Georgian National Spatial Data Infrastructure Metadata Specification

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CONTENTS

I. GEORGIAN NSDI METADA PROFILE

The Georgian NSDI metadata profile is created with regard to the INSPIRE Metadata Implementation Rules and meeting the INSPIRE requirements. The Georgian NSDI metadata profile is extended in relation to the INSPIRE profile. The extensions have been made in accordance with ISO standards and national initiative, in particular ISO 19115-1:2014.

II. OVERVIEW OF GEORGIAN NSDI METADA PROFILE

This chapter provides an overview of Georgian NSDI metadata element. Georgian NSDI metadata elements are divided into two groups, according to the type of the spatial data resource - elements of spatial datasets and dataset series and elements of spatial data services. An overview of metadata elements in the tables below is provided using the following:

- **Nr**. - consecutive number of the metadata element in the table
- **Element name** - name of the metadata element
- **Definition** - definition of the metadata element
- **Multiplicity** - defines whether the element consists of only one value (single, 1 or 0..1) or may have several values (multiple, 0..* or 1..*)
- **Obligation** - defines whether the element is mandatory (M) or conditional (C).
- **Comment** - additional comment.

Table 1: Metadata elements for spatial datasets, spatial dataset series and spatial data services

Nr.	Metadata element name	Definition	Multiplicity	Obligation	Comment
1	Resource title	Characteristic, and often unique, name by which the resource is known.	1	M	
2	Alternative resource title	Abbreviation, acronym, other name or resource title in another language.	0..*	C	
3	Resource abstract	Brief narrative summary of the resource content.	1	M	
4	Resource type	Type of resource described by the metadata.	1	M	
5	Resource status	Status of the resource	1	M	
6	Resource locator: for data sets and dataset series	Location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme.	0..*	C	M - If there is URL available providing additional information about the resource and/or service related to resource access. **Not applicable for services**
7	Resource Locator: for Services	Location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme.	0..*	C	M - If there is link to the service. **Not applicable for datasets and dataset series**
8	Unique Resource Identifier: code	Value uniquely identifying the resource (alphanumeric value identifying an	1..*	M	**Not applicable for services**

		instance in the namespace).			
9	Unique Resource Identifier: code space	Value uniquely identifying the resource (identifier or namespace in which the code is valid).	1..*	M	**Not applicable for services**
10	Coupled resource	If the data service resource, coupled resource, is identified, where this is relevant, link to the service of spatial dataset(s) is created with a unique resource identifier.	0..*	C	M- If there is available link to the dataset related to the service. **Not applicable for datasets and dataset series**
11	Resource language	Language(s) used within the resource.	0..*	C	M - If the resource contains textual information. **Not applicable for services**
12	Resource delivery: protocol	Connection protocol to be used.	1..*	M	
13	Resource delivery: function	Code for function performed by the online resource.	1..*	M	
14	Resource delivery: format	Name of data delivery format.	1..*	M	
15	Resource delivery: format version	Version of data delivery format.	1..*	M	
16	ISO topic category	Main theme(s) of the resource. Topic category is a high-level classification scheme to assist in the grouping and topic-based search of available spatial data resources.	1..*	M	**Not applicable for services**
17	Spatial data service type	Type of spatial data service.	1	M	**Not applicable for datasets and dataset series**
18	National spatial data themes: keyword	Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject.	1..*	M	
19	National spatial data themes catalogue: title	Name of the formally registered thesaurus or a similar authoritative source of keywords.	1..*	M	
20	National spatial data themes catalogue: date	Reference date for registered thesaurus or a similar authoritative source of keywords	1..*	M	
21	National spatial data themes catalogue: date type	Event used for reference date	1..*	M	
22	GEMET- INSPIRE themes: keyword	Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject.	1..*	M	
23	GEMET- INSPIRE themes: title	Name of the formally registered thesaurus or a similar authoritative source of keywords.	1..*	M	
24	GEMET- INSPIRE themes: date	Reference date for registered thesaurus or a similar authoritative source of keywords.	1..*	M	
25	GEMET- INSPIRE themes: date type	Event used for reference date.	1..*	M	
26	GEMET concepts - keyword	Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject.	1..*	M	

27	GEMET-concepts: title	Name of the formally registered thesaurus or a similar authoritative source of keywords.	1..*	M	
28	GEMET-concepts: date	Reference date for registered thesaurus or a similar authoritative source of keywords.	1..*	M	
29	GEMET-concepts: date type	Event used for reference date.	1..*	M	
30	Services classified keyword	Commonly used word(s) or formalised word(s) or phrase(s) used to describe the service.	1..*	M	
31	Free keyword	Other user defined free keywords.	0..*	C	
32	Coordinate reference system: code	Designates the data resource coordinate (spatial) reference system code.	1	M	Service: C M - for services with an explicit geographic propagation.
33	Coordinate reference system: codespace	Designates the data resource coordinate (spatial) reference system code space.	1	M	Service: C M - for services with an explicit geographic propagation.
34	Coordinate reference system: description	Designates description of the data resource coordinate (spatial) reference system.	1	M	Service: C M - for services with an explicit geographic propagation.
35	Lowest and highest elevation	Vertical domain of resource.	0..1	C	
36	Vertical datum: code	Provides information about the vertical coordinate reference system code.	0..1	C	M- if lowest and highest elevation is filled.
37	Vertical datum: codeSpace	Provides information about the vertical coordinate reference system code space.	0..1	C	M- if lowest and highest elevation is filled.
38	Vertical datum: description	Designates description of the data resource Vertical reference system, to which the maximum and minimum elevation values are measured.	0..1	C	M- if lowest and highest elevation is filled.
39	Geographic Bounding Box	Geographic position of the resource.	1..*	M	Service: C; M - for services with an explicit geographic extent.
40	Text Description of extent	Text Description which describes the location of the resource.	1	M	
41	Temporal extent	Time period covered by the content of the resource.	1..*	M	
42	Reference date: date	Reference date for the cited resource.	1..*	M	
43	Reference date: date type	Event used for reference date for the cited resource.	1..*	M	
44	Update frequency	Frequency with which modifications are made and data added to the resource after the initial resource has been finished.	1	M	**Not applicable for services**
45	Update note	Information related to specific requirements of resource maintenance.	0..1	C	**Not applicable for services**
46	Lineage	General explanation of the data	1..*	M	**Not applicable for services**

		producer's knowledge about the lineage of a resource.			
47	Spatial representation type	Method used to represent geographic information in the resource.	1	M	**Not applicable for services**
48	Spatial resolution: equivalent scale	Level of detail expressed as the scale denominator of a comparable hardcopy map or chart.	0..1	C	M - if an equivalent scale or a resolution distance can be specified - **note for datasets and dataset series** M - when there is a restriction on the spatial resolution for service - **note for services**
49	Spatial resolution: distance	Horizontal ground sample distance.	0..1	C	M - if an equivalent scale or a resolution distance can be specified - **note for datasets and dataset series** M - when there is a restriction on the - **note for services**
50	Degree	Indication of conformity result.	1	M	
51	Conformity specification: title	Citing title of implementation rules or other documents with which the spatial data resource is harmonised.	1	M	
52	Conformity specification: date	Citing reference date of implementation rules or other documents with which the spatial data resource is harmonised.	1	M	
53	Conformity specification: date type	Citing event used for reference date of implementation rules or other documents with which the spatial data resource is harmonised.	1	M	
54	Conformity specification: URL	Location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme.	0..*	C	M - If data resource is harmonised according to other documents (not NSDI implementing rules)
55	Conformity description	Explanation of conformity.	1..*	M	
56	Limitations on public access (access constraints)	Access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource.	0..*	C	M- if other constraints or classification are not documented
57	Limitations on public access (other constraints)	Other restrictions and legal prerequisites for accessing and using the resource or metadata.	0..*	C	M- if accessConstraints or classification are not documented
58	Limitations on public access (classification)	Name of the handling restrictions on the resource.	0..1	C	M- if accessConstraints or otherConstraints are not documented
59	Conditions applying to access and use	Restrictions on the access and use of a resource or metadata.	0..*	C	
60	Responsible party: organisation name	Name of organization for communication associated with the resource(s).	0..*	C	M - if the organisation is known

