order process details		

element **MI\_Metadata/distributionInfo/MD\_Distribution/distributor/MD\_Distributor/distributionOrderProcess/MD\_StandardOrderProcess/fees**

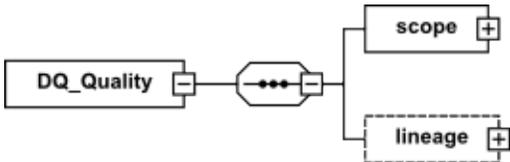
diagram	
type	<b>xs:string</b>
annotation	documentation distribution order process: fees

### 3.13 dataQualityInfo

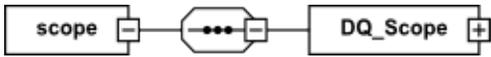
element **MI\_Metadata/dataQualityInfo**

diagram	
annotation	documentation data quality information

element **MI\_Metadata/dataQualityInfo/DQ\_Quality**

diagram	
annotation	documentation data quality information details

element **MI\_Metadata/dataQualityInfo/DQ\_Quality/scope**

diagram	
annotation	documentation data quality: scope

element **MI\_Metadata/dataQualityInfo/DQ\_Quality/scope/DQ\_Scope**

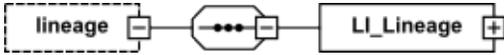
diagram	
annotation	documentation data quality: scope details

element **MI\_Metadata/dataQualityInfo/DQ\_Quality/scope/DQ\_Scope/level**

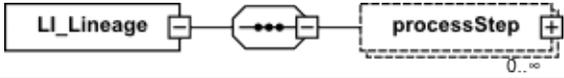
diagram	
type	<b>scopeCode</b>
facets	enumeration attribute enumeration attributeType

	enumeration	collectionHardware		
	enumeration	collectionSession		
	enumeration	<b>dataset</b>		
	enumeration	series		
	enumeration	nonGeographicDataset		
	enumeration	dimensionGroup		
	enumeration	feature		
	enumeration	featureType		
	enumeration	propertyType		
	enumeration	fieldSession		
	enumeration	software		
	enumeration	service		
	enumeration	model		
	enumeration	tile		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_ScopeCode
	codeListValue	<b>scopeCode</b>	required	value from code list
annotation	documentation	class of information to which the referencing entity applies		

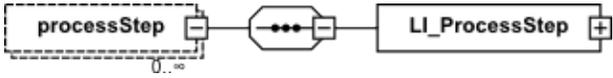
element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage**

diagram				
annotation	documentation	lineage information		

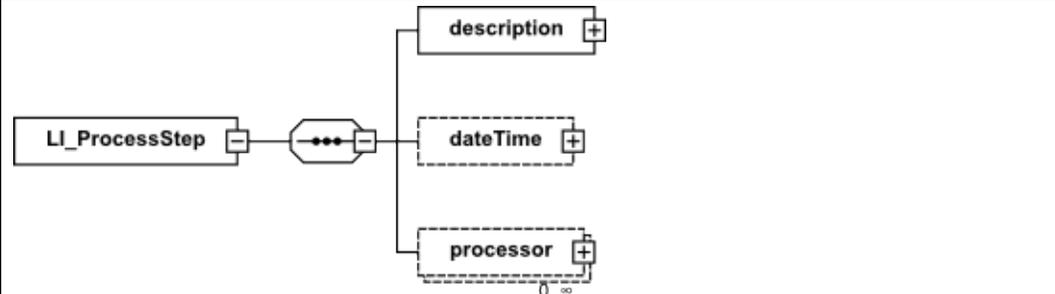
element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage**

diagram				
annotation	documentation	lineage information details		

element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage/processStep**

diagram				
annotation	documentation	lineage: processing step information		

element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage/processStep/LI\_ProcessStep**

diagram	 <p>The diagram shows the structure of the LI_ProcessStep element. It is a container element (rectangle with a minus sign) containing a sequence container (hexagon with three dots) which in turn contains three child elements: description (rectangle with a plus sign), dateTime (dashed rectangle with a plus sign), and processor (dashed rectangle with a plus sign). The processor element has a cardinality of 0..∞.</p>
annotation	documentation lineage: processing step information details

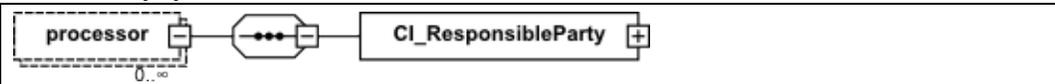
element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage/processStep/LI\_ProcessStep/description**

diagram	 <p>The diagram shows the structure of the LI_ProcessStep/description element. It is a container element (rectangle with a minus sign) containing a sequence container (hexagon with three dots) which contains a single child element: CharacterString (rectangle with a plus sign).</p>
type	xs:string
annotation	documentation processing step: description

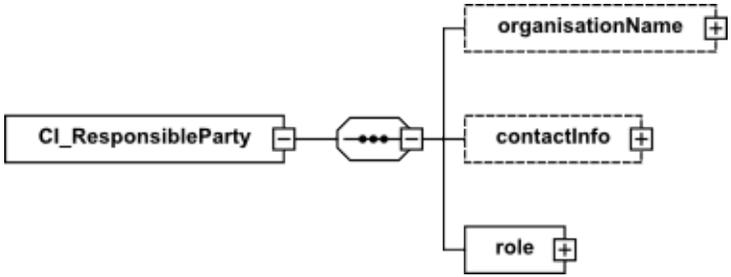
element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage/processStep/LI\_ProcessStep/dateTime**

diagram	 <p>The diagram shows the structure of the LI_ProcessStep/dateTime element. It is a container element (dashed rectangle with a minus sign) containing a sequence container (hexagon with three dots) which contains a single child element: DateTime (rectangle with a plus sign).</p>
type	xs:date
annotation	documentation processing step: time stamp

