

ASF InSAR products

Product format specification

ASF engineering

ABSTRACT

This product format specification defines standard InSAR products generated at the Alaska Satellite Facility. It contains the definition for the HDF5 data container as well as the ISO compliant XML metadata.



Document Preparation

The document was prepared with contributions from
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Document Change Log

Revision	Date	Page	Change Description	Reason for change
1.0 Draft	02/07/2014	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 structure of the HDF5 product with its data and metadata section.

Chapter 4 defines the elements of the ISO compliant XML metadata.

2 Product packaging

The naming convention for the InSAR products follows as base name of this pattern:
AAAAA_BBBBB_CCCCC_DDDD (e.g. ALPSR_01959_05314_0380)

Component	Definition	Example
AAAA	mission	ALPSR
BBBBB	orbit number of master image	01959
CCCCC	orbit number of slave image	05315
DDDD	frame number of master/slave image	0380

All files are stored in a folder with the base name. The file extension used are:

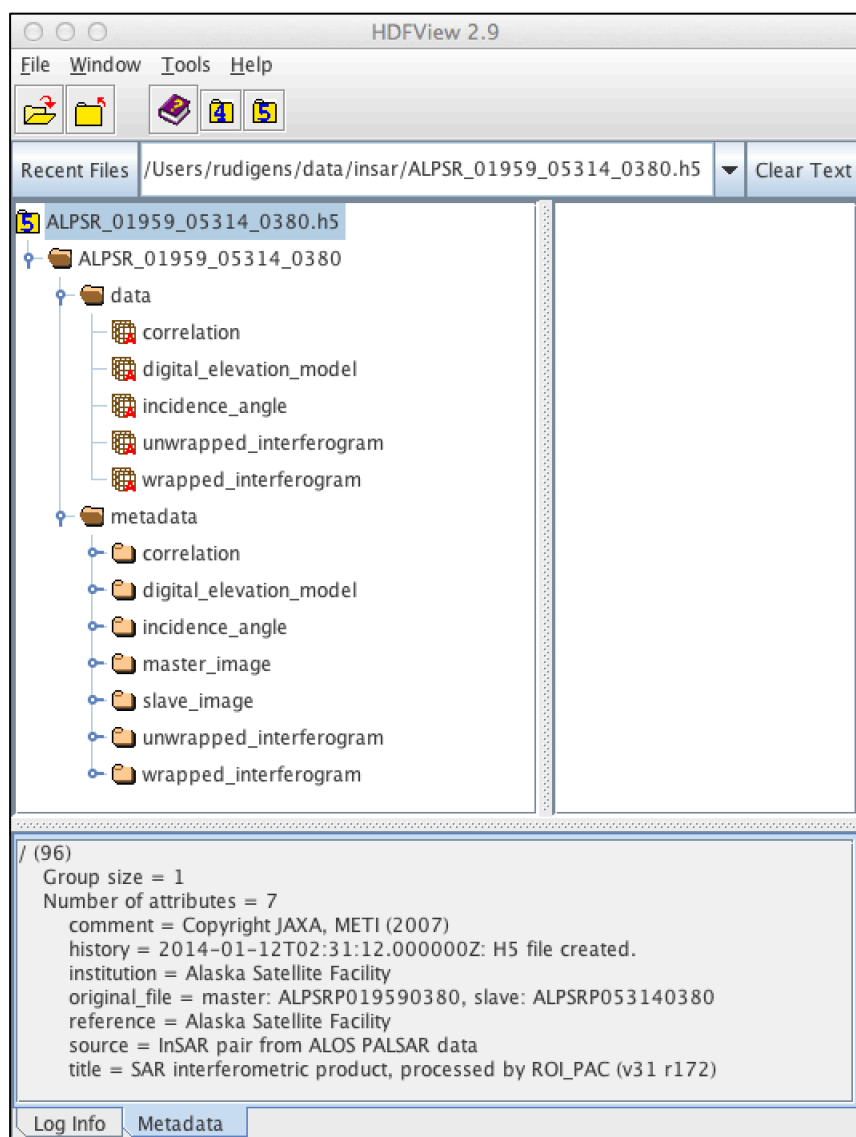
Extension	Description	Example
.h5	InSAR products (wrapped/unwrapped interferogram, correlation, digital elevation model, incidence angle) plus metadata	ALPSR_01959_05314_0380.h5
.xml	Metadata in XML format. <i>Future release will be replaced with ISO compliant metadata in XML format</i>	ALPSR_01959_05314_0380.xml <i>Future release will be ALPSR_01959_05314_0380.iso.xml</i>
.xsd	<i>Future release will include XML schema to validate the XML metadata</i>	<i>insar_iso.xsd</i>
.jpg	browse image of unwrapped interferogram in JPEG format	ALPSR_01959_05314_0380.jpg



.kmz	browse images in Google Earth format	ALPSR _01959_05314_0380.amp.kmz
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3 HDF5 InSAR product

All ASF InSAR products are stored as .h5 files using the HDF5 format data container. The data and their metadata are organized in the following structure:



The root level contains seven attributes summarizing in the contents of the file. This setup follows the NetCDF Climate and Forecast (CF) Metadata Convention.

The base folder is the same as the granule name and contains two subfolders for data and metadata.



3.1 Data

The data subfolder contains five image products: wrapped interferogram, unwrapped interferogram, correlation, incidence angle, and digital elevation model.

3.1.1 Wrapped interferogram

element	/ALPSR_01959_05314_0380/data/wrapped_interferogram	
attribute	Name	Value
	file	geo_interferogram
	source	Alaska Satellite Facility
	map_projection	geographic
	width	953
	height	1084
	start_lon	-156.143226022978 [degrees_east]
	spacing_lon	0.00092697702243 [degrees_east]
	start_lat	19.5304217134867 [degrees_north]
	spacing_lat	-0.00079228651329 [degrees_north]
	vertical_baseline	-1167.89 [m]
	vertical_baseline_rate	-5.33159e-05 [m/m]
	vertical_baseline_acceleration	1.12846e-11 [m/m ²]
	horizontal_baseline	-169.967 [m]
	horizontal_baseline_rate	-0.000399554 [m/m]
	horizontal_baseline_acceleration	0 [m/m ²]
	doppler0	0.0350854 [Hz/PRF]
	doppler1	-1.94266e-05 [Hz/(PRF*pixel)]
	doppler2	4.30631e-09 [Hz/(PRF*pixel ²)]
	slant_range_azimuth_resolution	4.67903 [m]
	baseline_method	topo
	orbit_type	HDR



3.1.2 Unwrapped interferogram

element	/ALPSR_01959_05314_0380/data/unwrapped_interferogram	
attribute	Name	Value
	file	geo_unwrapped
	source	Alaska Satellite Facility
	map_projection	geographic
	width	953
	height	1084
	start_lon	-156.143 [degrees_east]
	spacing_lon	0.000926977 [degrees_east]
	start_lat	19.5304 [degrees_north]
	spacing_lat	-0.000792287 [degrees_north]
	vertical_baseline	-1167.89 [m]
	vertical_baseline_rate	-5.33159e-05 [m/m]
	vertical_baseline_acceleration	1.12846e-11 [m/m ²]
	horizontal_baseline	-169.967 [m]
	horizontal_baseline_rate	-0.000399554 [m/m]
	horizontal_baseline_acceleration	0 [m/m ²]
	doppler0	0.0350854 [Hz/PRF]
	doppler1	-1.94266e-05 [Hz/(PRF*pixel)]
	doppler2	4.30631e-09 [Hz/(PRF*pixel ²)]
	slant_range_azimuth_resolution	4.67903 [m]
	baseline_method	topo
	orbit_type	HDR
	phase_minimum	-10.6545
	phase_maximum	3.4093
	percent_unwrapped	48.3557 [percent]



3.1.3 Correlation

element	/ALPSR_01959_05314_0380/data/correlation	
attribute	Name	Value
	file	geo_correlation
	source	Alaska Satellite Facility
	map_projection	geographic
	width	953
	height	1084
	start_lon	-156.143226022978 [degrees_east]
	spacing_lon	0.00092697702243 [degrees_east]
	start_lat	19.5304217134867 [degrees_north]
	spacing_lat	-0.00079228651329 [degrees_north]
	vertical_baseline	-1167.89 [m]
	vertical_baseline_rate	-5.33159e-05 [m/m]
	vertical_baseline_acceleration	1.12846e-11 [m/m ²]
	horizontal_baseline	-169.967 [m]
	horizontal_baseline_rate	-0.000399554 [m/m]
	horizontal_baseline_acceleration	0 [m/m ²]
	doppler0	0.0350854 [Hz/PRF]
	doppler1	-1.94266e-05 [Hz/(PRF*pixel)]
	doppler2	4.30631e-09 [Hz/(PRF*pixel ²)]
	slant_range_azimuth_resolution	4.67903 [m]
	baseline_method	topo
	orbit_type	HDR
	average_coherence	0.519758



3.1.4 Incidence angle

element	/ALPSR_01959_05314_0380/data/incidence_angle	
attribute	Name	Value
	file	geo_incidence
	source	Alaska Satellite Facility
	map_projection	geographic
	width	953
	height	1084
	start_lon	-156.143226022978 [degrees_north]
	spacing_lon	0.00092697702243 [degrees_east]
	start_lat	19.5304217134867 [degrees_north]
	spacing_lat	-0.00079228651329 [degrees_north]

3.1.5 Digital elevation model

element	/ALPSR_01959_05314_0380/data/digital_elevation_model	
attribute	Name	Value
	file	roipac.dem
	height_units	meters
	source	OpenTopo
	width	953
	height	1084
	start_lon	-156.144 [degrees_east]
	start_lat	19.5312 [degrees_north]
	spacing_lon	0.000926977 [degrees_east]
	spacing_lat	-0.000792287 [degrees_north]
	map_projection	geographic
	url	http://ot-data1.sdsc.edu:9090/otr/getdem?demtype=SRTM90&north=19.531&south=18.672&east=-155.261&west=-156.144

3.2 Metadata

In addition to providing metadata for the five data sets, metadata for the InSAR master and slave images have also been included. The metadata parameters of each image are stored as variables within the specific image folder. The data type, the definition, and the units of the metadata parameter are defined as attributes of the variable.

3.2.1 Master image

element	/ALPSR_01959_05314_0380/metadata/master_image/file
type	xs:string
definition	file name of the master image
value	IMG-HH-ALPSRP019590380-H1.0__A

element	/ALPSR_01959_05314_0380/metadata/master_image/platform
type	xs:string
definition	name of the platform
value	ALOS

element	/ALPSR_01959_05314_0380/metadata/master_image/sensor
type	xs:string
definition	name of the sensor
value	PALSAR

element	/ALPSR_01959_05314_0380/metadata/master_image/wavelength
type	xs:double
definition	wavelength of the sensor [m]
units	m
value	0.236057



element	/ALPSR_01959_05314_0380/metadata/master_image/beam_mode
type	xs:string
definition	beam mode of the sensor
value	FBS 9.9 HH

element	/ALPSR_01959_05314_0380/metadata/master_image/absolute_orbit
type	xs:int
definition	absolute orbit of the image
value	1959

element	/ALPSR_01959_05314_0380/metadata/master_image/frame
type	xs:int
definition	frame number of the image
value	380

element	/ALPSR_01959_05314_0380/metadata/master_image/flight_direction
type	xs:string
definition	flight direction of the sensor
value	ascending

element	/ALPSR_01959_05314_0380/metadata/master_image/polarization
type	xs:string
definition	polarization of the transmitted and received signal
value	HH

element	/ALPSR_01959_05314_0380/metadata/master_image/transmitted_polarization
type	xs:string
definition	polarization of transmitted signal
value	horizontal



element	/ALPSR_01959_05314_0380/metadata/master_image/received_polarization
type	xs:string
definition	polarization of received signal
value	horizontal

element	/ALPSR_01959_05314_0380/metadata/master_image/data_processing_level
type	xs:string
definition	processing level of the input data
value	raw

element	/ALPSR_01959_05314_0380/metadata/master_image/data_format
type	xs:language
definition	data format of input data
value	CEOS

element	/ALPSR_01959_05314_0380/metadata/master_image/prf
type	xs:double
definition	pulse repetition frequency [Hz]
units	Hz
value	2212.39

element	/ALPSR_01959_05314_0380/metadata/master_image/start_seconds_day
type	xs:double
definition	seconds of the day at the start of the image
units	s
value	31369.1021598702



element	/ALPSR_01959_05314_0380/metadata/master_image/start_datetime
type	xs:date
definition	UTC time at the start of the image
value	2006-06-07T08:42:49.102160Z

element	/ALPSR_01959_05314_0380/metadata/master_image/center_seconds_day
type	xs:double
definition	seconds of the day at the center of the image
units	s
value	31378.8762095513

element	/ALPSR_01959_05314_0380/metadata/master_image/center_datetime
type	xs:date
definition	UTC time at the center of the image
value	2006-06-07T08:42:58.876210Z

element	/ALPSR_01959_05314_0380/metadata/master_image/end_seconds_day
type	xs:double
definition	seconds of the day at the end of the image
units	s
value	31388.6502592324

element	/ALPSR_01959_05314_0380/metadata/master_image/end_datetime
type	xs:date
definition	UTC time at the end of the image
value	2006-06-07T08:43:08.650259Z



element	/ALPSR_01959_05314_0380/metadata/master_image/height
type	xs:double
definition	height of the platform at the image center [m]
units	m
value	0.6979368805E+06

element	/ALPSR_01959_05314_0380/metadata/master_image/peg_latitude
type	xs:double
definition	latitude of the peg point [degrees]
units	degrees_north
value	18.9534535

element	/ALPSR_01959_05314_0380/metadata/master_image/peg_longitude
type	xs:double
definition	longitude of the peg point [degrees]
units	degrees_east
value	-156.8000418

element	/ALPSR_01959_05314_0380/metadata/master_image/peg_heading
type	xs:double
definition	heading of the peg point [degrees]
units	degrees_north
value	-12.3167138

element	/ALPSR_01959_05314_0380/metadata/master_image/earth_radius
type	xs:double
definition	earth radius at the image center [m]
units	m
value	6343853.3172445

element	/ALPSR_01959_05314_0380/metadata/master_image/data_source
type	xs:string
definition	source providing the data
value	Alaska Satellite Facility

element	/ALPSR_01959_05314_0380/metadata/master_image/faraday_rotation
type	xs:double
definition	Faraday rotation [degrees]
units	degrees
value	2.16889