61	Responsible party: person	Personal name(s) for communication with, person(s) associated with the resource(s).	0..*	C	M- if organization is missing
62	Responsible party: contact info	Address of the electronic mailbox of the responsible organisation or individual.	1..*	M	
63	Responsible party role	Function performed by the responsible party.	1..*	M	
64	Metadata standard title	Citation for the standard to which the metadata conforms.	1	M	
65	Version of Metadata standard	Version of the cited standard to which the metadata conforms.	1	M	
66	Metadata date	Date which specifies when the metadata record was created or updated.	1	M	
67	Metadata language	Language used for documenting metadata.	1	M	
68	Metadata identifier	Value that uniquely identifies metadata.	1	M	
69	Metadata point of contact: organisation name	Name of organization responsible for the metadata information.	0..1	C	M - if the organisation is known
70	Metadata point of contact: person	Individual name of responsible person for the metadata information.	0..1	C	M- if organization is missing
71	Metadata point of contact: contact info	Address of the electronic mailbox of the responsible organisation or individual.	1..*	M	
72	Metadata point of contact role	Function performed by the metadata responsible party.	1..*	M	

III.   GEORGIAN METADATA ELEMENTS

1.   IDENTIFICATION

1.1 Resource title

Element number	1.1
Element name	Resource title
Definition	Characteristic, and often unique, name by which the resource is known.
Inspire	1.1 Resource title
ISO 19115	362: title *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text
Example	Register of geographic names

Comments	Data resource must have a unique and easily identifiable title. In determining a resource title, the needs of potential users must be taken into consideration. The title must be informative and diminish the potential risk of mistaking one data resource for another. Generic search engines most often analyse the first record. It is therefore desirable for a resource title to clearly define spatial data and differentiate between similar search results.

1.2 Alternative resource title

Element number	1.2
Element name	Alternative resource title
Definition	Abbreviation, acronym, other name or resource title in another language.
Inspire	--
ISO 19115	363: alternateTitle *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C Service: C
Data type	CharacterString
Domain	Free text
Example	1. GeoGeoNames 2. GGN
Comments	Title for "Georgian register of geographic names " Along with the main title, alternative resource title is the title that makes a resource identifiable. Acronyms and abbreviations are common alternative forms of the main resource title.

1.3 Resource abstract

Element number	1.3
Element name	Resource abstract
Definition	Brief narrative summary of the resource content.
Inspire	1.2 Resource abstract
ISO 19115	44: abstract *(Table B.3 - Identification information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text

Example	Register of geographic names contains geographic names on the territory of Georgia from official maps and other original official sources. The Register contains the names of counties, cities/municipalities, inhabited places, cultural heritage in Georgia, airports, national parks, nature parks and other protected natural areas, sheets names of new topographic maps etc. Also, the names of all rivers, lakes, mountains, peaks and other dominant geographic features in line with the scale are included. Position data are given in the WGS84/UTM reference system.
Comments	The abstract serves to give a potential user a clear insight into the nature of data. Description should be complete and concise. In making an abstract, all needs of a potential user should be taken into consideration. It is desirable to use words and expression a potential user is expected to use in searching. The first sentences are crucial in the searching process. They need to be clear and written using simple language, and are followed with details related to the data resource observed. It is recommended to clearly describe the data collection method. It is not recommended an abstract to have more than 3500 characters (including spaces).

1.4 Resource type

Element number	1.4
Element name	Resource type
Definition	Type of resource described by the metadata.
Inspire	1.3 Resource type
ISO 19115	40: resourceScope *(Table B.2.1 - Metadata scope information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	MD_ScopeCode<<CodeList>>
Example	Dataset
Comments	Generally, there are very many types of data resources. Georgian NSDI recognises the following resource types: spatial dataset, spatial dataset series, and spatial data services. Based on the type of resource, Georgian NSDI will have two XML metadata models: the dataset and dataset series model, and the spatial data services model. To select the right metadata model, one needs to know the type of spatial data resource before they are entered.

MD_ScopeCode<<CodeList>> (ISO 19115 B.3.28)

Nr.	Name / Role name	Domain code	Definition
1	dataset	001	information applies to the dataset
2	dataset series	002	information applies to the dataset series
3	service	003	information applies to a capability which a service provider entity makes available to a service user entity through a set of interfaces that define a behavior, such as a use case.

1.5 Resource status

Element number	1.5
Element name	Resource status
Definition	Status of the resource.
Inspire	--
ISO 19115	47: status *(Table B.3 - Identification information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	MD_ProgressCode <<CodeList>>
Example	Completed
Comments	Status uses to inform if datasets, data series and data services are in the status of planned, under development or going on. Datasets and data series may also be in the status of completed. For some geographical themes may use status: Historical Archive.

MD_ProgressCode <<CodeList>> (ISO 19115 B.3.25)			
Nr.	Name / Role name	Domain code	Definition
1	Completed	001	has been completed
2	Planned	002	fixed date has been established upon or by which the resource will be created or updated
3	On Going	003	continually being updated
4	Under Development	004	currently in the process of being created
5	Historical Archive	005	stored in an offline storage facility

1.6 Resource locator

1.6.1 Resource locator: for data sets and dataset series

Element number	1.6.1
Element name	Resource Locator: for data sets and dataset series
Definition	Location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme.
Inspire	1.4 Resource Locator
ISO 19115	406: linkage *(Table B.16.6 - Online resource information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C Service: not applicable; M - If there is URL available providing additional information about the resource and/or service related to resource access.
Data type	URL
Domain	URL (IETF RFC1738 and IETF RFC 2056)
Example	http://nv1.napr.gov.ge/geoserver/wms&version=1.3.0
Comments	This element specifies the address(es) of the web-page (URL) linked to a data resource. If there is no web-address, a link may be indicated to the point of contact. If the resource is available through a service, this element is a service address (URL), for instance http://napr.gov.ge The address prefix ("http://") has to be written.

1.6.2 Resource locator: for services

Element number	1.6.2
Element name	Resource Locator: for Services
Definition	Location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme.
Inspire	1.4 Resource Locator
ISO 19115	406: linkage *(Table B.16.6 - Online resource information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: not applicable Service: C; M - If there is link to the service.
Data type	URL
Domain	URL (IETF RFC1738 and IETF RFC 2056)
Example	http://nv1.napr.gov.ge/geoserver/wms&version=1.3.0
Comments	If a linkage for a service is available, the Resource Locator shall be a valid URL providing one of the following: a link to a web with further instructions a link to a service capabilities document

	a link to the service WSDL document (SOAP Binding) a link to a client application that directly accesses the service If no direct link to a resource is available, provide link to a contact point where more information about the resource is available.