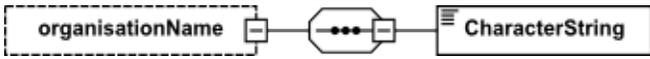
element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage/processStep/LI\_ProcessStep/processor**

diagram	 <p>The diagram shows the structure of the LI_ProcessStep/processor element. It is a container element (dashed rectangle with a minus sign) containing a sequence container (hexagon with three dots) which contains a single child element: CI_ResponsibleParty (rectangle with a plus sign). The processor element has a cardinality of 0..∞.</p>
annotation	documentation processing step: processor

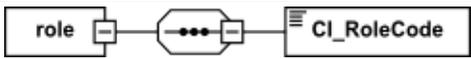
element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage/processStep/LI\_ProcessStep/processor/CI\_ResponsibleParty**

diagram	 <p>The diagram shows a central box labeled 'CI_ResponsibleParty' connected to a container with three dots. This container branches into three separate boxes: 'organisationName', 'contactInfo', and 'role'. Each of these three boxes has a '+' sign in its top right corner, indicating that each is optional.</p>
annotation	documentation processing step: responsible party

element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage/processStep/LI\_ProcessStep/processor/CI\_ResponsibleParty/organisationName**

diagram	 <p>The diagram shows a box labeled 'organisationName' connected to a container with three dots, which is then connected to a box labeled 'CharacterString'.</p>
type	<b>xs:string</b>
annotation	documentation

element **MI\_Metadata/dataQualityInfo/DQ\_Quality/lineage/LI\_Lineage/processStep/LI\_ProcessStep/processor/CI\_ResponsibleParty/role**

diagram	 <p>The diagram shows a box labeled 'role' connected to a container with three dots, which is then connected to a box labeled 'CI_RoleCode'.</p>																										
type	<b>roleCode</b>																										
facets	<table border="0"> <tr><td>enumeration</td><td>resourceProvider</td></tr> <tr><td>enumeration</td><td>custodian</td></tr> <tr><td>enumeration</td><td>owner</td></tr> <tr><td>enumeration</td><td>sponsor</td></tr> <tr><td>enumeration</td><td>user</td></tr> <tr><td>enumeration</td><td>distributor</td></tr> <tr><td>enumeration</td><td>originator</td></tr> <tr><td>enumeration</td><td>pointOfContact</td></tr> <tr><td>enumeration</td><td>principallInvestigator</td></tr> <tr><td>enumeration</td><td><b>processor</b></td></tr> <tr><td>enumeration</td><td>publisher</td></tr> <tr><td>enumeration</td><td>author</td></tr> <tr><td>enumeration</td><td>collaborator</td></tr> </table>	enumeration	resourceProvider	enumeration	custodian	enumeration	owner	enumeration	sponsor	enumeration	user	enumeration	distributor	enumeration	originator	enumeration	pointOfContact	enumeration	principallInvestigator	enumeration	<b>processor</b>	enumeration	publisher	enumeration	author	enumeration	collaborator
enumeration	resourceProvider																										
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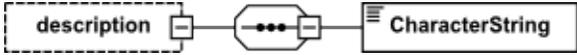
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	CI_RoleCode
	codeListValue	<b>roleCode</b>	required	value from code list
annotation	documentation	function performed by the responsible party		
diagram				
type	<b>xs:string</b>			
annotation	documentation	processing step: source description		

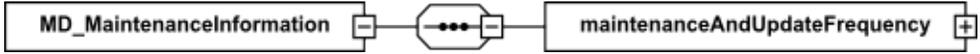
diagram				
type	<b>xs:string</b>			
annotation	documentation	software reference: title		

### 3.14 metadataMaintenance

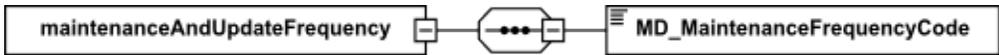
#### element MI\_Metadata/metadataMaintenance

diagram				
annotation	documentation	metadata maintenance information		

#### element MI\_Metadata/metadataMaintenance/MD\_MaintenanceInformation

diagram				
annotation	documentation	metadata maintenance details		

#### element MI\_Metadata/metadataMaintenance/MD\_MaintenanceInformation/maintenanceAndUpdateFrequency

diagram				
type	<b>maintenanceFrequencyCode</b>			
facets	enumeration	continual		
	enumeration	daily		
	enumeration	weekly		
	enumeration	fortnightly		



	enumeration	monthly		
	enumeration	quarterly		
	enumeration	biannually		
	enumeration	annually		
	enumeration	<b>asNeeded</b>		
	enumeration	irregular		
	enumeration	notPlanned		
	enumeration	unknown		
attribute	Name	Type	Use	Annotation
	codeList	<b>xs:string</b>	required	MD_MaintenanceFrequencyCode
	codeListValue	<b>maintenance FrequencyCode</b>	required	value of code list
annotation	documentation	frequency with which modifications and deletions are made to the data after it is first produced		