3.2.2 Slave image

element	/ALPSR_01959_05314_0380/metadata/slave_image/file
type	xs:string
definition	file name of the slave image
value	IMG-HH-ALPSRP053140380-H1.0__A

element	/ALPSR_01959_05314_0380/metadata/slave_image/platform
type	xs:string
definition	name of the platform
value	ALOS

element	/ALPSR_01959_05314_0380/metadata/slave_image/sensor
type	xs:string
definition	name of the sensor
value	PALSAR



element	/ALPSR_01959_05314_0380/metadata/slave_image/wavelength
type	xs:double
definition	wavelength of the sensor [m]
units	m
value	0.236057

element	/ALPSR_01959_05314_0380/metadata/slave_image/beam_mode
type	xs:string
definition	beam mode of the sensor
value	FBS 9.9 HH

element	/ALPSR_01959_05314_0380/metadata/slave_image/absolute_orbit
type	xs:int
definition	absolute orbit of the image
value	5314

element	/ALPSR_01959_05314_0380/metadata/slave_image/frame
type	xs:int
definition	frame number of the image
value	380

element	/ALPSR_01959_05314_0380/metadata/slave_image/flight_direction
type	xs:string
definition	flight direction of the sensor
value	ascending

element	/ALPSR_01959_05314_0380/metadata/slave_image/polarization
type	xs:string
definition	polarization of the transmitted and received signal
value	HH

element	/ALPSR_01959_05314_0380/metadata/slave_image/transmitted_polarization
type	xs:string
definition	polarization of transmitted signal
value	horizontal

element	/ALPSR_01959_05314_0380/metadata/slave_image/received_polarization
type	xs:string
definition	polarization of received signal
value	horizontal

element	/ALPSR_01959_05314_0380/metadata/slave_image/data_processing_level
type	xs:string
definition	processing level of the input data
value	raw

element	/ALPSR_01959_05314_0380/metadata/slave_image/data_format
type	xs:double
definition	data format of input data
value	CEOS

element	/ALPSR_01959_05314_0380/metadata/slave_image/prf
type	xs:double
definition	pulse repetition frequency [Hz]
units	Hz
value	2217.29



element	/ALPSR_01959_05314_0380/metadata/slave_image/start_seconds_day
type	xs:double
definition	seconds of the day at the start of the image
units	s
value	31529.0488300339

element	/ALPSR_01959_05314_0380/metadata/slave_image/start_datetime
type	xs:date
definition	UTC time at the start of the image
value	2007-01-23T08:45:29.048830Z

element	/ALPSR_01959_05314_0380/metadata/slave_image/center_seconds_day
type	xs:double
definition	seconds of the day at the center of the image
units	s
value	31538.7994495951

element	/ALPSR_01959_05314_0380/metadata/slave_image/center_datetime
type	xs:date
definition	UTC time at the center of the image
value	2007-01-23T08:45:38.799450Z

element	/ALPSR_01959_05314_0380/metadata/slave_image/end_seconds_day
type	xs:double
definition	seconds of the day at the end of the image
units	s
value	31548.5500691563

element	/ALPSR_01959_05314_0380/metadata/slave_image/end_datetime
type	xs:date
definition	UTC time at the end of the image
value	2007-01-23T08:45:48.550069Z

element	/ALPSR_01959_05314_0380/metadata/slave_image/height
type	xs:double
definition	height of the platform at the image center [m]
units	m
value	0.6967525577E+06

element	/ALPSR_01959_05314_0380/metadata/slave_image/peg_latitude
type	xs:double
definition	latitude of the peg point [degrees]
units	degrees_north
value	18.9533033

element	/ALPSR_01959_05314_0380/metadata/slave_image/peg_longitude
type	xs:double
definition	longitude of the peg point [degrees]
units	degrees_east
value	-156.7982264

element	/ALPSR_01959_05314_0380/metadata/slave_image/peg_heading
type	xs:double
definition	heading of the peg point [degrees]
units	degrees_north
value	-12.2927112



element	/ALPSR_01959_05314_0380/metadata/slave_image/earth_radius
type	xs:double
definition	earth radius at the image center [m]
units	m
value	6343847.43694792

element	/ALPSR_01959_05314_0380/metadata/slave_image/data_source
type	xs:string
definition	source providing the data
value	Alaska Satellite Facility

element	/ALPSR_01959_05314_0380/metadata/slave_image/faraday_rotation
type	xs:double
definition	Faraday rotation [degrees]
units	degrees
value	0.921244

3.2.3 Wrapped interferogram

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/file
type	xs:string
definition	file name of wrapped interferogram
value	geo_interferogram

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/source
type	xs:string
definition	source of the data
value	Alaska Satellite Facility



element	/ALPSR_01959_05314_0380/.../wrapped_interferogram/map_projection
type	xs:string
definition	map projection of the data
value	geographic

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/width
type	xs:int
definition	width of the image
value	953

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/height
type	xs:int
definition	height of the image
value	1084

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/start_lon
type	xs:double
definition	starting longitude of the image [degrees]
units	degrees_east
value	-156.143226022978

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/spacing_lon
type	xs:double
definition	pixel spacing in longitude direction [degrees]
units	degrees_east
value	0.00092697702243



element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/start_lat
type	xs:double
definition	starting latitude of the image [degrees]
units	degrees_north
value	19.5304217134867

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/spacing_lat
type	xs:double
definition	pixel spacing in latitude direction [degrees]
units	degrees_north
value	-0.00079228651329

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/ vertical_baseline
type	xs:double
definition	vertical baseline component [m]
units	m
value	-1167.89

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/ vertical_baseline_rate
type	xs:double
definition	vertical baseline velocity [m/m]
units	m/m
value	-5.33159e-05



element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/ vertical_baseline_acceleration
type	xs:double
definition	vertical baseline acceleration [m/m ²]
units	m/m ²
value	1.12846e-11

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/ horizontal_baseline
type	xs:double
definition	horizontal baseline component [m]
units	m
value	-169.967

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/ horizontal_baseline_rate
type	xs:double
definition	horizontal baseline velocity [m/m]
units	m/m
value	-0.000399554

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/ horizontal_baseline_acceleration
type	xs:double
definition	horizontal baseline acceleration [m/m ²]
units	m/m ²
value	0



element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/doppler0
type	xs:double
definition	constant Doppler term [Hz/PRF]
units	Hz/PRF
value	0.0350854

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/doppler1
type	xs:double
definition	linear Doppler term [Hz/(PRF*pixel)]
units	Hz/(PRF*pixel)
value	-1.94266e-05

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/doppler2
type	xs:double
definition	quadratic Doppler term [Hz/(PRF*pixel ²)]
units	Hz/(PRF*pixel ²)
value	4.30631e-09

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/ slant_range_azimuth_resolution
type	xs:double
definition	azimuth resolution in slant range [m]
units	m
value	4.67903

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/ baseline_method
type	xs:string
definition	baseline refinement using unwrapped phase and topography
value	topo

element	/ALPSR_01959_05314_0380/metadata/wrapped_interferogram/orbit_type
type	xs:string
definition	orbit type: HDR (header information) or PRC (precision state vectors)
value	HDR

3.2.4 Unwrapped interferogram

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/file
type	xs:string
definition	file name of unwrapped interferogram
value	geo_unwrapped

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/source
type	xs:string
definition	source of the data
value	Alaska Satellite Facility

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ map_projection
type	xs:string
definition	map projection of the data
value	geographic

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/width
type	xs:int
definition	width of the image
value	953



element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/height
type	xs:int
definition	height of the image
value	1084

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/start_lon
type	xs:double
definition	starting longitude of the image [degrees]
units	degrees_east
value	-156.143

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/spacing_lon
type	xs:double
definition	pixel spacing in longitude direction [degrees]
units	degrees_east
value	0.000926977

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/start_lat
type	xs:double
definition	starting latitude of the image [degrees]
units	degrees_north
value	19.5304

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/spacing_lat
type	xs:double
definition	pixel spacing in latitude direction [degrees]
units	degrees_north
value	-0.000792287



element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ vertical_baseline
type	xs:double
definition	vertical baseline component [m]
units	m
value	-1167.89

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ vertical_baseline_rate
type	xs:double
definition	vertical baseline velocity [m/m]
units	m/m
value	-5.33159e-05

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ vertical_baseline_acceleration
type	xs:double
definition	vertical baseline acceleration [m/m ²]
units	m/m ²
value	1.12846e-11

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ horizontal_baseline
type	xs:double
definition	horizontal baseline component [m]
units	m
value	-169.967



element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/horizontal_baseline_rate
type	xs:double
definition	horizontal baseline velocity [m/m]
units	m/m
value	-0.000399554

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/horizontal_baseline_acceleration
type	xs:double
definition	horizontal baseline acceleration [m/m ²]
units	m/m ²
value	0

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/doppler0
type	xs:double
definition	constant Doppler term [Hz/PRF]
units	Hz/PRF
value	0.0350854

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/doppler1
type	xs:double
definition	linear Doppler term [Hz/(PRF*pixel)]
units	Hz/(PRF*pixel)
value	-1.94266e-05



element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/doppler2
type	xs:double
definition	quadratic Doppler term [Hz/(PRF*pixel ²)]
units	Hz/(PRF*pixel ²)
value	4.30631e-09

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ slant_range_azimuth_resolution
type	xs:double
definition	azimuth resolution in slant range [m]
units	m
value	4.67903

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ baseline_method
type	xs:string
definition	baseline refinement using unwrapped phase and topography
value	topo

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/orbit_type
type	xs:string
definition	orbit type: HDR (header information) or PRC (precision state vectors)
value	HDR

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ phase_minimum
type	xs:double
definition	minimum phase value
value	-10.6545

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ phase_maximum
type	xs:double
definition	maximum phase value
value	3.4093

element	/ALPSR_01959_05314_0380/metadata/unwrapped_interferogram/ percent_unwrapped
type	xs:double
definition	percentage of unwrapped phase
units	percent
value	48.3557

3.2.5 Correlation

element	/ALPSR_01959_05314_0380/metadata/correlation/file
type	xs:string
definition	file name of correlation image
value	geo_correlation

element	/ALPSR_01959_05314_0380/metadata/correlation/source
type	xs:string
definition	source of the data
value	Alaska Satellite Facility

element	/ALPSR_01959_05314_0380/metadata/correlation/map_projection
type	xs:string
definition	map projection of the data
value	geographic



element	/ALPSR_01959_05314_0380/metadata/correlation/width
type	xs:int
definition	width of the image
value	953

element	/ALPSR_01959_05314_0380/metadata/correlation/height
type	xs:int
definition	height of the image
value	1084

element	/ALPSR_01959_05314_0380/metadata/correlation/start_lon
type	xs:double
definition	starting longitude of the image [degrees]
units	degrees_east
value	-156.143226022978

element	/ALPSR_01959_05314_0380/metadata/correlation/spacing_lon
type	xs:double
definition	pixel spacing in longitude direction [degrees]
units	degrees_east
value	0.00092697702243

element	/ALPSR_01959_05314_0380/metadata/correlation/start_lat
type	xs:double
definition	starting latitude of the image [degrees]
units	degrees_north
value	19.5304217134867



element	/ALPSR_01959_05314_0380/metadata/correlation/spacing_lat
type	xs:double
definition	pixel spacing in latitude direction [degrees]
units	degrees_north
value	-0.00079228651329

element	/ALPSR_01959_05314_0380/metadata/correlation/vertical_baseline
type	xs:double
definition	vertical baseline component [m]
units	m
value	-1167.89

element	/ALPSR_01959_05314_0380/metadata/correlation/vertical_baseline_rate
type	xs:double
definition	vertical baseline velocity [m/m]
units	m/m
value	5.33159e-05

element	/ALPSR_01959_05314_0380/metadata/correlation/ vertical_baseline_acceleration
type	xs:double
definition	vertical baseline acceleration [m/m ²]
units	m/m ²
value	1.12846e-11

element	/ALPSR_01959_05314_0380/metadata/correlation/horizontal_baseline
type	xs:double
definition	horizontal baseline component [m]
units	m
value	-169.967



element	/ALPSR_01959_05314_0380/metadata/correlation/horizontal_baseline_rate
type	xs:double
definition	horizontal baseline velocity [m/m]
units	m/m
value	-0.000399554

element	/ALPSR_01959_05314_0380/metadata/correlation/ horizontal_baseline_acceleration
type	xs:double
definition	horizontal baseline acceleration [m/m ²]
units	m/m ²
value	0

element	/ALPSR_01959_05314_0380/metadata/correlation/doppler0
type	xs:double
definition	constant Doppler term [Hz/PRF]
units	Hz/PRF
value	0.0350854

element	/ALPSR_01959_05314_0380/metadata/correlation/doppler1
type	xs:double
definition	linear Doppler term [Hz/(PRF*pixel)]
units	Hz/(PRF*pixel)
value	-1.94266e-05



element	/ALPSR_01959_05314_0380/metadata/correlation/doppler2
type	xs:double
definition	quadratic Doppler term [Hz/(PRF*pixel ²)]
units	Hz/(PRF*pixel ²)
value	4.30631e-09

element	/ALPSR_01959_05314_0380/metadata/correlation/ slant_range_azimuth_resolution
type	xs:double
definition	azimuth resolution in slant range [m]
units	m
value	4.67903

element	/ALPSR_01959_05314_0380/metadata/correlation/baseline_method
type	xs:string
definition	baseline refinement using unwrapped phase and topography
value	topo

element	/ALPSR_01959_05314_0380/metadata/correlation/orbit_type
type	xs:string
definition	orbit type: HDR (header information) or PRC (precision state vectors)
value	HDR

element	/ALPSR_01959_05314_0380/metadata/correlation/average_coherence
type	xs:double
definition	average coherence
value	0.519758