1.7 Unique Resource Identifier

1.7.1 Unique Resource Identifier: code

Element number	1.7.1
Element name	Unique Resource Identifier: code
Definition	Value uniquely identifying the resource (alphanumeric value identifying an instance in the namespace).
Inspire	1.5 Unique Resource Identifier
ISO 19115	433: code *(Table B.17.2 - Identifier information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: not applicable
Data type	CharacterString
Domain	No specified domain
Example	0001
Comments	This element serves to uniquely identify a data resource in the specified code space. It is a mandatory element consisting of an identification code and code space that uniquely identify the spatial data resource. The code uniquely identifies a resource and must be set. The code space is a collection of names used in XML documents. It enables the names of elements and attributes to be uniquely identified and is set if there is one. Unique Resource Identifier (URI) can use Uniform Resource Locator (URL) or Uniform Resource Name (URN). URN is more desirable because it does not change if data location does. Universally Unique Identifier (UUID) can also be used. The existing URL for a dataset, dataset series or data service can be documented. If a link is not available, a link can be made to the point of contact with more information. Unique resource identifier cannot be changed.

1.7.2 Unique Resource Identifier: code space

Element number	1.7.2
Element name	Unique Resource Identifier: code space
Definition	Value uniquely identifying the resource (identifier or namespace in which the code is valid).

Inspire	1.5 Unique Resource Identifier
ISO 19115	434: codeSpace *(Table B.17.2 - Identifier information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: not applicable
Data type	CharacterString
Domain	No specified domain
Example	GE:NAPR:GeoNames:0001
Comments	This element serves to uniquely identify a data resource in the specified code space. It is a mandatory element consisting of an identification code and code space that uniquely identify the spatial data resource. The code uniquely identifies a resource and must be set. The code space is a collection of names used in XML documents. It enables the names of elements and attributes to be uniquely identified and is set if there is one. Unique Resource Identifier (URI) can use Uniform Resource Locator (URL) or Uniform Resource Name (URN). URN is more desirable because it does not change if data location does. Universally Unique Identifier (UUID) can also be used. The existing URL for a dataset, dataset series or data service can be documented. If a link is not available, a link can be made to the point of contact with more information. Unique resource identifier cannot be changed.

1.8 Coupled resource

Element number	1.8
Element name	Coupled resource
Definition	If the data service resource, coupled resource, is identified, where this is relevant, link to the service of spatial dataset(s) is created with a unique resource identifier.
Inspire	1.6 Coupled resource
ISO 19115	305: coupledResource *(Table B.14 - Service metadata information - Service Identification information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: not applicable Service: C; M- If there is available link to the dataset related to the service.
Data type	Class
Domain	Unique resource identifier (URI) or location (URL) of the SV_CoupledResource (Table B.14.4)
Example	http://napr.gov.ge/eng/csw?SERVICE=CSW&VERSION=2.0.2&
Comments	This metadata element connects a service with a dataset or a

	dataset series over which the observed service is established. It serves to provide information about the dataset over which the service is established. Unique Resource Locator (URL) of the dataset over which a service is established can be indicated as Unique Resource Identifier (URI). This element can be identical with the element Unique Resource Identifier for the dataset over which the observed service is established. Also, this element's domain can be identified by code and code space, and a version of it uniquely defining the code.

1.9 Resource language

Element number	1.9
Element name	Resource language
Definition	Language(s) used within the resource.
Inspire	1.7 Resource language
ISO 19115	448: language *(Table B.18.2 - Locale information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C; M - If the resource contains textual information. Service: not applicable
Data type	Class
Domain	LanguageCode <<Codelist>>
Example	geo
Comments	Only three-letter language codes from ISO 639-2 are used.

LanguageCode <<Codelist>> (ISO 19115 B.3.1 1)			
Nr.	Name / Role name	Domain code	Definition
1	geo	001	Georgian
2	abk	002	Abkhazian
3	eng	003	English
4	ger	004	German
5	fre	005	French
6	rus	006	Russian

1.10 Resource delivery

1.10.1 Resource delivery: protocol

Element number	1.10.1
Element name	Resource delivery: protocol
Definition	Connection protocol to be used.
Inspire	--
ISO 19115	407: protocol *(Table B.16.6 - Online resource information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	No specified domain
Example	HTTP:OGC:WMS
Comments	

1.10.2 Resource delivery: function

Element number	1.10.2
Element name	Resource delivery: function
Definition	Code for function performed by the online resource.
Inspire	--
ISO 19115	411: function *(Table B.16.6 - Online resource information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	Cl_OnLineFunctionCode<<CodeList>>
Example	download
Comments	

Cl_OnLineFunctionCode<<CodeList>> (ISO 19115 B.3.3)			
Nr.	Name / Role name	Domain code	Definition

1	download	001	online instructions for transferring data from one storage device or system to another
2	information	002	on line information about the resource
3	offlineAccess	003	online instructions for requesting the resource from the provider
4	order	004	online order process for obtaining the resource
5	search	005	online search interface for seeking out information about the resource
6	completeMetadata	006	complete metadata provided
7	browseGraphic	007	browse graphic provided
8	upload	008	online resource upload capability provided
9	emailService	009	online email service provided
10	browsing	010	on line browsing provided
11	fileAccess	011	on line file access provided

1.10.3 Resource delivery: format

Element number	1.10.3
Element name	Resource delivery: format
Definition	Name of data delivery format.
Inspire	--
ISO 19115	362: title *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text
Example	ESRI Shape file
Comments	

1.10.4 Resource delivery: format version

Element number	1.10.4
Element name	Resource delivery: format version
Definition	Version of data delivery format.
Inspire	--
ISO 19115	365: edition *(Table B.16 - Citation and responsible party information - Citation information)*

Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text
Example	9.1
Comments	

2. CLASSIFICATION OF SPATIAL DATA AND SERVICES

2.1 ISO topic category

Element number	2.1
Element name	ISO topic category
Definition	Main theme(s) of the resource. Topic category is a high-level classification scheme to assist in the grouping and topic-based search of available spatial data resources.
Inspire	2.1 Topic category
ISO 19115	52: topicCategory *(Table B.3 - Identification information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: not applicable
Data type	Class
Domain	MD_TopicCategoryCode<<Enumeration>>
Example	Location
Comments	This element is a standard ISO topic classification helping to group and search spatial data. This is a generalised classification of spatial data themes categorising them roughly. For fine searching, keywords are used. This element's domain values are in accordance with the EN ISO 19115 standard.

MD_TopicCategoryCode<<Enumeration>> (ISO 19115 B.3.30)			
Nr.	Name / Role name	Domain code	Definition
1	farming	001	rearing of animals and/or cultivation of plants EXAMPLES Agriculture, irrigation, aquaculture, plantations, herding, pests and diseases affecting crops and livestock.
2	biota	002	flora and/or fauna in natural environment EXAMPLES Wildlife, vegetation, biological sciences, ecology, wilderness, sea life, wetlands, habitat.
3	boundaries	003	legal land descriptions, maritime boundaries

			EXAMPLES Political and administrative boundaries, territorial seas, EEZ, port security zones.
4	climatologyMeteorology Atmosphere	004	processes and phenomena of the atmosphere EXAMPLES Cloud cover, weather, climate, atmospheric conditions, climate change, precipitation.
5	Economy	005	economic activities, conditions and employment EXAMPLES Production, labour, revenue, commerce, industry, tourism and ecotourism, forestry, fisheries, commercial or subsistence hunting, exploration and exploitation of resources such as minerals, oil and gas.
6	elevation	006	height above or below a vertical datum EXAMPLES Altitude, bathymetry, digital elevation models, slope, derived products.
7	environment	007	environmental resources, protection and conservation EXAMPLES Environmental pollution, waste storage and treatment, environmental impact assessment, monitoring environmental risk, nature reserves, landscape.
8	geoscientificInformation	008	information pertaining to earth sciences EXAMPLES Geophysical features and processes, geology, minerals, sciences dealing with the composition, structure and origin of the earth's rocks, risks of earthquakes, volcanic activity, landslides, gravity information, soils, permafrost, hydrogeology, erosion.
9	health	009	health, health services, human ecology, and safety EXAMPLES Disease and illness, factors affecting health, hygiene, substance abuse, mental and physical health, health services.
10	imageryBaseMapsEarth-Cover	010	base maps EXAMPLES Land cover, topographic maps, imagery, unclassified images, annotations.
11	intelligenceMilitary	011	military bases, structures, activities EXAMPLES Barracks, training grounds, military transportation, information collection.
12	inlandWaters	012	inland water features, drainage systems and their characteristics EXAMPLES Rivers and glaciers, salt lakes, water utilization plans, dams, currents, floods, water quality, hydrologic information.
13	location	013	positional information and services EXAMPLES Addresses, geodetic networks, control points, postal zones and services, place names.
14	oceans	014	features and characteristics of salt water bodies (excluding inland waters) EXAMPLES Tides, tsunamis, coastal information,