3.2.6 Incidence angle

element	/ALPSR_01959_05314_0380/metadata/incidence_angle/file
type	xs:string
definition	file name of incidence angle map
value	geo_incidence

element	/ALPSR_01959_05314_0380/metadata/incidence_angle/source
type	xs:string
definition	source of the data
value	Alaska Satellite Facility

element	/ALPSR_01959_05314_0380/metadata/incidence_angle/map_projection
type	xs:string
definition	map projection of the data
value	geographic

element	/ALPSR_01959_05314_0380/metadata/incidence_angle/width
type	xs:int
definition	width of the image
value	953

element	/ALPSR_01959_05314_0380/metadata/incidence_angle/height
type	xs:int
definition	height of the image
value	1084



element	/ALPSR_01959_05314_0380/metadata/incidence_angle/start_lon
type	xs:double
definition	starting longitude of the image [degrees]
units	degrees_east
value	-156.143226022978

element	/ALPSR_01959_05314_0380/metadata/incidence_angle/spacing_lon
type	xs:double
definition	pixel spacing in longitude direction [degrees]
units	degrees_east
value	0.00092697702243

element	/ALPSR_01959_05314_0380/metadata/incidence_angle/start_lat
type	xs:double
definition	starting latitude of the image [degrees]
units	degrees_north
value	19.5304217134867

element	/ALPSR_01959_05314_0380/metadata/incidence_angle/spacing_lat
type	xs:double
definition	pixel spacing in latitude direction [degrees]
units	degrees_north
value	-0.00079228651329

3.2.7 Digital elevation model

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/file
type	xs:string
definition	file name of digital elevation model
value	roipac.dem

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/height_units
type	xs:string
definition	units of the height values
value	meters

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/source
type	xs:string
definition	source of the data
value	OpenTopo

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/width
type	xs:int
definition	width of the image
value	953

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/height
type	xs:int
definition	height of the image
value	1084



element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/start_lon
type	xs:double
definition	starting longitude of the image [degrees]
units	degrees_east
value	-156.144

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/start_lat
type	xs:double
definition	starting latitude of the image [degrees]
units	degrees_north
value	19.5312

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/spacing_lon
type	xs:double
definition	pixel spacing in longitude direction [degrees]
units	degrees_east
value	0.000926977

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/spacing_lat
type	xs:double
definition	pixel spacing in latitude direction [degrees]
units	degrees_north
value	-0.000792287

element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/ map_projection
type	xs:string
definition	map projection of the data
value	geographic



element	/ALPSR_01959_05314_0380/metadata/digital_elevation_model/url
type	xs:string
definition	URL used to download digital elevation model
value	http://ot-data1.sdsc.edu:9090/otr/getdem?demtype=SRTM90&north=19.531&south=18.672&east=-155.261&west=-156.144

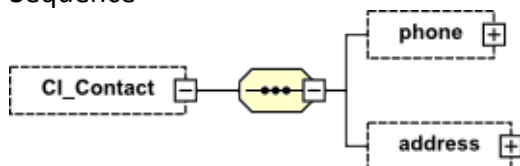
4 ISO XML metadata

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

```
<?xml version="1.0" encoding="utf-8"?>
<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/operations"
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"
xsi:noNamespaceSchemaLocation="schema.no_ns.xsd">
  <composedOf>
    <DS_DataSet>
      <has>
        <MI_Metadata>
          <fileIdentifier>
            <CharacterString>ALPSR_25203_25874_3210.h5</CharacterString>
          </fileIdentifier>
          <language>
            <CharacterString>eng</CharacterString>
          </language>
          <characterSet>
            <MD_CharacterSetCode
codeList="http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.xml#
MD_CharacterSetCode" codeListValue="utf8">utf8</MD_CharacterSetCode>
          </characterSet>
          <hierarchyLevel>
            <MD_ScopeCode
codeList="http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.xml#
MD_ScopeCode" codeListValue="dataset">dataset</MD_ScopeCode>
          </hierarchyLevel>
        </MI_Metadata>
      </has>
    </DS_DataSet>
  </composedOf>
</DS_Series>
```

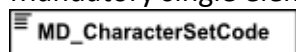
The graphical representation contains a number of compositors and components:

- Sequence



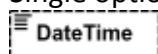
A sequence requires all child elements to present in the given order, i.e. in this case the **phone** component needs to be in XML file before the **address** component.

- Mandatory single element



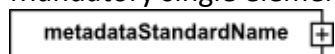
An element with solid border indicates that the element is required. The absence of a number range implies a minimum and maximum occurrence of the element of 1.

- Single optional element



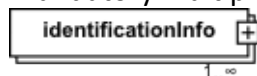
An element with dashed border indicates that the element is optional. The absence of a number range implies a minimum occurrence of 0 and a maximum occurrence of 1.

- Mandatory single element containing children



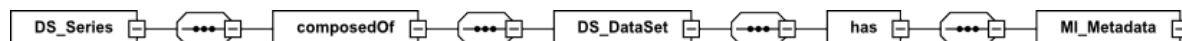
The solid border indicates a mandatory element. The plus sign means complex content, i.e. it contains at least one child element.

- Mandatory multiple element containing child elements



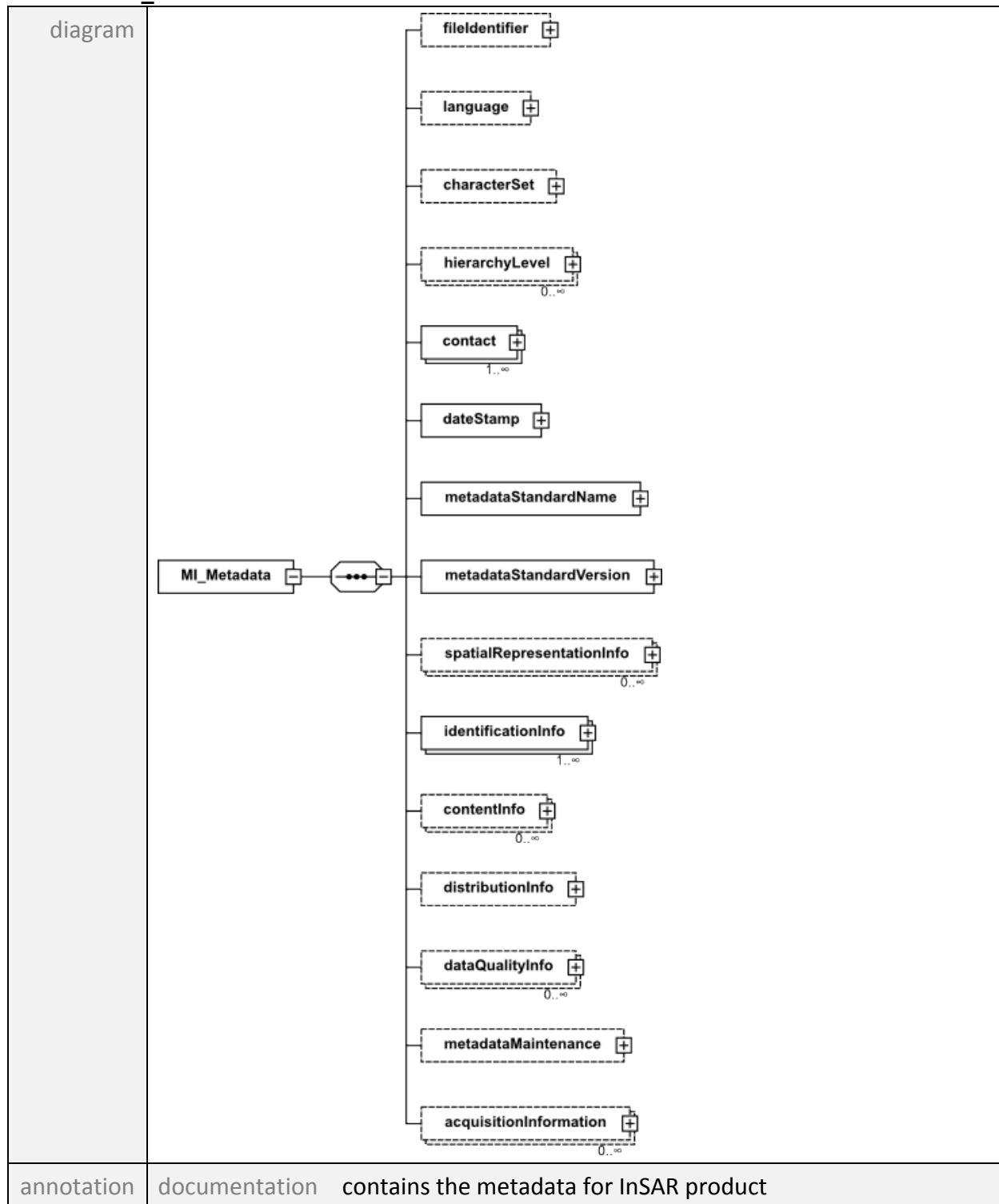
The solid border indicates a mandatory element. The plus sign means complex content, i.e. it contains at least one child element. The number range 1..∞ indicates a minimum occurrence of 1 and an unbounded maximum occurrence.

The structure is outlined in more detail below.



4.1 MI_Metadata

element **MI_Metadata**



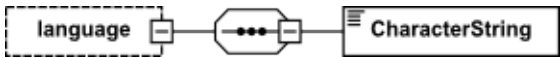
4.1.1 fileIdentifier

element MI_Metadata/fileIdentifier

diagram	
type	xs:string
annotation	documentation file name of the InSAR product

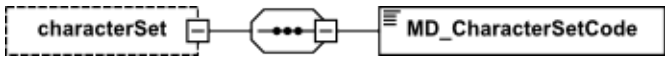
4.1.2 language

element MI_Metadata/language

diagram	
type	xs:string
annotation	documentation language of the metadata record

4.1.3 characterSet

element MI_Metadata/characterSet

diagram																											
type	characterSetCode																										
facets	<table> <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>utf8</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	utf8	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	utf8																										
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	xs:string	required	MD_CharacterSetCode
	codeListValue	characterSetCode	required	value from code list
annotation	documentation	name of the character coding standard used in the resource		

4.1.4 hierarchyLevel

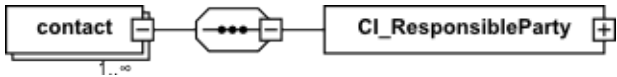
element **MI_Metadata/hierarchyLevel**

diagram			
type	scopeCode		
facets	enumeration	attribute	
	enumeration	attributeType	
	enumeration	collectionHardware	
	enumeration	collectionSession	
	enumeration	dataset	
	enumeration	series	
	enumeration	nonGeographicDataset	

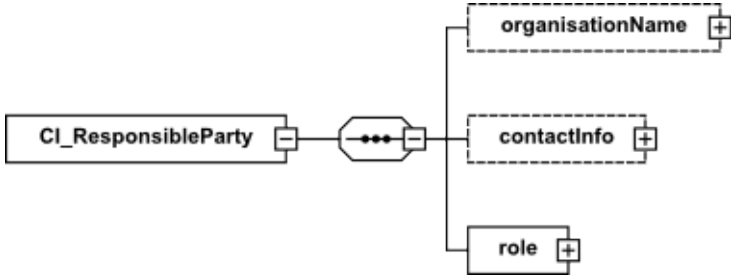
	enumeration	dimensionGroup		
	enumeration	feature		
	enumeration	featureType		
	enumeration	propertyType		
	enumeration	fieldSession		
	enumeration	software		
	enumeration	service		
	enumeration	model		
	enumeration	tile		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	MD_ScopeCode
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

4.1.5 contact

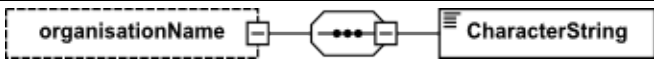
element **MI_Metadata/contact**

diagram				
annotation	documentation	contact information		

element **MI_Metadata/contact/CI_ResponsibleParty**

diagram				
annotation	documentation	responsible party details		

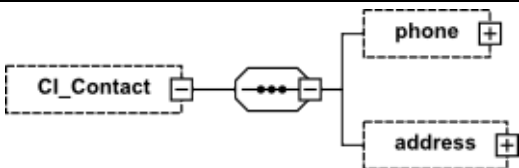
element **MI_Metadata/contact/CI_ResponsibleParty/organisationName**

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

element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo**

diagram	
annotation	documentation contact information

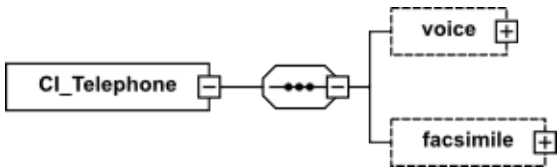
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact**

diagram				
attribute	Name	Type	Use	Annotation
	id	xs:string	required	ID for ASF contact information
annotation	documentation	contact information details		

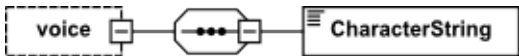
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/phone**

diagram	
annotation	documentation contact phone information

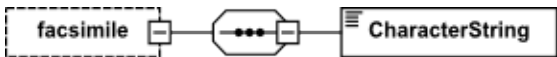
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/phone/CI_Telephone**

diagram				
annotation	documentation	contact telephone information details		

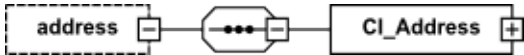
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/phone/CI_Telephone/voice**

diagram	
type	xs:string
annotation	documentation contact phone number

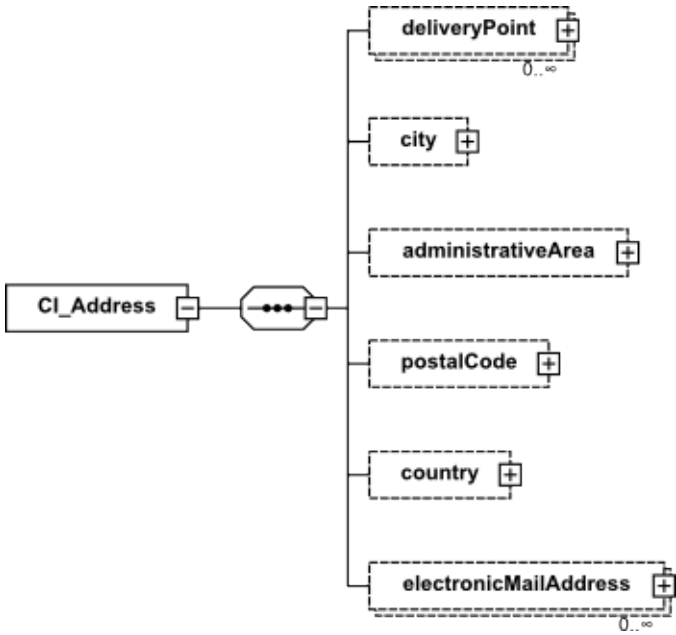
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/phone/CI_Telephone/facsimile**

diagram	
type	xs:string
annotation	documentation contact fax number

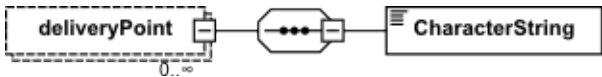
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/address**

diagram	
annotation	documentation contract address

element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address**

diagram	
annotation	documentation contact address details

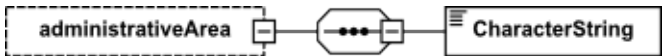
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/deliveryPoint**

diagram	
type	xs:string
annotation	documentation contact address: street

element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/city**

diagram	
type	xs:string
annotation	documentation contact address: city

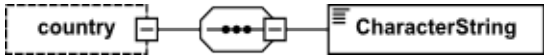
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/administrativeArea**

diagram	
type	xs:string
annotation	documentation contact address: administrative area