			reefs.
15	planningCadastre	015	information used for appropriate actions for future use of the land EXAMPLES Land use maps, zoning maps, cadastral surveys and land ownership.
16	society	016	characteristics of society and cultures EXAMPLES Settlements, anthropology, archaeology, education, traditional beliefs, manners and customs, demographic data, recreational areas and activities, social impact assessments, crime and justice, census information.
17	structure	017	man-made construction EXAMPLES Buildings, museums, churches, factories, housing, monuments, shops, towers.
18	transportation	018	means and aids for conveying persons and/or goods EXAMPLES Roads, airports/airstrips, shipping routes, tunnels, nautical charts, vehicle or vessel location, aeronautical charts, railways.
19	utilitiesCommunication	019	energy, water and waste systems and communications infrastructure and services EXAMPLES Hydroelectricity, geothermal, solar and nuclear sources of energy, water purification and distribution, sewage collection and disposal, electricity and gas distribution, data communication, telecommunication, radio, communication networks.
20	extraTerrestrial	020	region more than 100 km above the surface of the Earth
21	disaster	021	information related to disasters EXAMPLES Site of the disaster evacuation zone, disaster-prevention facility, disaster relief activities.

2.2 Spatial data service type

Element number	2.2
Element name	Spatial data service type
Definition	Type of spatial data service.
Inspire	2.2 Spatial data service type
ISO 19115	301: serviceType *(Table B.14 - Service metadata information - Service Identification information)*
Multiplicity	1
Obligation	Dataset or dataset series: not applicable Service: M
Data type	Class
Domain	ServiceType *(GenericName ISO/TS 19103)*
Example	view
Comments	One service is listed under only one category

ServiceType << GenericName >> (ISO 19115 B.2.7)			
Nr.	Name / Role name	Domain code	Definition
1	discovery	001	Discovery service allows finding spatial datasets, dataset series and spatial data services on the basis of metadata content and it shows metadata content.
2	view	002	View service allows viewing, navigating, zooming in and out, moving or overlapping visible datasets and viewing legends and relevant metadata contents.
3	download	003	Download service allows copying spatial datasets or their parts, in order for them to be downloaded and, if feasible, accessed directly.
4	transformation	004	Transformation service allows transformation of spatial data resources to achieve greater interoperability.

3. KEYWORD

3.1 National spatial data themes

3.1.1 National spatial data themes: keyword

Element number	3.1.1
Element name	National spatial data themes: keyword
Definition	Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject.
Inspire	--
ISO 19115	69: keyword *(Table B.3.1 - Keyword information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Values in National spatial data themes topic category (Geo NSDI Law)
Example	Cultural heritage
Comments	

3.1.2 National spatial data themes catalogue: title

Element number	3.1.2
Element name	National spatial data themes catalogue: title
Definition	Name of the formally registered thesaurus or a similar authoritative source of keywords.
Inspire	--
ISO 19115	362: title *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text
Example	National spatial data themes catalogue
Comments	

3.1.3 National spatial data themes catalogue: date

Element number	3.1.3
Element name	National spatial data themes catalogue: date
Definition	Reference date for registered thesaurus or a similar authoritative source of keywords.
Inspire	--
ISO 19115	403: date *(Table B.16.5 - Date information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	DateTime (B.2.2)
Example	2007-09; 2015-04-25
Comments	Date is defined in accordance with the ISO 19108 and ISO 8601 standards.

3.1.4 National spatial data themes catalogue: date type

Element number	3.1.4
Element name	National spatial data themes catalogue: date type
Definition	Event used for reference date.
Inspire	---
ISO 19115	404: dateType *(Table B.16.5 - Date information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	CI_DateTypeCode<<CodeList>>
Example	publication
Comments	

CI_DateTypeCode <<CodeList>> (ISO 19115 B.3.2)			
Nr.	Concept name (English)	Domain code	Definition
1	creation	001	date identifies when the resource was brought into existence

2	publication	002	date identifies when the resource was issued
3	revision	003	date identifies when the resource was examined or reexamined and improved or amended
4	lastRevision	004	date identifies when resource was last reviewed

3.2 GEMET-INSPIRE themes

3.2.1 GEMET- INSPIRE themes: keyword

Element number	3.2.1
Element name	GEMET- INSPIRE themes: keyword
Definition	Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject.
Inspire	3.2 Originating controlled vocabulary
ISO 19115	69: keyword *(Table B.3.1 - Keyword information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Values in GEMET – INSPIRE themes
Example	Buildings
Comments	

3.2.2 GEMET- INSPIRE themes: title

Element number	3.2.2
Element name	GEMET- INSPIRE themes: title
Definition	Name of the formally registered thesaurus or a similar authoritative source of keywords.
Inspire	3.2 Originating controlled vocabulary
ISO 19115	362: title *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text
Example	GEMET – INSPIRE themes, version 1.0

Comments	

3.2.3   GEMET- INSPIRE themes: date

Element number	3.2.3
Element name	GEMET- INSPIRE themes: date
Definition	Reference date for registered thesaurus or a similar authoritative source of keywords.
Inspire	3.2 Originating controlled vocabulary
ISO 19115	403: date *(Table B.16.5 - Date information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	DateTime (B.2.2)
Example	2007-09; 2015-04-25
Comments	Date is defined in accordance with the ISO 19108 and ISO 8601 standards.

3.2.4   GEMET- INSPIRE themes: date type

Element number	3.2.4
Element name	GEMET- INSPIRE themes: date type
Definition	Event used for reference date.
Inspire	3.2 Originating controlled vocabulary
ISO 19115	404: dateType *(Table B.16.5 - Date information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	CI_DateTypeCode<<CodeList>>
Example	publication
Comments	

CI_DateTypeCode <<CodeList>> (ISO 19115 B.3.2)			
Nr.	Concept name (English)	Domain code	Definition
1	creation	001	date identifies when the resource was brought into existence
2	publication	002	date identifies when the resource was issued
3	revision	003	date identifies when the resource was examined or reexamined and improved or amended
4	lastRevision	004	date identifies when resource was last reviewed

3.3 GEMET concepts

3.3.1   GEMET concepts: keyword

Element number	3.3.1
Element name	GEMET concepts - keyword
Definition	Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject.
Inspire	3.2 Originating controlled vocabulary
ISO 19115	69: keyword *(Table B.3.1 - Keyword information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Values in GEMET - Concepts
Example	culture (society)
Comments	values http://www.eionet.europa.eu/gemet/

3.3.2   GEMET concepts: title

Element number	3.3.2
Element name	GEMET-concepts: title
Definition	Name of the formally registered thesaurus or a similar authoritative source of keywords.
Inspire	3.2 Originating controlled vocabulary
ISO 19115	362: title *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M

	Service: M
Data type	CharacterString
Domain	Free text
Example	GEMET - Concepts, version 2.4
Comments	

3.3.3 GEMET concepts: date

Element number	3.3.3
Element name	GEMET-concepts: date
Definition	Reference date for registered thesaurus or a similar authoritative source of keywords.
Inspire	3.2 Originating controlled vocabulary
ISO 19115	403: date *(Table B.16.5 - Date information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	DateTime (B.2.2)
Example	2007-09; 2015-04-25
Comments	Date is defined in accordance with the ISO 19108 and ISO 8601 standards.