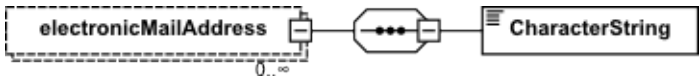
element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/postalCode**

diagram	
type	xs:string
annotation	documentation contact address: postal code

element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/country**

diagram	
type	xs:string
annotation	documentation contact address: country

element **MI_Metadata/contact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/electronicMailAddress**

diagram	
type	xs:string
annotation	documentation contact address: email address

element **MI_Metadata/contact/CI_ResponsibleParty/role**

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

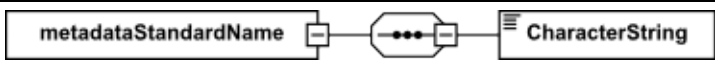
4.1.6 dateStamp

element **MI_Metadata/dateStamp**

diagram	
type	xs:date
annotation	documentation date that the metadata was last updated

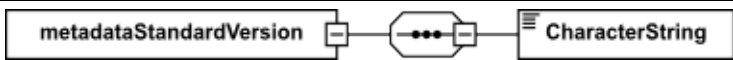
4.1.7 metadataStandardName

element **MI_Metadata/metadataStandardName**

diagram	
type	xs:string
annotation	documentation name of the metadata standard

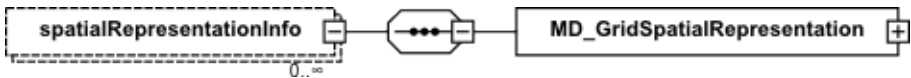
4.1.8 metadataStandardVersion

element **MI_Metadata/metadataStandardVersion**

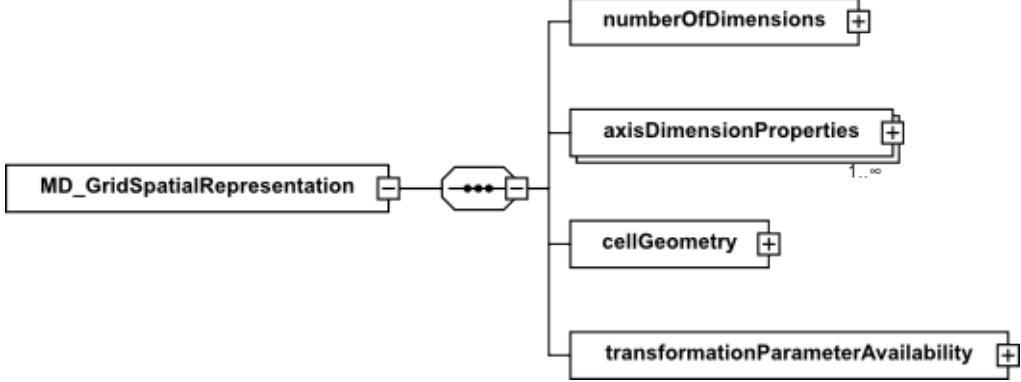
diagram	
type	xs:string
annotation	documentation version of the metadata standard

4.1.9 spatialRepresentationInfo

element **MI_Metadata/spatialRepresentationInfo**

diagram	
annotation	documentation spatial representation information

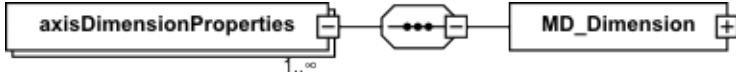
element **MI_Metadata/spatialRepresentationInfo/MD_GridSpatialRepresentation**

diagram	 The diagram shows the structure of the MD_GridSpatialRepresentation element. It is a container element (rectangle with a small square at the bottom-left) that contains a sequence of four child elements: numberOfDimensions, axisDimensionProperties, cellGeometry, and transformationParameterAvailability. The axisDimensionProperties element is shown with a multiplicity of 1..∞. Each child element is represented by a rectangle with a small square at the bottom-left and a small circle with a plus sign at the bottom-right.
annotation	documentation grid spatial representation details

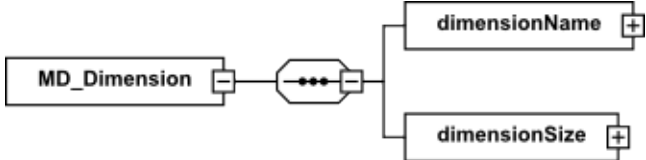
element **MI_Metadata/spatialRepresentationInfo/MD_GridSpatialRepresentation/numberOfDimensions**

diagram	 The diagram shows the structure of the numberOfDimensions element. It is a container element (rectangle with a small square at the bottom-left) that contains a sequence of one child element: Integer. The Integer element is represented by a rectangle with a small square at the bottom-left and a small circle with a plus sign at the bottom-right.
type	xs:int
annotation	documentation number of dimensions

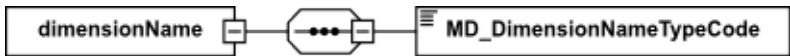
element **MI_Metadata/spatialRepresentationInfo/MD_GridSpatialRepresentation/axisDimensionProperties**

diagram	 The diagram shows the structure of the axisDimensionProperties element. It is a container element (rectangle with a small square at the bottom-left) that contains a sequence of one or more child elements: MD_Dimension. The MD_Dimension element is represented by a rectangle with a small square at the bottom-left and a small circle with a plus sign at the bottom-right. The multiplicity of the child element is 1..∞.
annotation	documentation axis dimension properties

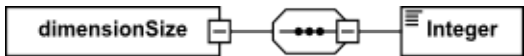
element **MI_Metadata/spatialRepresentationInfo/MD_GridSpatialRepresentation/axisDimensionProperties/MD_Dimension**

diagram	 The diagram shows the structure of the MD_Dimension element. It is a container element (rectangle with a small square at the bottom-left) that contains a sequence of two child elements: dimensionName and dimensionSize. Both child elements are represented by rectangles with a small square at the bottom-left and a small circle with a plus sign at the bottom-right.
annotation	documentation dimension details

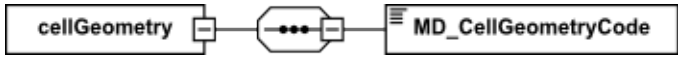
element **MI_Metadata/spatialRepresentationInfo/MD_GridSpatialRepresentation/axisDimensionProperties/MD_Dimension/dimensionName**

diagram				
type	dimensionNameTypeCode			
facets	enumeration	row		
	enumeration	column		
	enumeration	vertical		
	enumeration	track		
	enumeration	crossTrack		
	enumeration	line		
	enumeration	sample		
	enumeration	time		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	MD_DimensionNameTypeCode
	codeListValue	dimensionName TypeCode	required	value of code list
annotation	documentation	name of the dimension		

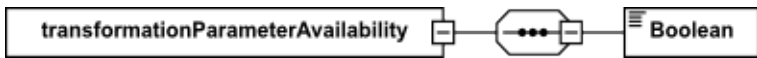
element **MI_Metadata/spatialRepresentationInfo/MD_GridSpatialRepresentation/axisProperties/MD_Dimension/dimensionSize**

diagram				
type	xs:int			
annotation	documentation	size of the dimension		

element **MI_Metadata/spatialRepresentationInfo/MD_GridSpatialRepresentation/
cellGeometry**

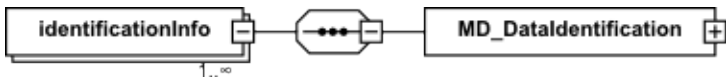
diagram				
type	cellGeometryCode			
facets	enumeration	point		
	enumeration	area		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	MD_CellGeometryCode
	codeListValue	cellGeometryCode	required	value of code list
annotation	documentation	cell geometry		

element **MI_Metadata/spatialRepresentationInfo/MD_GridSpatialRepresentation/
transformationParameterAvailability**

diagram				
type	xs:Boolean			
annotation	documentation	transformation parameter availability		

4.1.10 identificationInfo

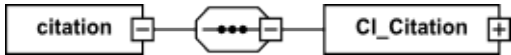
element **MI_Metadata/identificationInfo**

diagram				
annotation	documentation	dataset identification information		

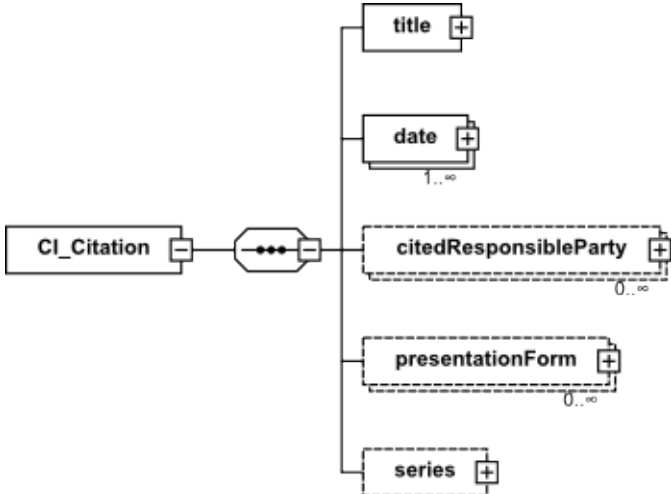
element **MI_Metadata/identificationInfo/MD_DataIdentification**

diagram	
annotation	documentation data identification details

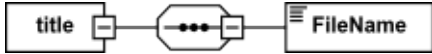
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation**

diagram	
annotation	documentation data citation

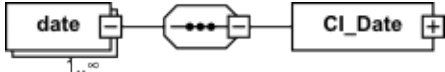
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation**

diagram	
annotation	documentation data citation details

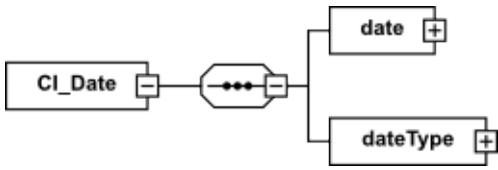
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/title**

diagram	
type	xs:string
annotation	documentation data citation: title

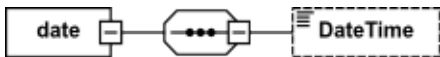
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/date**

diagram	
annotation	documentation data citation: date

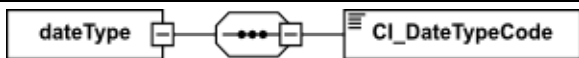
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/**
date/CI_Date

diagram	
annotation	documentation data citation: date details

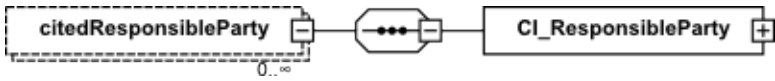
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/**
date/CI_Date/date

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

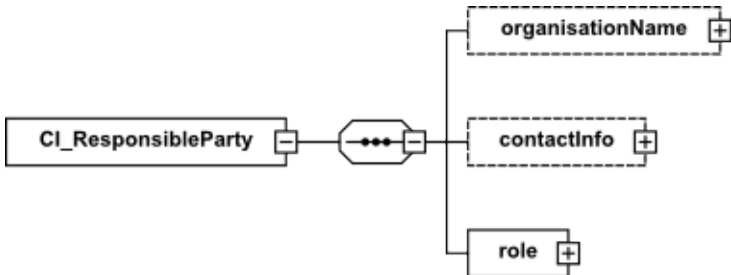
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/**
date/CI_Date/dateType

diagram				
type	dateTypeCode			
facets	enumeration	creation		
	enumeration	publication		
	enumeration	revision		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	CI_DateTypeCode
	codeListValue	dataTypeCode	required	value of code list
annotation	documentation	type of date stamp		

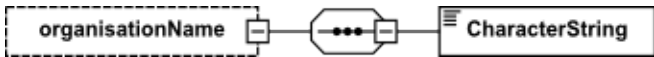
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/**
citedResponsibleParty

diagram	
annotation	documentation data citation: cited responsible party

element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty**

diagram	 The diagram shows the structure of the CI_ResponsibleParty element. It is a complex type containing three optional elements: organisationName, contactInfo, and role. Each element is represented by a dashed box with a '+' sign in the top right corner, indicating it is optional. The elements are connected to a central connector box (a rectangle with three dots) which is then connected to the main CI_ResponsibleParty element box (a rectangle with a '-' sign in the top right corner).
annotation	documentation data citation: cited responsible party details

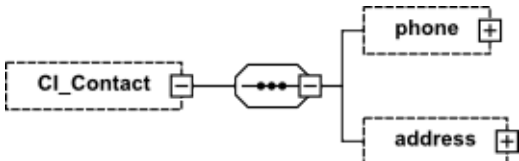
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/organisationName**

diagram	 The diagram shows the structure of the organisationName element. It is a simple type containing a CharacterString element, represented by a solid box with a '+' sign in the top right corner. The element is connected to a central connector box (a rectangle with three dots) which is then connected to the main organisationName element box (a dashed box with a '-' sign in the top right corner).
type	xs:string
annotation	documentation name of the responsible organization

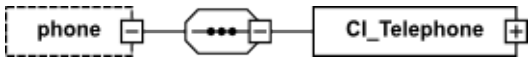
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo**

diagram	 The diagram shows the structure of the contactInfo element. It is a complex type containing a CI_Contact element, represented by a dashed box with a '+' sign in the top right corner. The element is connected to a central connector box (a rectangle with three dots) which is then connected to the main contactInfo element box (a dashed box with a '-' sign in the top right corner).
annotation	documentation contact information

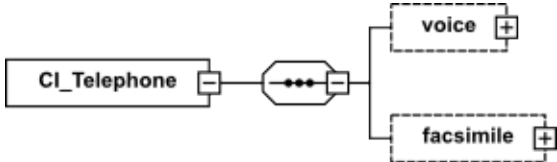
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact**

diagram	 The diagram shows the structure of the CI_Contact element. It is a complex type containing two optional elements: phone and address. Each element is represented by a dashed box with a '+' sign in the top right corner, indicating it is optional. The elements are connected to a central connector box (a rectangle with three dots) which is then connected to the main CI_Contact element box (a dashed box with a '-' sign in the top right corner).
annotation	documentation contact information details