3.3.4 GEMET concepts: date type

Element number	3.3.4
Element name	GEMET-concepts: date type
Definition	Event used for reference date.
Inspire	3.2 Originating controlled vocabulary
ISO 19115	404: dateType *(Table B.16.5 - Date information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	CI_DateTypeCode<<CodeList>>
Example	publication

Comments	

CI_DateTypeCode <<CodeList>> (ISO 19115 B.3.2)			
Nr.	Concept name (English)	Domain code	Definition
1	creation	001	date identifies when the resource was brought into existence
2	publication	002	date identifies when the resource was issued
3	revision	003	date identifies when the resource was examined or reexamined and improved or amended
4	lastRevision	004	date identifies when resource was last reviewed

3.4 Services classified keyword

Element number	3.4
Element name	Services classified keyword
Definition	Commonly used word(s) or formalised word(s) or phrase(s) used to describe the service.
Inspire	3.1 Keyword value
ISO 19115	69: keyword *(Table B.3.1 - Keyword information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Values in part D4 in INSPIRE metadata regulation
Example	infoMapAccessService
Comments	

3.5 Free keyword

Element number	3.5
Element name	Free keyword
Definition	Other user defined free keywords.
Inspire	--
ISO 19115	69: keyword *(Table B.3.1 - Keyword information)*
Multiplicity	0..*

Obligation	Dataset or dataset series: C Service: C
Data type	CharacterString
Domain	Free text
Example	Historical Monument

4. SPATIAL REFERENCE

4.1 Coordinate reference system

4.1.1 Coordinate reference system: code

Element number	4.1.1
Element name	Coordinate reference system: code
Definition	Designates the data resource coordinate (spatial) reference system code.
Inspire	--
ISO 19115	433: code *(Table B.17.2 - Identifier information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: C; M - for services with an explicit geographic propagation.
Data type	Class
Domain	EPSG Registry (http://www.epsg-registry.org)
Example	EPSG::32638
Comments	

EPSG Registry (http://www.epsg-registry.org)			
Nr.	Code	Code space	Description
1	EPSG::32637	EPSG	WGS 84 / UTM zone 37N
2	EPSG::32638	EPSG	WGS 84 / UTM zone 38N
2	EPSG::2497	EPSG	Pulkovo 1942 / Gauss-Kruger CM 39E
3	EPSG::2498	EPSG	Pulkovo 1942 / Gauss-Kruger CM 45E
4	EPSG::2588	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 39E
5	EPSG::2589	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 42E

6	EPSG::2590	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 45E
7	EPSG::2591	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 48E
8	EPSG::2935	EPSG	Pulkovo 1942 / CS63 zone A1
9	EPSG::2936	EPSG	Pulkovo 1942 / CS63 zone A2
10	EPSG::2937	EPSG	Pulkovo 1942 / CS63 zone A3

4.1.2 Coordinate reference system: codespace

Element number	4.1.2
Element name	Coordinate reference system: codespace
Definition	Designates the data resource coordinate (spatial) reference system code space.
Inspire	--
ISO 19115	434: codeSpace *(Table B.17.2 - Identifier information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: C; M - for services with an explicit geographic propagation.
Data type	Class
Domain	EPSG Registry (http://www.epsg-registry.org)
Example	EPSG
Comments	

EPSG Registry (http://www.epsg-registry.org)			
Nr.	Code	Code space	Description
1	EPSG::32637	EPSG	WGS 84 / UTM zone 37N
2	EPSG::32638	EPSG	WGS 84 / UTM zone 38N
2	EPSG::2497	EPSG	Pulkovo 1942 / Gauss-Kruger CM 39E
3	EPSG::2498	EPSG	Pulkovo 1942 / Gauss-Kruger CM 45E
4	EPSG::2588	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 39E
5	EPSG::2589	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 42E
6	EPSG::2590	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 45E
7	EPSG::2591	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 48E
8	EPSG::2935	EPSG	Pulkovo 1942 / CS63 zone A1
9	EPSG::2936	EPSG	Pulkovo 1942 / CS63 zone A2
10	EPSG::2937	EPSG	Pulkovo 1942 / CS63 zone A3

Element number	4.1.3
Element name	Coordinate reference system: description
Definition	Designates description of the data resource coordinate (spatial) reference system.
Inspire	--
ISO 19115	436: description *(Table B.17.2 - Identifier information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: C; M - for services with an explicit geographic propagation.
Data type	Class
Domain	EPSG Registry (http://www.epsg-registry.org)
Example	WGS 84 / UTM zone 38N
Comments	

EPSG Registry (http://www.epsg-registry.org)			
Nr.	Code	Code space	Description
1	EPSG::32637	EPSG	WGS 84 / UTM zone 37N
2	EPSG::32638	EPSG	WGS 84 / UTM zone 38N
2	EPSG::2497	EPSG	Pulkovo 1942 / Gauss-Kruger CM 39E
3	EPSG::2498	EPSG	Pulkovo 1942 / Gauss-Kruger CM 45E
4	EPSG::2588	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 39E
5	EPSG::2589	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 42E
6	EPSG::2590	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 45E
7	EPSG::2591	EPSG	Pulkovo 1942 / 3-degree Gauss-Kruger CM 48E
8	EPSG::2935	EPSG	Pulkovo 1942 / CS63 zone A1
9	EPSG::2936	EPSG	Pulkovo 1942 / CS63 zone A2
10	EPSG::2937	EPSG	Pulkovo 1942 / CS63 zone A3

4.2 Lowest and highest elevation

Element number	4.2

Element name	Lowest and highest elevation
Definition	Vertical domain of resource.
Inspire	--
ISO 19115	357: minimumValue *(Table B.15.3 - Vertical extent information)* 358: maximumValue *(Table B.15.3 - Vertical extent information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C Service: C
Data type	Real
Domain	Real
Example	-4,0; 5203,0
Comments	Lowest and highest vertical value contained in the resource

4.3 Vertical datum

4.3.1   Vertical datum: code

Element number	4.3.1
Element name	Vertical datum: code
Definition	Identifies the vertical coordinate reference system code.
Inspire	--
ISO 19115	433: code *(Table B.17.2 - Identifier information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C Service: C M - if lowest and highest elevation is filled
Data type	Class
Domain	EPSG Registry (http://www.epsg-registry.org)
Example	EPSG::5105
Comments	

EPSG Registry (http://www.epsg-registry.org)			
Nr.	Code	Code space	Description
1	EPSG::5105	EPSG	Baltic 1977 (Baltic Sea)

4.3.2 Vertical datum: codeSpace

Element number	4.3.2
Element name	Vertical datum: codeSpace
Definition	Identifies the vertical coordinate reference system code space.
Inspire	--
ISO 19115	434: codeSpace *(Table B.17.2 - Identifier information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C Service: C; M - if lowest and highest elevation is filled.
Data type	Class
Domain	EPSG Registry (http://www.epsg-registry.org)
Example	EPSG
Comments	

EPSG Registry (http://www.epsg-registry.org)			
Nr.	Code	Code space	Description
1	EPSG::5105	EPSG	Baltic 1977 (Baltic Sea)

4.3.3 Vertical datum: description

Element number	4.3.3
Element name	Vertical datum: description
Definition	Identifies the vertical coordinate reference system used for the minimum and maximum values.
Inspire	--
ISO 19115	436: description *(Table B.17.2 - Identifier information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C Service: C; M - if lowest and highest elevation is filled.
Data type	Class
Domain	EPSG Registry (http://www.epsg-registry.org)
Example	Baltic 1977 (Baltic Sea)
Comments	

EPSG Registry (http://www.epsg-registry.org)			
Nr.	Code	Code space	Description
1	EPSG::5105	EPSG	Baltic 1977 (Baltic Sea)

5. GEOGRAPHIC LOCATION

5.1 Geographic Bounding Box

Element number	5.1
Element name	Geographic Bounding Box
Definition	Geographic position of the resource Western-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east). Eastern-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east) Northern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north) Southern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north).
Inspire	4.1 Geographic bounding box
ISO 19115	345: westBoundLongitude *(Table B.15.1 - Geographic extent) information)* 346: eastBoundLongitude *(Table B.15.1 - Geographic extent) information)* 347: southBoundLatitude *(Table B.15.1 - Geographic extent) information)* 348: northBoundLatitude *(Table B.15.1 - Geographic extent) information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: C; M - for services with an explicit geographic extent.
Data type	Decimal - angle, expressed in degrees with at least two decimal digits Specified
Domain	-180.00 ≤ westBoundLongitude ≤ 180.00 -180.00 ≤ eastBoundLongitude ≤ 180.00 -90.00 ≤ southBoundingLatitude ≤ 90.00 -90.00 ≤ northBoundingLatitude ≤ 90.00
Example	44.60 (westBoundLongitude) 45.02 (eastBoundLongitude) 41.62 (southBoundLatitude) 41.84 (northBoundLatitude)
Comments	The bounding box shall be as small as possible. The bounding box shall be expressed in decimal degree with a precision of at least 2 decimals.

5.2 Text Description of extent

Element number	5.2
Element name	Text Description of extent
Definition	Text Description which describes the location of the resource.
Inspire	--
ISO 19115	336: description *(Table B.15 - Extent information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text
Example	Data covers area of Tbilisi Municipality
Comments	

6. TEMPORAL REFERENCE

6.1 Temporal extent

Element number	6.1
Element name	Temporal extent
Definition	Time period covered by the content of the resource.
Inspire	5.1 Temporal extent
ISO 19115	352: extent *(Table B.15.2 - Temporal extent information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	TM_primitive (B2.4)
Example	From 2008-03-10 to 2011-01-15
Comments	Temporal extent primarily refers to the data collection period. However, if a data resource refers to a historical period, such as the geological period, then temporal extent refers to the moment when data were found or collected. Temporal extent is defined by the start and end dates of data, or either of these. If the start date is not known, it is dropped and only the end date is used. If data are still added to a resource, the end date is dropped, while the start date is indicated, which is also reflected in data status, as being updated.

6.2 Reference date

6.2.1   Reference date: date

Element number	6.2.1
Element name	Reference date: date
Definition	Reference date for the cited resource.
Inspire	5.2 Date of Publication, 5.3 Date of last revision, 5.4 Date of creation
ISO 19115	403: date *(Table B.16.5 - Date information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	DateTime (B.2.2)
Example	1921; 2007-09; 2015-04-25
Comments	Date is set using the values for year, month and day, in the format specified by the ISO 8601 standard. In realising temporal reference, date and date type is specified. Date type serves to distinguish between the dates of creation, the date of publication or the date of last revision.

6.2.2   Reference date: date type

Element number	6.2.2
Element name	Reference date: date type
Definition	Event used for reference date for the cited resource.
Inspire	5.2 Date of Publication, 5.3 Date of last revision, 5.4 Date of creation
ISO 19115	404: dateType *(Table B.16.5 - Date information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	CI_DateTypeCode <<CodeList>>
Example	Publication
Comments	Date is set using the values for year, month and day, in the format specified by the ISO 8601 standard. In realising temporal reference, date and date type is specified. Date type serves to distinguish between the dates of creation, the date of publication or the date of last revision.

CI_DateTypeCode <<CodeList>> (ISO 19115 B.3.2)

Nr.	Concept name (English)	Domain code	Definition
1	creation	001	date identifies when the resource was brought into existence
2	publication	002	date identifies when the resource was issued
3	revision	003	date identifies when the resource was examined or reexamined and improved or amended
4	lastRevision	004	date identifies when resource was last reviewed

6.3 Update frequency

Element number	6.3
Element name	Update frequency
Definition	Frequency with which modifications are made and data added to the resource after the initial resource has been finished.
Inspire	--
ISO 19115	141: maintenanceAndUpdateFrequency *(Table B.6 - Maintenance information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: not applicable
Data type	Class
Domain	MD_MaintenanceFrequencyCode<<CodeList>>
Example	Monthly
Comments	This element documents frequency of the revision of data resource.

MD_MaintenanceFrequencyCode <<CodeList>>(ISO 19115 B.3.21)			
Nr.	Name / Role name	Domain code	Definition
1	continual	001	Data is continually updated
2	daily	002	Data is updated each day
3	weekly	003	Data is updated on a weekly basis
4	fortnightly	004	Data is updated every two weeks
5	monthly	005	Data is updated each month
6	quarterly	006	Data is updated every three months
7	biannually	007	Data is updated twice each year
8	annually	008	Data is updated every year
9	as needed	009	Data is updated in intervals that are uneven in duration

10	irregular	010	Data is updated in intervals that are uneven in duration
11	not planned	011	There are no plans to update data
12	unknown	012	Frequency of data update is not known
13	periodic	013	resource is updated at regular intervals
14	semimonthly	014	resource updated twice monthly
15	biennially	015	resource is updated every 2 years

6.4 Update note

Element number	6.4
Element name	Update note
Definition	Information related to specific requirements of resource maintenance.
Inspire	--
ISO 19115	145: maintenanceNote *(Table B.6 - Maintenance information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C Service: not applicable
Data type	CharacterString
Domain	Free text
Example	Data are updated on the first day of the month.
Comments	This element documents additional information about data and metadata update.

7. QUALITY AND VALIDITY

7.1 Lineage

Element number	7.1
Element name	Lineage
Definition	General explanation of the data producer's knowledge about the lineage of a resource.
Inspire	6.1 Lineage
ISO 19115	119: statement *(Table B.5 - Lineage information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: not applicable

Data type	CharacterString
Domain	Free text
Example	A geographical name (GeoName) is a proper noun applied to a natural, man-made or cultural feature on Earth. A feature can have different names in one or several languages and the names may be provided, together with appropriate information on the feature, in different products like maps and gazetteers as well as respective services. In Georgia issues associated to GeoNames regulated state commission. A commission headed by the Ministry of Regional Development and Infrastructure is governing the updates. NAPR is responsible for processing the updating of the data sets. Data and requests for updates are coming from municipalities (village names) and state agencies and ministries and are submitted to the commission. After approval by the commission, the package is delivered to NAPR. Technical errors being detected by users may be addressed directly to NAPR. Legal errors being detected shall be addressed to the Commission. Procedures for updating metadata will be developed in the future. Data is being updated at least four times a year. If needed, more frequent updates in certain parts of the country may be utilized.
Comments	General description of the producer knowledge about the history of data capturing.