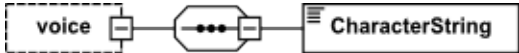
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/phone**

diagram	 The diagram shows the structure of the phone element. It is a simple type containing a CI_Telephone element, represented by a solid box with a '+' sign in the top right corner. The element is connected to a central connector box (a rectangle with three dots) which is then connected to the main phone element box (a dashed box with a '-' sign in the top right corner).
annotation	documentation contact phone information

element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/phone/
CI_Telephone**

diagram	 The diagram shows a box labeled 'CI_Telephone' connected to a central octagonal connector with three dots. This connector is then connected to two separate boxes: 'voice' and 'facsimile'. Both 'voice' and 'facsimile' boxes have a small '+' symbol in the top right corner.
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	 The diagram shows a dashed box labeled 'voice' connected to a central octagonal connector with three dots. This connector is then connected to a box labeled 'CharacterString'.
type	xs:string
annotation	documentation contact phone number

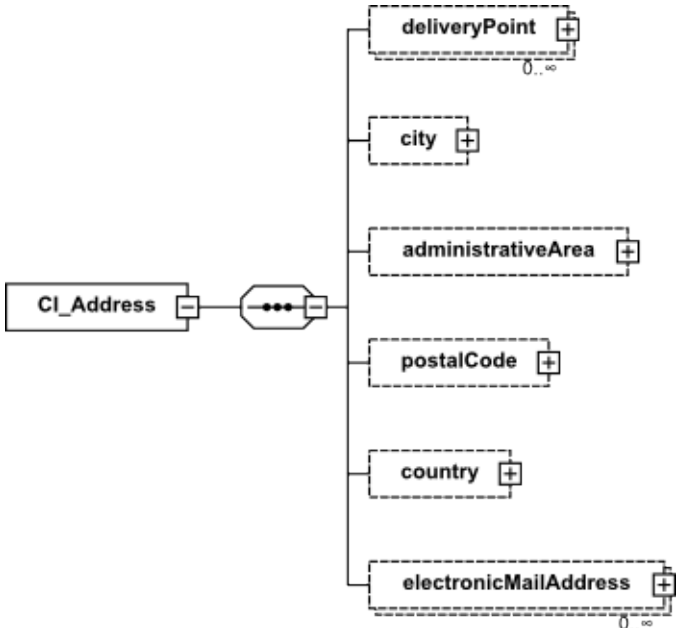
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/phone/
CI_Telephone/facsimile**

diagram	 The diagram shows a dashed box labeled 'facsimile' connected to a central octagonal connector with three dots. This connector is then connected to a box labeled 'CharacterString'.
type	xs:string
annotation	documentation contact fax number

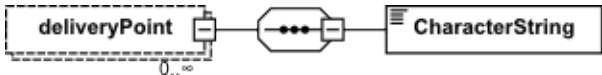
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/address**

diagram	 The diagram shows a dashed box labeled 'address' connected to a central octagonal connector with three dots. This connector is then connected to a box labeled 'CI_Address' which has a small '+' symbol in the top right corner.
annotation	documentation contact address information

element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/address/
CI_Address**

diagram	 The diagram shows the structure of the CI_Address element. It is a complex type (indicated by a square with a small circle) that contains a choice (indicated by a circle with three dots). The choice has six branches, each leading to a simple type (indicated by a rectangle with a small circle): deliveryPoint, city, administrativeArea, postalCode, country, and electronicMailAddress. Each simple type has a '+' sign in a small square, indicating it is optional. The deliveryPoint and electronicMailAddress types also have a '0..∞' cardinality indicator below them, indicating they can occur multiple times.
annotation	documentation contact address information details

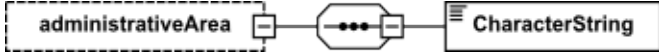
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/address/
CI_Address/deliveryPoint**

diagram	 The diagram shows the structure of the CI_Address/deliveryPoint element. It is a simple type (indicated by a rectangle with a small circle) that contains a choice (indicated by a circle with three dots). The choice has one branch leading to a CharacterString type (indicated by a rectangle with a small circle). The deliveryPoint type has a '+' sign in a small square, indicating it is optional. The deliveryPoint type also has a '0..∞' cardinality indicator below it, indicating it can occur multiple times.
type	xs:string
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	 The diagram shows the structure of the CI_Address/city element. It is a simple type (indicated by a rectangle with a small circle) that contains a choice (indicated by a circle with three dots). The choice has one branch leading to a CharacterString type (indicated by a rectangle with a small circle). The city type has a '+' sign in a small square, indicating it is optional.
type	xs:string
annotation	documentation contact address: city

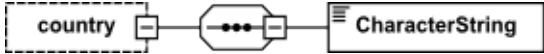
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/address/
CI_Address/administrativeArea**

diagram	
type	xs:string
annotation	documentation contact address: administrative area

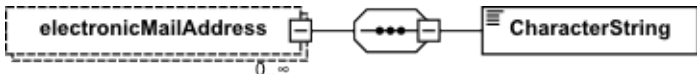
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/address/
CI_Address/postalCode**

diagram	
type	xs:string
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	xs:string
annotation	documentation contact address: country

element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/contactInfo/CI_Contact/address/
CI_Address/electronicMailAddress**

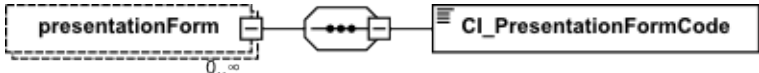
diagram	
type	xs:string
annotation	documentation contact address: email address

element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/
citedResponsibleParty/CI_ResponsibleParty/role**

diagram	
type	roleCode
facets	enumeration resourceProvider

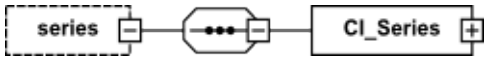
	enumeration	custodian		
	enumeration	owner		
	enumeration	sponsor		
	enumeration	user		
	enumeration	distributor		
	enumeration	originator		
	enumeration	pointOfContact		
	enumeration	principalInvestigator		
	enumeration	processor		
	enumeration	publisher		
	enumeration	author		
	enumeration	collaborator		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	CI_RoleCode
	codeListValue	roleCode	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	presentationFormCode			
facets	enumeration	documentDigital		
	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	xs:string	require	CI_PresentationFormCode
	codeListValue	presentationFormCode	require	value of code list
annotation	documentation	presentation form		

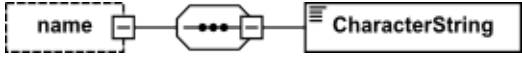
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/series**

diagram	
annotation	documentation series the dataset belongs to

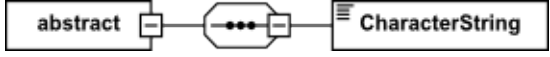
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/series/CI_Series**

diagram	
annotation	documentation series details

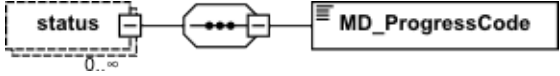
element **MI_Metadata/identificationInfo/MD_DataIdentification/citation/CI_Citation/series/CI_Series/name**

diagram	
type	xs:string
annotation	documentation name of the data series

element **MI_Metadata/identificationInfo/MD_DataIdentification/abstract**

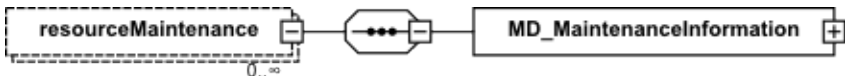
diagram	
type	xs:string
annotation	documentation abstract describing the data

element **MI_Metadata/identificationInfo/MD_DataIdentification/status**

diagram	
type	progressCode
facets	enumeration completed

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

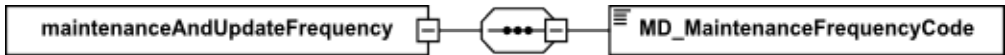
element **MI_Metadata/identificationInfo/MD_DataIdentification/resourceMaintenance**

diagram				
annotation	documentation	resource maintenance information		

element **MI_Metadata/identificationInfo/MD_DataIdentification/resourceMaintenance/MD_MaintenanceInformation**

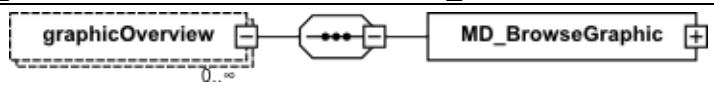
diagram				
annotation	documentation	metadata maintenance details		

element **MI_Metadata/identificationInfo/MD_DataIdentification/resourceMaintenance/MD_MaintenanceInformation/maintenanceAndUpdateFrequency**

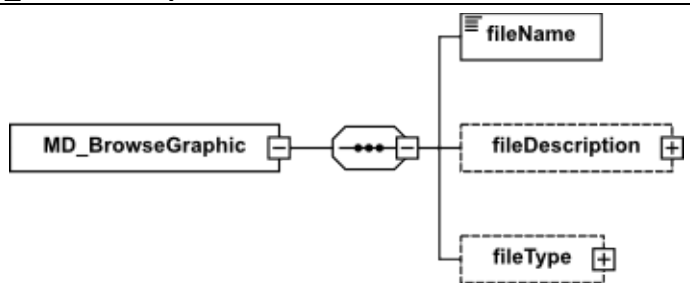
diagram				
type	maintenanceFrequencyCode			
facets	enumeration	continual		
	enumeration	daily		
	enumeration	weekly		
	enumeration	fortnightly		
	enumeration	monthly		
	enumeration	quarterly		
	enumeration	biannually		
	enumeration	annually		

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

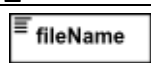
element **MI_Metadata/identificationInfo/MD_DataIdentification/graphicOverview**

diagram				
annotation	documentation	browse image information		

element **MI_Metadata/identificationInfo/MD_DataIdentification/graphicOverview/
MD_BrowseGraphic**

diagram				
annotation	documentation	browse image information details		

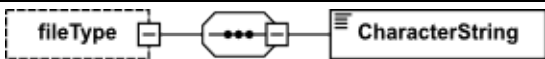
element **MI_Metadata/identificationInfo/MD_DataIdentification/graphicOverview/
MD_BrowseGraphic/fileName**

diagram				
type	xs:string			
annotation	documentation	browse image information: file name		

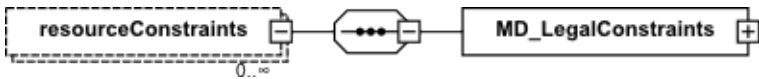
element **MI_Metadata/identificationInfo/MD_DataIdentification/graphicOverview/
MD_BrowseGraphic/fileDescription**

diagram	
type	xs:string
annotation	documentation browse image information: file description

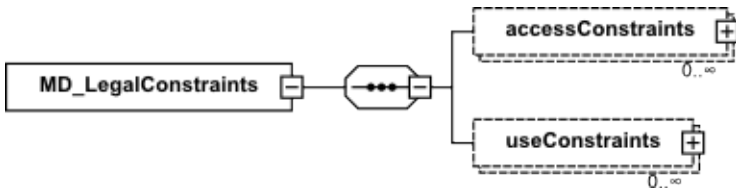
element **MI_Metadata/identificationInfo/MD_DataIdentification/graphicOverview/
MD_BrowseGraphic/fileType**

diagram	
type	xs:string
annotation	documentation browse image information: file type

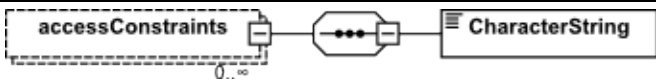
element **MI_Metadata/identificationInfo/MD_DataIdentification/resourceConstraints**

diagram	
annotation	documentation resource constraints

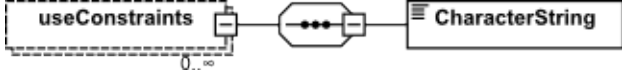
element **MI_Metadata/identificationInfo/MD_DataIdentification/resourceConstraints/
MD_LegalConstraints**

diagram	
annotation	documentation resource constraints details

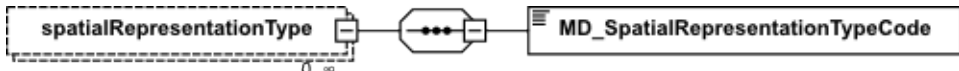
element **MI_Metadata/identificationInfo/MD_DataIdentification/resourceConstraints/
MD_LegalConstraints/accessConstraints**

diagram	
type	xs:string
annotation	documentation resource constraints: access

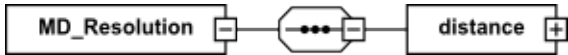
element **MI_Metadata/identificationInfo/MD_DataIdentification/resourceConstraints/MD_LegalConstraints/useConstraints**

diagram	
type	xs:string
annotation	documentation resource constraints: use

element **MI_Metadata/identificationInfo/MD_DataIdentification/spatialRepresentationType**

diagram				
type	spatialRepresentationTypeCode			
facets	enumeration	vector		
	enumeration	grid		
	enumeration	textTable		
	enumeration	tin		
	enumeration	stereoModel		
	enumeration	video		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	MD_SpatialRepresentationTypeCode
	codeListValue	spatialRepresentationTypeCode	required	value of code list
annotation	documentation	method used to represent geographic information in the dataset		

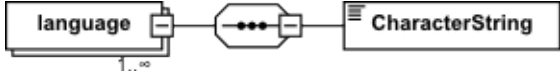
element **MI_Metadata/identificationInfo/MD_DataIdentification/spatialResolution/MD_Resolution**

diagram	
annotation	documentation dataset resolution information

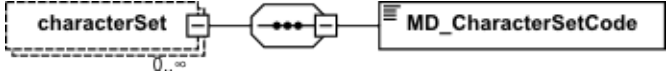
element **MI_Metadata/identificationInfo/MD_DataIdentification/spatialResolution/MD_Resolution/distance**

diagram	
type	xs:decimal
annotation	documentation dataset resolution (rows/columns)

element **MI_Metadata/identificationInfo/MD_DataIdentification/language**

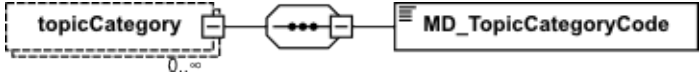
diagram	
type	xs:language
annotation	documentation language

element **MI_Metadata/identificationInfo/MD_DataIdentification/characterSet**

diagram																																					
type	characterSetCode																																				
facets	<table> <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>utf8</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> <tr><td>enumeration</td><td>8859part9</td></tr> <tr><td>enumeration</td><td>8859part10</td></tr> <tr><td>enumeration</td><td>8859part11</td></tr> <tr><td>enumeration</td><td>8859part12</td></tr> <tr><td>enumeration</td><td>8859part13</td></tr> </table>	enumeration	ucs2	enumeration	ucs4	enumeration	utf7	enumeration	utf8	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	ucs2																																				
enumeration	ucs4																																				
enumeration	utf7																																				
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enumeration	utf16																																				
enumeration	8859part1																																				
enumeration	8859part2																																				
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enumeration	8859part4																																				
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enumeration	8859part9																																				
enumeration	8859part10																																				
enumeration	8859part11																																				
enumeration	8859part12																																				
enumeration	8859part13																																				

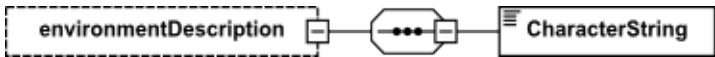
	enumeration	8859part14		
	enumeration	8859part15		
	enumeration	8859part16		
	enumeration	jis		
	enumeration	shiftJIS		
	enumeration	eucJP		
	enumeration	usAscii		
	enumeration	ebcdic		
	enumeration	eucKR		
	enumeration	big6		
	enumeration	GB2312		
attribute	Name	Type	attribute	Name
	codeList	xs:string	required	MD_CharacterSetCode
	codeListValue	characterSetCode	required	value of code list
annotation	documentation	name of the character coding standard used in the resource		

element **MI_Metadata/identificationInfo/MD_DataIdentification/topicCategory**

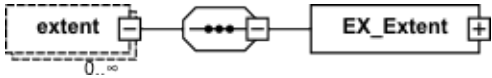
diagram				
type	topicCategoryCode			
facets	enumeration	farming		
	enumeration	biota		
	enumeration	boundaries		
	enumeration	climatologyMeteorologyAtmosphere		
	enumeration	economy		
	enumeration	elevation		
	enumeration	environment		
	enumeration	geoscientificInformation		
	enumeration	health		
	enumeration	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	xs:string	required	MD_TopicCategoryCode
	codeListValue	topicCategoryCode	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		

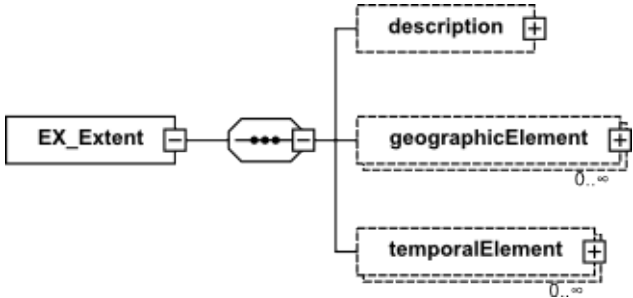
element **MI_Metadata/identificationInfo/MD_DataIdentification/environmentDescription**

diagram			
type	xs:string		
annotation	documentation	description of the environment	

element **MI_Metadata/identificationInfo/MD_DataIdentification/extent**

diagram			
annotation	documentation	geographic extent of dataset	

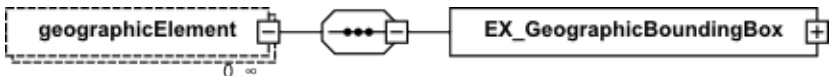
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent**

diagram			
annotation	documentation	geographic extent details	

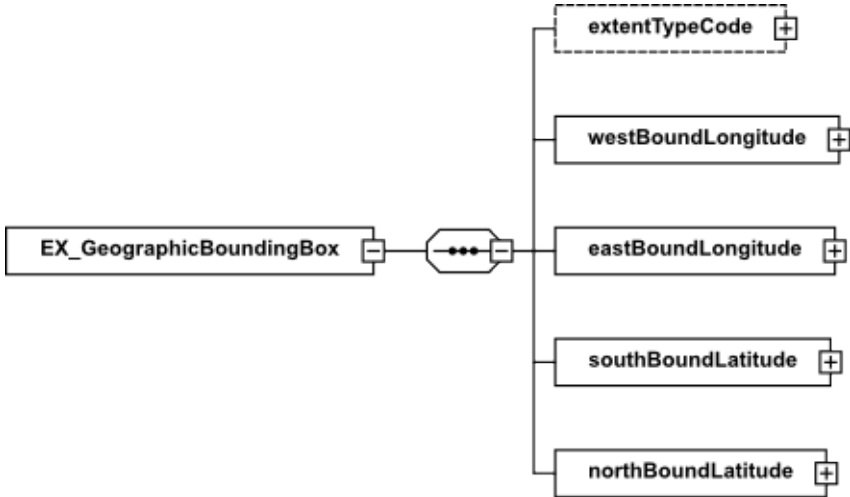
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/
description**

diagram	
type	xs:string
annotation	documentation geographic extent: description

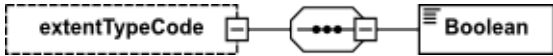
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/
geographicElement**

diagram	
annotation	documentation geographic extent: geographic elments

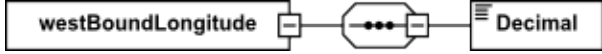
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/
geographicElement/EX_GeographicBoundingBox**

diagram	
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

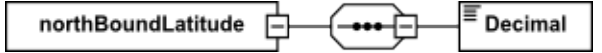
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/
geographicElement/EX_GeographicBoundingBox/eastBoundLongitude**

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

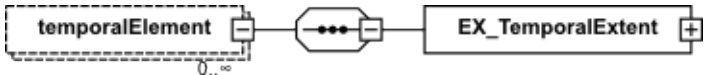
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/
geographicElement/EX_GeographicBoundingBox/southBoundLatitude**

diagram	
type	xs:decimal
annotation	documentation geographic bounding box: south bound latitude

element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/
geographicElement/EX_GeographicBoundingBox/northBoundLatitude**

diagram	
type	xs:decimal
annotation	documentation geographic bounding box: north bound latitude

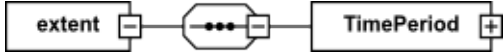
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/
temporalElement**

diagram	
annotation	documentation geographic extent: temporal element

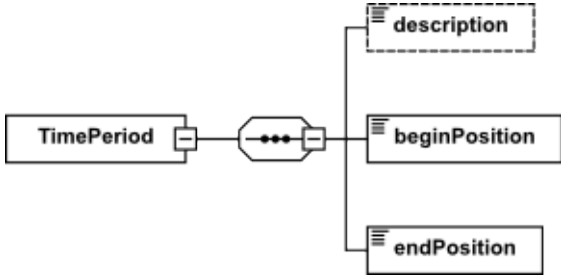
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/**
temporalElement/EX_TemporalExtent

diagram	
annotation	documentation temporal extent details

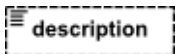
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/**
temporalElement/EX_TemporalExtent/extent

diagram	
annotation	documentation temporal extent

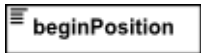
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/**
temporalElement/EX_TemporalExtent/extent/TimePeriod

diagram	
type	xs:string
annotation	documentation time period details

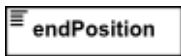
element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/**
temporalElement/EX_TemporalExtent/extent/TimePeriod/description

diagram	
type	xs:string
annotation	documentation time period: description

element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/**
temporalElement/EX_TemporalExtent/extent/TimePeriod/beginPosition

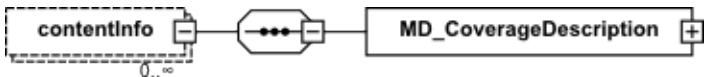
diagram	
type	xs:string
annotation	documentation time period: begin position

element **MI_Metadata/identificationInfo/MD_DataIdentification/extent/EX_Extent/temporalElement/EX_TemporalExtent/extent/TimePeriod/endTimePosition**

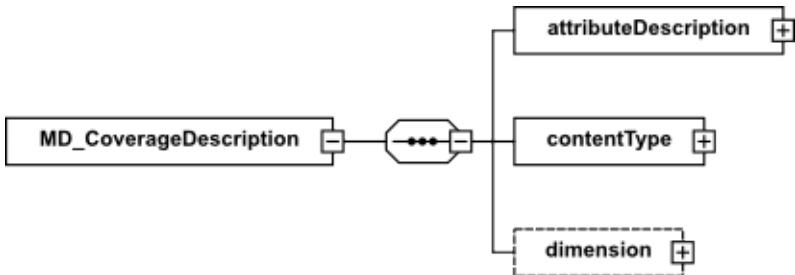
diagram	
type	xs:string
annotation	documentation time period: end position

4.1.11 contentInfo

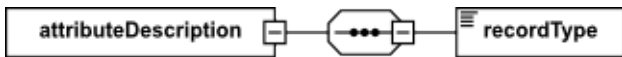
element **MI_Metadata/contentInfo**

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	xs:string
annotation	documentation attribute description

element **MI_Metadata/contentInfo/MD_CoverageDescription/contentType**

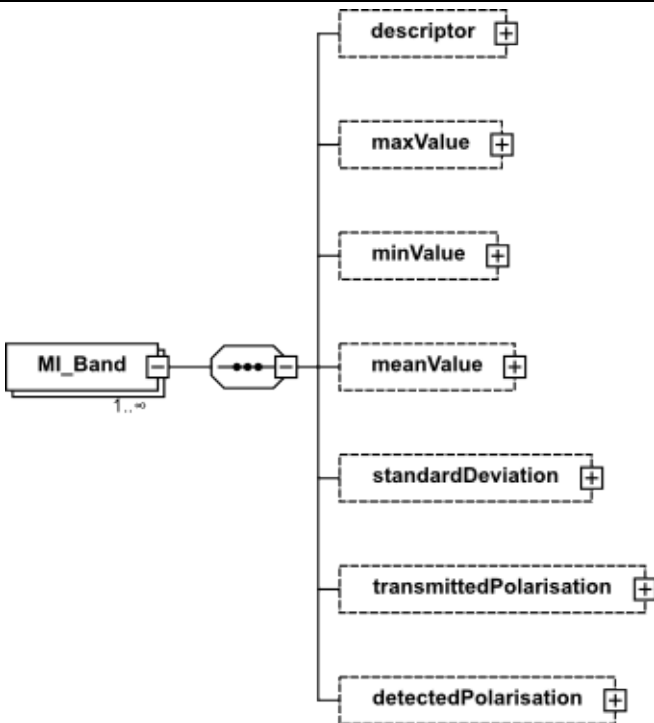
diagram	
type	coverageContentTypeCode
facets	enumeration image enumeration thematicClassification enumeration physicalMeasurement

	enumeration	referenceInformation		
	enumeration	auxiliaryData		
	enumeration	qualityInformation		
	enumeration	modelResult		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	MD_CoverageContent TypeCode
	codeListValue	coverageContentTypeCode	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		

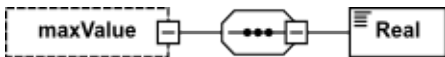
element **MI_Metadata/contentInfo/MD_CoverageDescription/dimension/MI_Band**

diagram				
annotation	documentation	band parameters		

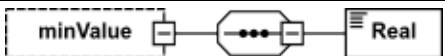
element **MI_Metadata/contentInfo/MD_CoverageDescription/dimension/MI_Band/descriptor**

diagram	
type	xs:string
annotation	documentation band parameters: descriptor

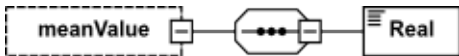
element **MI_Metadata/contentInfo/MD_CoverageDescription/dimension/MI_Band/maxLength**

diagram	
type	xs:float
annotation	documentation band parameters: maximum value

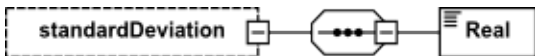
element **MI_Metadata/contentInfo/MD_CoverageDescription/dimension/MI_Band/minValue**

diagram	
type	xs:float
annotation	documentation band parameters: minimum value

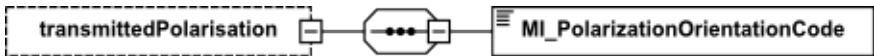
element **MI_Metadata/contentInfo/MD_CoverageDescription/dimension/MI_Band/meanValue**

diagram	
type	xs:float
annotation	documentation band parameters: mean value

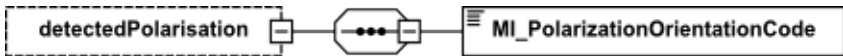
element **MI_Metadata/contentInfo/MD_CoverageDescription/dimension/MI_Band/standardDeviation**

diagram	
type	xs:float
annotation	documentation band parameters: standard deviation

element **MI_Metadata/contentInfo/MD_CoverageDescription/dimension/MI_Band/
transmittedPolarisation**

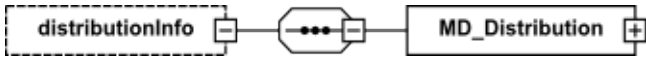
diagram				
type	polarizationOrientationCode			
facets	enumeration	horizontal		
	enumeration	vertical		
	enumeration	leftCircular		
	enumeration	rightCircular		
	enumeration	theta		
	enumeration	phi		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	MI_Polarization OrientationCode
	codeListValue	polarizationOrientationCode	required	value of code list
annotation	documentation	band parameters: polarization of the antenna relative to the waveform		

element **MI_Metadata/contentInfo/MD_CoverageDescription/dimension/MI_Band/
detectedPolarisation**

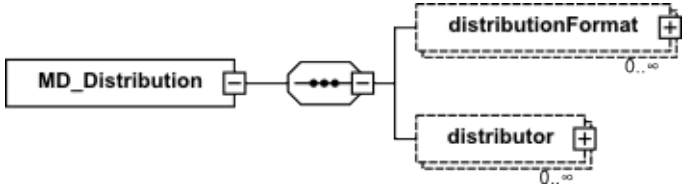
diagram				
type	polarizationOrientationCode			
facets	enumeration	horizontal		
	enumeration	vertical		
	enumeration	leftCircular		
	enumeration	rightCircular		
	enumeration	theta		
	enumeration	phi		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	MI_Polarization OrientationCode
	codeListValue	polarizationOrientationCode	required	value of code list
annotation	documentation	band parameters: polarization of the antenna relative to the waveform		