7.2 Spatial representation type

Element number	7.2
Element name	Spatial representation type
Definition	Method used to represent geographic information in the resource.
Inspire	--
ISO 19115	49: spatialRepresentationType *(Table B.3 - Identification information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: not applicable
Data type	Class
Domain	MD_SpatialRepresentationTypeCode <<CodeList>>
Example	Vector
Comments	

MD_SpatialRepresentationTypeCode <<CodeList>>(ISO 19115 B.3.29)			
Nr.	Concept name (English)	Domain code	Definition
1	vector	001	vector data are used to represent geographic data
2	grid	002	grid data are used to represent geographic data
3	textTable	003	textual or tabular data are used to represent geographic data
4	Tin	004	triangulated irregular network
5	stereoModel	005	three-dimensional view formed by the intersecting homologous rays of an overlapping pair of images
6	video	006	scene from a video recording

7.3 Spatial resolution

7.3.1 Spatial resolution: equivalent scale

Element number	7.3.1
Element name	Spatial resolution: equivalent scale
Definition	Level of detail expressed as the scale denominator of a comparable hardcopy map or chart.
Inspire	6.2 Spatial resolution
ISO 19115	78: denominator *(Table B.3.3 - Representative fraction information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C M - if an equivalent scale or a resolution distance can be specified Service: C M - when there is a restriction on the spatial resolution for service .
Data type	Integer
Domain	Positive integer
Example	50000 (e.g. 1:50 000 scale map)
Comments	Spatial resolution, scale is most often specified for maps and products made on the basis of maps. It is generally the positive integer value of map scale denominator that is indicated for this element, i.e. 1000 for the map scale 1:1000. If two values are stated, spatial resolution is the value limited by those two values. For example, "25 000, 50 000" assumes the spatial resolution interval to be between scales 1:25 000 and 1:50 000. If data have several scale intervals, the smallest scale is stated.

7.3.2 Spatial resolution: distance

Element number	7.3.2
Element name	Spatial resolution: distance
Definition	Horizontal ground sample distance.
Inspire	6.2 Spatial resolution
ISO 19115	81: distance *(Table B.3.4 - Resolution information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C M - if an equivalent scale or a resolution distance can be specified Service: C M - when there is a restriction on the spatial resolution for service .
Data type	Class
Domain	Distance (B.2.3) *Number expressing the distance value and a unit of measure of the distance value (ISO/TS 19103).*
Example	100 (Meters)
Comments	For services, it is not possible to express the restriction of a service concerning the spatial resolution in the current version of ISO 19119. While the problem is addressed by the standardization community, spatial resolution restrictions for services shall be expressed in the Abstract.

8. CONFORMITY

8.1 Degree

Element number	8.1
Element name	Degree
Definition	Indication of conformity result.
Inspire	7.2 Degree
ISO 19157	62: pass *(Table C.5 - Data quality result)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	Boolean
Domain	1=yes (pass) - data resource is harmonised with cited specification 0=no (fail) - data resource is not harmonised with cited specification.
Example	yes
Comments	

8.2 Conformity Specification

8.2.1   Conformity specification: title

Element number	8.2.1
Element name	Conformity specification: title
Definition	Citing title of implementation rules or other documents with which the spatial data resource is harmonised.
Inspire	7.1 Specification
ISO 19115	362: title *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text
Example	Data Specification on Geographical Names - Guidelines v 1.0.1
Comments	This element defines implementation regulations, specifications and other acts used in checking the conformity of a data resource. The resource may also be in line with several documents.

8.2.2   Conformity specification: date

Element number	8.2.2
Element name	Conformity specification: date
Definition	Citing reference date of implementation rules or other documents with which the spatial data resource is harmonised.
Inspire	7.1 Specification
ISO 19115	403: date *(Table B.16.5 - Date information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	DateTime (B.2.2)
Example	2007-09; 2015-04-25
Comments	Date is defined in accordance with the ISO 19108 and ISO 8601 standards.

8.2.3   Conformity specification: date type

Element number	8.2.3
Element name	Conformity specification: date type
Definition	Citing event used for reference date of implementation rules or other documents with which the spatial data resource is harmonised.
Inspire	7.1 Specification
ISO 19115	404: dateType *(Table B.16.5 - Date information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	CI_DateTypeCode<<CodeList>>
Example	publication
Comments	

CI_DateTypeCode <<CodeList>> (ISO 19115 B.3.2)			
Nr.	Concept name (English)	Domain code	Definition
1	creation	001	date identifies when the resource was brought into existence
2	publication	002	date identifies when the resource was issued
3	revision	003	date identifies when the resource was examined or reexamined and improved or amended
4	lastRevision	004	date identifies when resource was last reviewed

8.2.1   Conformity specification: URL

Element number	8.2.4
Element name	Conformity specification: URL
Definition	Location (address) for on-line access using a Uniform Resource Locator address or similar addressing scheme.
Inspire	--
ISO 19115	406: linkage *(Table B.16.6 - Online resource information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C; M - If data resource is harmonised according to other documents (not NSDI implementing rules)

	Service: C M - If data resource is harmonised according to other documents (not NSDI implementing rules)
Data type	URL
Domain	Text restricted to URL (IETF RFC1738 and IETF RFC 2056)
Example	http://nv1.napr.gov.ge/geoserver/wms&version=1.3.0
Comments	Before the establishment of NSDI implementing rules, there is mandatory to specify the link of the document (URL), according to which the data resource is harmonised.

8.3 Conformity description

Element number	8.3
Element name	Conformity description
Definition	Explanation of conformity.
Inspire	7.1 Specification
ISO 19157	61: explanation *(Table C.5 - Data quality result)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free text
Example	Only mandatory items of the cited specification are included in checking the conformity of a data resource and the cited specification.
Comments	

9. CONSTRAINT RELATED TO ACCESS AND USE

9.1 Limitations on public access - access constraints

Element number	9.1
Element name	Limitations on public access (access constraints)
Definition	Access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource.

Inspire	8.2 Limitations on public access
ISO 19115	106: accessConstraints *(Table B.4 - Constraint information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C M- if other constraints or classification are not documented Service: C M- if other constraints or classification are not documented
Data type	Class
Domain	MD_RestrictionCode <<CodeList>>
Example	other Restrictions (limitation not listed)
Comments	

MD_RestrictionCode <<CodeList>>(ISO 19115 B.3.27)			
Nr.	Name / Role name	Domain code	Definition
1	copyright	001	exclusive right to the publication, production, or sale of the rights to a literary, dramatic, musical, or artistic work, or to the use of a commercial print or label, granted by law for a specified period of time to an author, composer, artist, distributor
2	patent	002	government has granted exclusive right to make, sell, use or license an invention or discovery
3	patentPending	003	produced or sold information awaiting a patent
4	trademark	004	a name, symbol, or other device identifying a product, officially registered and legally restricted to the use of the owner or manufacturer
5	licence	005	formal permission to do something
6	intellectualPropertyRights	006	rights to financial benefit from and control of distribution of non-tangible property that is a result of creativity
7	restricted	007	withheld from general circulation or disclosure
8	other Restrictions	008	limitation not listed
9	unrestricted	009	no constraints exist
10	licenceUnrestricted	010	formal permission not required to use the resource
11	licenceEndUser	011	formal permission required for a person or an entity to use the resource and that may differ from the person that orders or purchases it
12	licenceDistributor	012	protects rights of individual or organisations from observation, intrusion, or attention of others
13	private	013	protects rights of individual or organisations from observation, intrusion, or attention of others

14	statutory	014	prescribed by law
15	confidential	015	not available to the public NOTE Contains information that could be prejudicial to a commercial, industrial, or national interest.
16	sensitiveButUnclassified	015	although unclassified, requires strict controls over its distribution.
17	in-confidence	017	with trust

9.2 Limitations on public access - other constraints

Element number	9.2
Element name	Limitations on public access (other constraints)
Definition	Other restrictions and legal prerequisites for accessing and using the resource or metadata.
Inspire	8.2 Limitations on public access
ISO 19115	108: otherConstraints *(Table B.4 - Constraint information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C M- if accessConstraints or classification are not documented Service: C M- if accessConstraints or classification are not documented
Data type	CharacterString
Domain	Free text
Example	No limitations
Comments	