4.1.12 distributionInfo

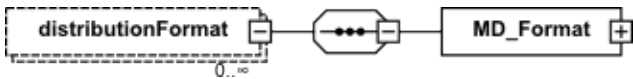
element MI_Metadata/distributionInfo

diagram	
annotation	documentation distribution information

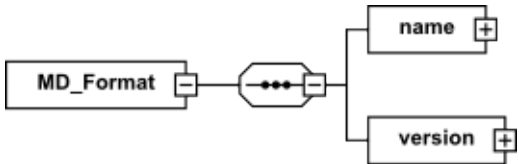
element MI_Metadata/distributionInfo/MD_Distribution

diagram	
annotation	documentation distribution information details

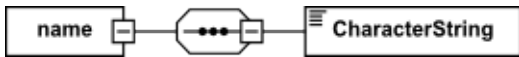
element MI_Metadata/distributionInfo/MD_Distribution/distributionFormat

diagram	
annotation	documentation distribution format

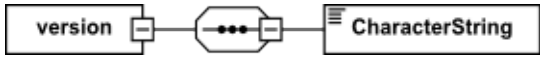
element MI_Metadata/distributionInfo/MD_Distribution/distributionFormat/MD_Format

diagram	
annotation	documentation distribution format details

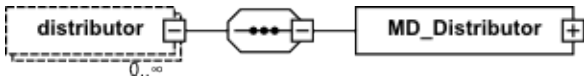
element MI_Metadata/distributionInfo/MD_Distribution/distributionFormat/MD_Format/name

diagram	
type	xs:string
annotation	documentation name of the data format

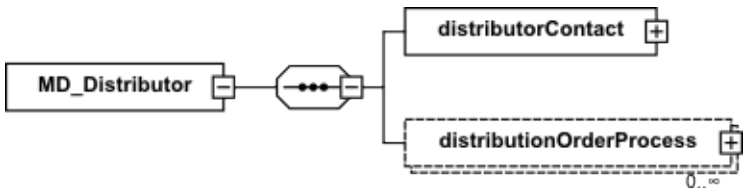
element **MI_Metadata/distributionInfo/MD_Distribution/distributionFormat/MD_Format/version**

diagram	
type	xs:string
annotation	documentation version of the data format

element **MI_Metadata/distributionInfo/MD_Distribution/distributor**

diagram	
annotation	documentation distributor information

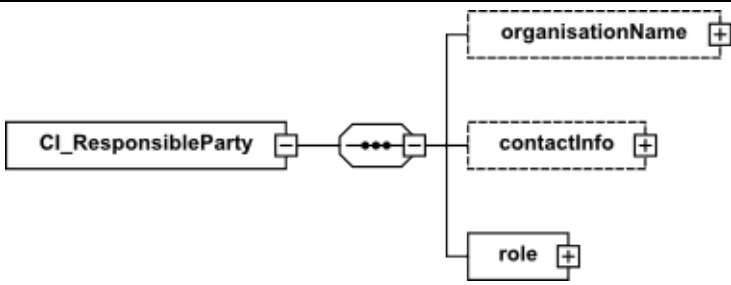
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor**

diagram	
annotation	documentation distributor information details

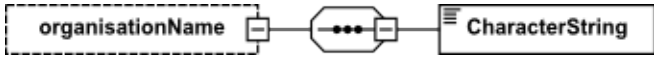
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact**

diagram	
annotation	documentation distribution contact information

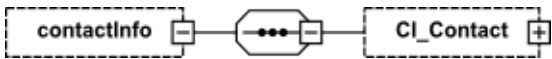
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty**

diagram	
annotation	documentation distribution: responsible party

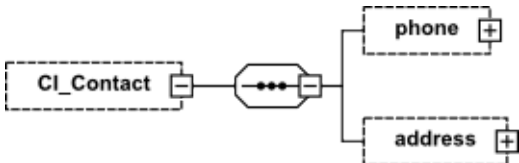
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/organisationName**

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

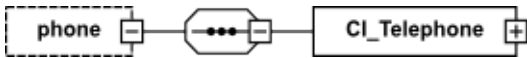
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo**

diagram	
annotation	documentation distribution contact information

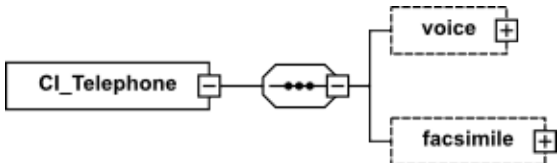
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact**

diagram	
annotation	documentation distribution contact information details

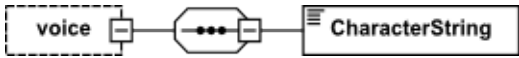
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/phone**

diagram	
annotation	documentation distribution contact: phone information

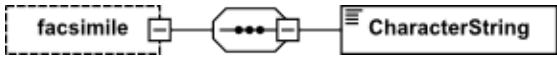
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/phone/CI_Telephone**

diagram	
annotation	documentation distribution contact: telephone information details

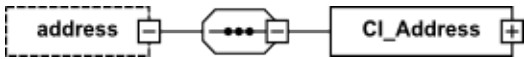
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/
distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/phone/
CI_Telephone/voice**

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

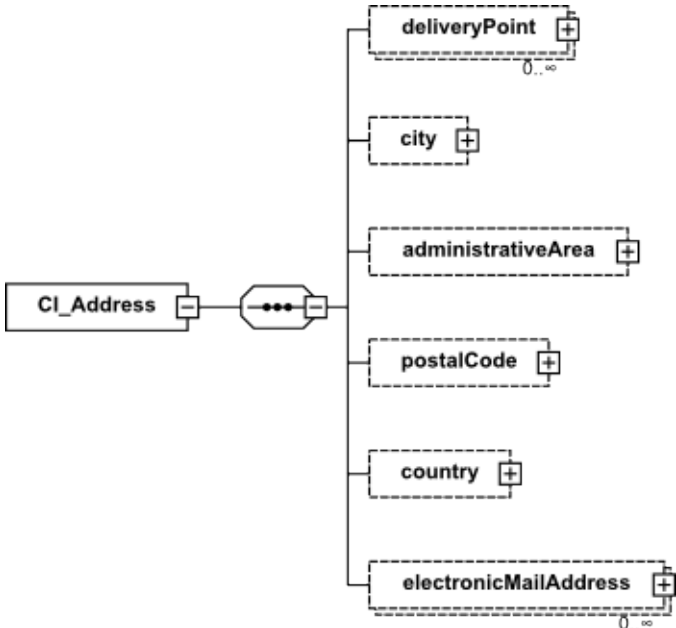
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/
distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/phone/
CI_Telephone/facsimile**

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

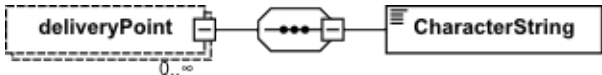
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/
distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/address**

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	 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 six optional elements (dashed rectangles with a '+' sign in the top right corner). The elements are: deliveryPoint, city, administrativeArea, postalCode, country, and electronicMailAddress. Each element has a cardinality of 0..∞. The elements are connected by a sequence connector (a circle with three dots inside).
annotation	documentation distribution contact: address information details

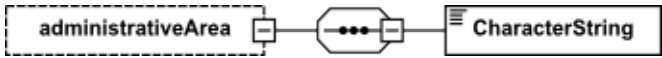
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/deliveryPoint**

diagram	 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 connector (a circle with three dots inside) which points to a CharacterString element (rectangle with a small square on the left).
type	xs:string
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	 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 connector (a circle with three dots inside) which points to a CharacterString element (rectangle with a small square on the left).
type	xs:string
annotation	documentation distribution contact: city

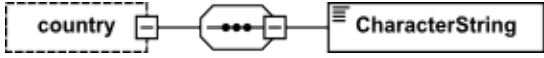
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/administrativeArea**

diagram	
type	xs:string
annotation	documentation distribution contact: administrative area

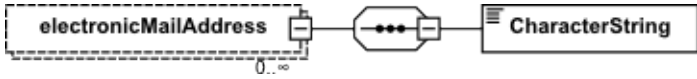
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/postalCode**

diagram	
type	xs:string
annotation	documentation distribution contact: postal code

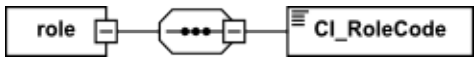
element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/country**

diagram	
type	xs:string
annotation	documentation distribution contact: country

element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/contactInfo/CI_Contact/address/CI_Address/electronicMailAddress**

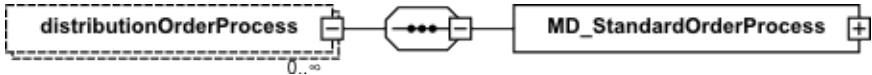
diagram	
type	xs:string
annotation	documentation distribution contact: email address

element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributorContact/CI_ResponsibleParty/role**

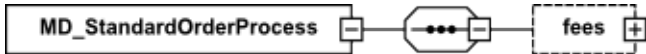
diagram	
type	roleCode
facets	enumeration resourceProvider

	enumeration	custodian		
	enumeration	owner		
	enumeration	sponsor		
	enumeration	user		
	enumeration	distributor		
	enumeration	originator		
	enumeration	pointOfContact		
	enumeration	principalInvestigator		
	enumeration	processor		
	enumeration	publisher		
	enumeration	author		
	enumeration	collaborator		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	CI_RoleCode
	codeListValue	roleCode	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**

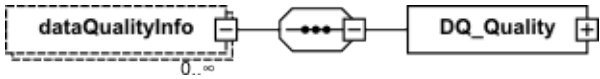
diagram				
annotation	documentation	distribution order process details		

element **MI_Metadata/distributionInfo/MD_Distribution/distributor/MD_Distributor/distributionOrderProcess/MD_StandardOrderProcess/fees**

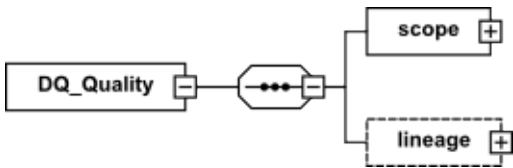
diagram				
type	xs:string			
annotation	documentation	distribution order process: fees		

4.1.13 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

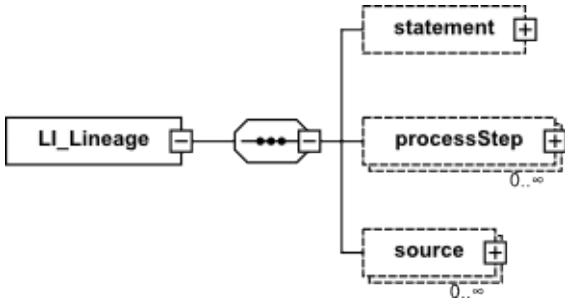
diagram																			
type	scopeCode																		
facets	<table border="0"> <tr><td>enumeration</td><td>attribute</td></tr> <tr><td>enumeration</td><td>attributeType</td></tr> <tr><td>enumeration</td><td>collectionHardware</td></tr> <tr><td>enumeration</td><td>collectionSession</td></tr> <tr><td>enumeration</td><td>dataset</td></tr> <tr><td>enumeration</td><td>series</td></tr> <tr><td>enumeration</td><td>nonGeographicDataset</td></tr> <tr><td>enumeration</td><td>dimensionGroup</td></tr> <tr><td>enumeration</td><td>feature</td></tr> </table>	enumeration	attribute	enumeration	attributeType	enumeration	collectionHardware	enumeration	collectionSession	enumeration	dataset	enumeration	series	enumeration	nonGeographicDataset	enumeration	dimensionGroup	enumeration	feature
enumeration	attribute																		
enumeration	attributeType																		
enumeration	collectionHardware																		
enumeration	collectionSession																		
enumeration	dataset																		
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	xs:string	required	MD_ScopeCode
	codeListValue	scopeCode	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		

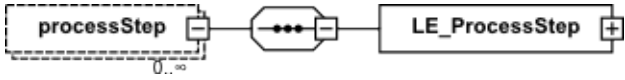
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage**

diagram				
annotation	documentation	lineage information details		

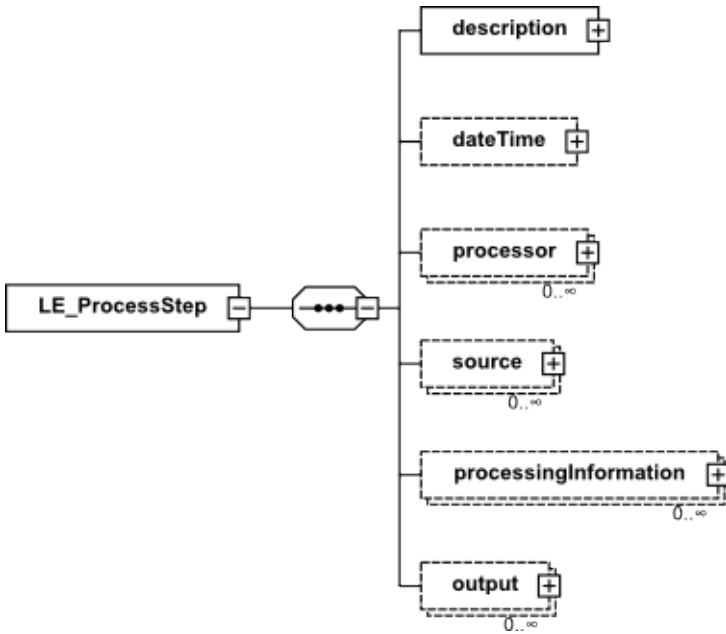
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/statement**

diagram				
type	xs:string			
annotation	documentation	lineage: statement		

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/LE_ProcessStep**

diagram	
annotation	documentation lineage: processing step information details

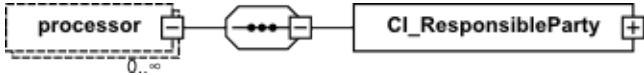
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/description**

diagram	
type	xs:string
annotation	documentation processing step: description

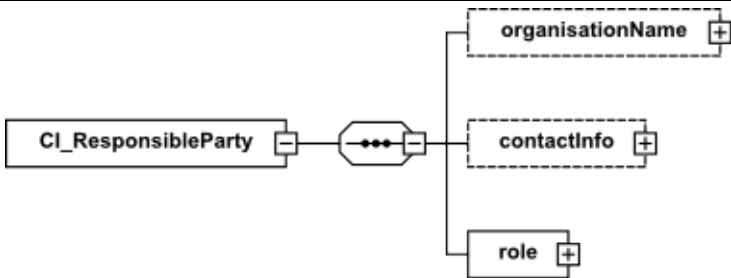
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/dateTime**

diagram	
type	xs:date
annotation	documentation processing step: time stamp

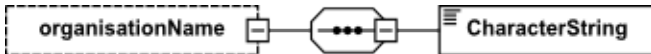
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processor**

diagram	
annotation	documentation processing step: processor

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processor/CI_ResponsibleParty**

diagram	
annotation	documentation processing step: responsible party

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processor/CI_ResponsibleParty/organisationName**

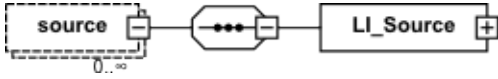
diagram	
type	xs:string
annotation	documentation

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processor/CI_ResponsibleParty/role**

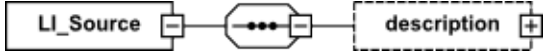
diagram															
type	roleCode														
facets	<table border="0"> <tr><td>enumeration</td><td>resourceProvider</td></tr> <tr><td>enumeration</td><td>custodian</td></tr> <tr><td>enumeration</td><td>owner</td></tr> <tr><td>enumeration</td><td>sponsor</td></tr> <tr><td>enumeration</td><td>user</td></tr> <tr><td>enumeration</td><td>distributor</td></tr> <tr><td>enumeration</td><td>originator</td></tr> </table>	enumeration	resourceProvider	enumeration	custodian	enumeration	owner	enumeration	sponsor	enumeration	user	enumeration	distributor	enumeration	originator
enumeration	resourceProvider														
enumeration	custodian														
enumeration	owner														
enumeration	sponsor														
enumeration	user														
enumeration	distributor														
enumeration	originator														

	enumeration	pointOfContact		
	enumeration	principalInvestigator		
	enumeration	processor		
	enumeration	publisher		
	enumeration	author		
	enumeration	collaborator		
attribute	Name	Type	Use	Annotation
	codeList	xs:string	required	CI_RoleCode
	codeListValue	roleCode	required	value from code list
annotation	documentation	function performed by the responsible party		

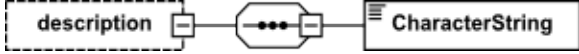
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/source**

diagram				
annotation	documentation	processing step: source		

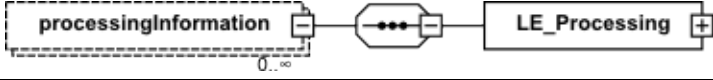
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/source/LI_Source**

diagram				
annotation	documentation	processing step: source details		

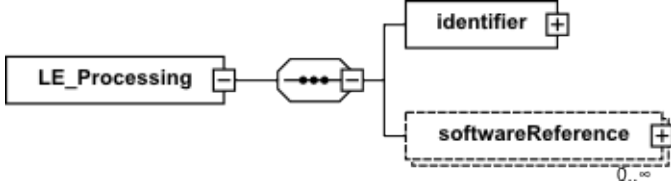
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/source/LI_Source/description**

diagram				
type	xs:string			
annotation	documentation	processing step: source description		

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation**

diagram				
annotation	documentation	processing step: processing information		

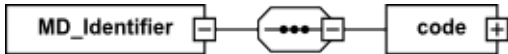
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing**

diagram	
annotation	documentation processing step: processing information details

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/identifier**

diagram	
annotation	documentation processing information: identifier

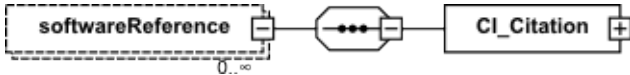
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/identifier/MD_Identifier**

diagram	
annotation	documentation processing information: identifier details

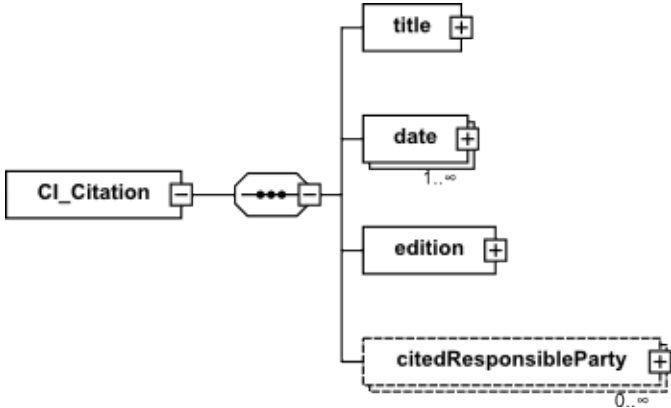
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/identifier/MD_Identifier/code**

diagram	
type	xs:string
annotation	documentation processing information: identifier code

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference**

diagram	
annotation	documentation software reference

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference/CI_Citation**

diagram	
annotation	documentation source citation information

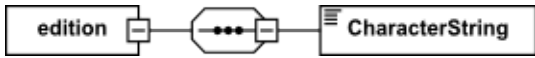
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference/CI_Citation/title**

diagram	
type	xs:string
annotation	documentation software reference: title

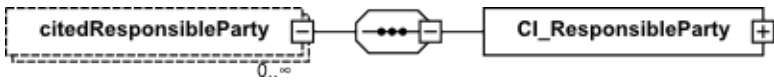
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference/CI_Citation/date**

diagram	
type	xs:date
annotation	documentation software reference: time stamp

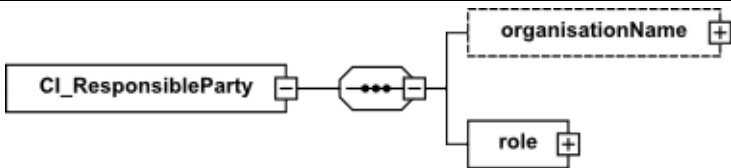
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference/CI_Citation/edition**

diagram	
type	xs:string
annotation	documentation software reference: edition

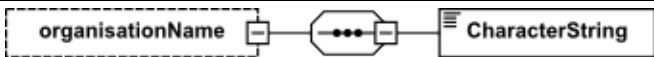
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference/CI_Citation/citedResponsibleParty**

diagram	
annotation	documentation software reference: responsible party

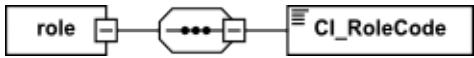
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference/CI_Citation/citedResponsibleParty/CI_ResponsibleParty**

diagram	
annotation	documentation software reference: responsible party details

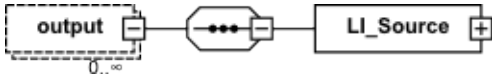
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference/CI_Citation/citedResponsibleParty/CI_ResponsibleParty/organisationName**

diagram	
type	xs:string
annotation	documentation software reference: name of responsible organization

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/processingInformation/LE_Processing/softwareReference/CI_Citation/citedResponsibleParty/CI_ResponsibleParty/role**

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

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/output**

diagram				
annotation	documentation			

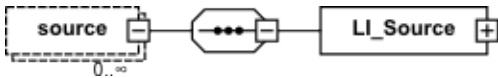
element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/output/LI_Source**

diagram				
annotation	documentation	processing step: source details		

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/processStep/LE_ProcessStep/output/LI_Source/description**

diagram	
type	xs:string
annotation	documentation processing step: source description

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/source**

diagram	
annotation	documentation lineage: source

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/source/LI_Source**

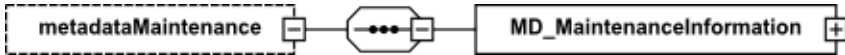
diagram	
annotation	documentation lineage: source details

element **MI_Metadata/dataQualityInfo/DQ_Quality/lineage/LI_Lineage/source/LI_Source/description**

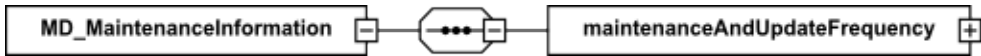
diagram	
type	xs:string
annotation	documentation lineage: source description

4.1.14 metadataMaintenance

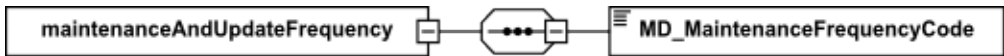
element **MI_Metadata/metadataMaintenance**

diagram	
annotation	documentation metadata maintenance information

element **MI_Metadata/metadataMaintenance/MD_MaintenanceInformation**

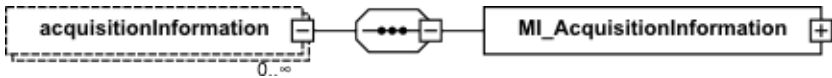
diagram	
annotation	documentation metadata maintenance details

element **MI_Metadata/metadataMaintenance/MD_MaintenanceInformation/
maintenanceAndUpdateFrequency**

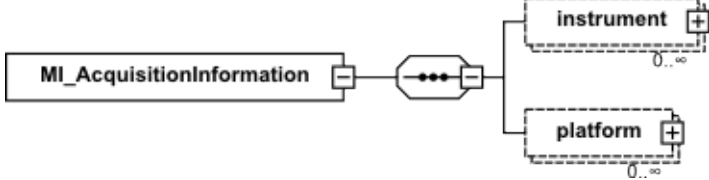
diagram				
type	maintenanceFrequencyCode			
facets	enumeration	continual		
	enumeration	daily		
	enumeration	weekly		
	enumeration	fortnightly		
	enumeration	monthly		
	enumeration	quarterly		
	enumeration	biannually		
	enumeration	annually		
	enumeration	asNeeded		
	enumeration	irregular		
	enumeration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

4.1.15 acquisitionInformation

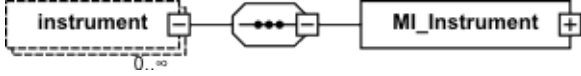
element **MI_Metadata/acquisitionInformation**

diagram			
annotation	documentation	acquisition information	

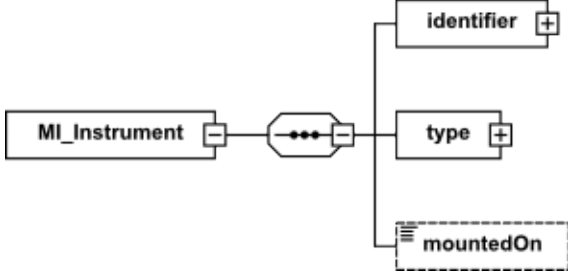
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation**

diagram	 The diagram shows a box labeled 'MI_AcquisitionInformation' connected to a container box. This container box has two child elements: 'instrument' and 'platform'. Both 'instrument' and 'platform' are shown in dashed boxes, indicating they are optional, and have a cardinality of '0..∞'.		
annotation	documentation	acquisition information details	

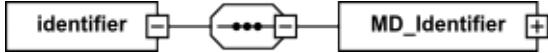
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/instrument**

diagram	 The diagram shows a dashed box labeled 'instrument' connected to a container box, which is then connected to a box labeled 'MI_Instrument'. The 'instrument' box has a cardinality of '0..∞'.		
annotation	documentation	acquisition information: instrument	

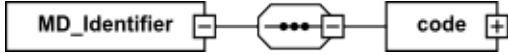
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/instrument/MI_Instrument**

diagram	 The diagram shows a box labeled 'MI_Instrument' connected to a container box. This container box has three child elements: 'identifier', 'type', and 'mountedOn'. 'identifier' and 'type' are in solid boxes with a cardinality of '1', while 'mountedOn' is in a dashed box with a cardinality of '0..1'.			
attribute	Name	Type	Use	Annotation
	id	xs:string	required	instrument ID
annotation	documentation	acquisition information: instrument details		

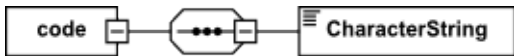
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/instrument/MI_Instrument/identifier**

diagram	 The diagram shows a box labeled 'identifier' connected to a container box, which is then connected to a box labeled 'MD_Identifier'. The 'identifier' box has a cardinality of '1'.		
annotation	documentation	instrument: identifier	

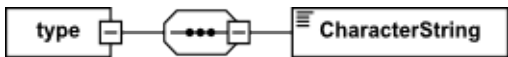
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/instrument/MI_Instrument/identifier/MD_Identifier**

diagram	 The diagram shows a box labeled 'MD_Identifier' connected to a container box, which is then connected to a box labeled 'code'. The 'MD_Identifier' box has a cardinality of '1'.		
annotation	documentation	instrument: identifier details	

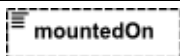
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/instrument/MI_Instrument/identifier/MD_Identifier/code**

diagram	
type	xs:string
annotation	documentation instrument: code

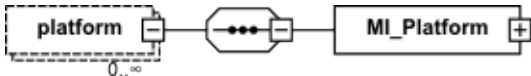
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/instrument/MI_Instrument/type**

diagram	
type	xs:string
annotation	documentation instrument: type

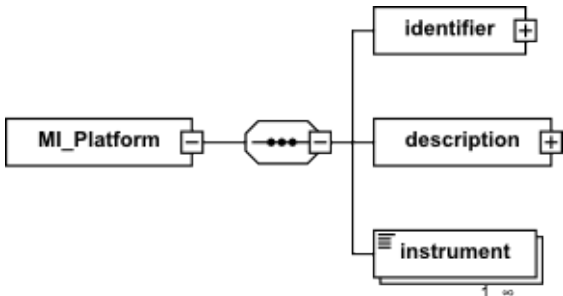
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/instrument/MI_Instrument/mountedOn**

diagram				
attribute	Name	Type	Use	Annotation
	href	xs:string	required	link to platform ID
annotation	documentation	instrument: mounted on		

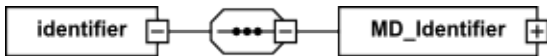
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/platform**

diagram	
annotation	documentation acquisition information: platform

element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/platform/MI_Platform**

diagram				
attribute	Name	Type	Use	Annotation
	id	xs:string	required	platform ID
annotation	documentation	acquisition information: platform details		

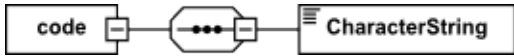
element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/platform/MI_Platform/identifier**

diagram				
annotation	documentation	platform: identifier		

element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/platform/MI_Platform/identifier/MD_Identifier**

diagram				
annotation	documentation	platform: identifier details		

element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/platform/MI_Platform/identifier/MD_Identifier/code**

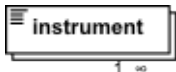
diagram				
type	xs:string			
annotation	documentation	platform: identifier code		

element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/platform/MI_Platform/description**

diagram				
type	xs:string			
annotation	documentation	platform: description		



element **MI_Metadata/acquisitionInformation/MI_AcquisitionInformation/platform/
MI_Platform/instrument**

diagram				
attribute	Name	Type	Use	Annotation
	href	xs:string	required	link to instrument ID
annotation	documentation	platform: link to instrument		