9.3 Limitations on public access - classification

Element number	9.3
Element name	Limitations on public access (classification)
Definition	Name of the handling restrictions on the resource.
Inspire	8.2 Limitations on public access
ISO 19115	110: classification *(Table B.4 - Constraint information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C M- if accessConstraints or otherConstraints are not documented Service: C

	M- if accessConstraints or otherConstraints are not documented
Data type	Class
Domain	MD_ClassificationCode<<CodeList>>
Example	unclassified
Comments	

MD_ClassificationCode<<CodeList>>(ISO 19115 B.3.13)			
Nr.	Name / Role name	Domain code	Definition
1	unclassified	001	available for general disclosure
2	restricted	002	not for general disclosure
3	confidential	003	available for someone who can be entrusted with information
4	secret	004	kept or meant to be kept private, unknown, or hidden from all but a select group of people
5	topSecret	005	of the highest secrecy
6	sensitiveButUnclassified	006	although unclassified, requires strict controls over its distribution
7	forOfficialUseOnly	007	unclassified information that is to be used only for official purposes determined by the designating body
8	protected	008	compromise of the information could cause damage
9	limitedDistribution	009	desimination limited by designating body

9.4 Conditions applying to access and use

Element number	9.4
Element name	Conditions applying to access and use
Definition	Restrictions on the access and use of a resource or metadata.
Inspire	8.1 Conditions for access and use
ISO 19115	99: useLimitation *(Table B.4 - Constraint information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C Service: C
Data type	CharacterString
Domain	Free text

Example	Commercial use is prohibited
Comments	Terms that affect the usage of the resource

10. ORGANISATIONS RESPONSIBLE FOR THE ESTABLISHMENT, MANAGEMENT, MAINTENANCE AND DISTRIBUTION OF SPATIAL DATA SETS AND SERVICES

10.1 Responsible party

10.1.1 Responsible party: organisation name

Element number	10.1.1
Element name	Responsible party: organisation name
Definition	Name of organization for communication associated with the resource(s).
Inspire	9.1 Responsible party
ISO 19115	381: name *(Table B.16.2 - Party information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C Service: C; M - if the organisation is known
Data type	CharacterString
Domain	Free text
Example	National Agency of Public Register
Comments	The name of the organization should be given in full, without abbreviations.

10.1.2 Responsible party: person

Element number	10.1.2
Element name	Responsible party: person
Definition	Personal name(s) for communication with, person(s) associated with the resource(s).
Inspire	9.1 Responsible party
ISO 19115	381: name *(Table B.16.2 - Party information)*
Multiplicity	0..*
Obligation	Dataset or dataset series: C

	Service: C ==M - if organization is missing==
Data type	CharacterString
Domain	Free text
Example	Kvachi Kvachantiradze
Comments	

10.1.3 Responsible party: contact info

Element number	10.1.3
Element name	Responsible party: contact info
Definition	Address of the electronic mailbox of the responsible organisation or individual.
Inspire	9.1 Responsible party
ISO 19115	394: electronicMailAddress *(Table B.16.3 - Address information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	No specified domain
Example	info@napr.gov.ge
Comments	It is recommended to use institutional email instead of personal emails.

10.2   Responsible party role

Element number	10.2
Element name	Responsible party role
Definition	Function performed by the responsible party.
Inspire	9.2 Responsible party role
ISO 19115	377: role *(Table B.16.1 - Responsible party information)*
Multiplicity	1..*
Obligation	dataset or dataset series: M Service: M
Data type	Class
Domain	CI_RoleCode<<CodeList>>

Example	Owner
Comments	In metadata records, roles and responsibilities occur in different contexts and with different meanings, and it is important not to mix them.

CI_RoleCode <<CodeList>>(ISO 19115 B 3.5)			
Nr.	Name / Role name	Domain code	Definition
1	resourceProvider	001	party that supplies the resource
2	custodian	002	party that accepts accountability and responsibility for the resource and ensures appropriate care and maintenance of the resource
3	owner	003	party that owns the resource
4	user	004	party who uses the resource
5	distributor	005	party who distributes the resource
6	originator	006	party who created the resource
7	pointOfContact	007	party who can be contacted for acquiring knowledge about or acquisition of the resource
8	principal Investigator	008	key party responsible for gathering information and conducting research
9	processor	009	party who has processed the data in a manner such that the resource has been modified
10	publisher	010	party who published the resource
11	author	011	party who authored the resource
12	sponsor	012	party who speaks for the resource
13	coAuthor	013	party who jointly authors the resource
14	collaborator	014	party who assists with the generation of the resource other than the principal investigator
15	editor	015	party who reviewed or modified the resource to improve the content
16	mediator	016	a class of entity that mediates access to the resource and for whom the resource is intended or useful
17	rightsHolder	017	party owning or managing rights over the resource
18	contributor	018	party contributing to the resource
19	funder	019	party providing monetary support for the resource
20	stakeholder	020	party who has an interest in the resource or the use of the resource

11. METADATA ON METADATA

11.1   Metadata standard

11.1.1 Metadata standard title

Element number	11.1.1
Element name	Metadata standard title
Definition	Citation for the standard to which the metadata conforms.
Inspire	--
ISO 19115	362: title *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free Text
Example	GeoNSDI_MD_v1.1_20160615
Comments	Official name of the registered standard

11.1.2 Version of Metadata standard

Element number	11.1.2
Element name	Version of Metadata standard
Definition	Version of the cited standard to which the metadata conforms.
Inspire	--
ISO 19115	365: Edition *(Table B.16 - Citation and responsible party information - Citation information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	Free Text
Example	1.1
Comments	

11.2 Metadata date

Element number	11.2
Element name	Metadata date
Definition	Date which specifies when the metadata record was created or updated.
Inspire	10.2 Metadata date
ISO 19115	403: date *(Table B.16.5 - Date information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	DateTime (B.2.2)
Example	2015-04-25
Comments	These metadata specify the date when metadata were last updated or were confirmed to be updated, or if they have not been updated, the date of creation. Date encoding is a string whose format is specified in ISO 8601. This class is documented in u ISO/TS 19103.

11.3 Metadata language

Element number	11.3
Element name	Metadata language
Definition	Language used for documenting metadata.
Inspire	10.3 Metadata language
ISO 19115	448: language *(Table B.18.2 - Locale information)*
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	Class
Domain	LanguageCode <<Codelist>>
Example	geo
Comments	Only three-letter language codes from ISO 639-2 are used.

LanguageCode <<Codelist>> (ISO 19115 B.3.1 1)			
Nr.	Name / Role name	Domain code	Definition
1	geo	001	Georgian
2	abk	002	Abkhazian
3	eng	003	English
4	ger	004	German
5	fre	005	French
6	rus	006	Russian

11.4   Metadata identifier

Element number	11.4
Element name	Metadata identifier
Definition	Value that uniquely identifies metadata.
Inspire	--
ISO 19115	2: fileIdentifier (Table G.1 - Metadata about metadata)
Multiplicity	1
Obligation	Dataset or dataset series: M Service: M
Data type	CharacterString
Domain	No specified domain
Example	632b9514-16ab-4d97-948b-7fb85f1590c5
Comments	

11.5   Metadata point of contact

11.5.1 Metadata point of contact: organisation name

Element number	11.5.1
Element name	Metadata point of contact: organisation name
Definition	Name of organization responsible for the metadata information.
Inspire	10.1 Metadata point of contact
ISO 19115	381: name (Table B.16.2 - Party information)
Multiplicity	0..1

Obligation	Dataset or dataset series: C Service: C; M - if the organization is known
Data type	CharacterString
Domain	Free text
Example	National Agency of Public Register
Comments	The name of the organization should be given in full, without abbreviations. It is recommended to use institutional email instead of personal emails.

11.5.2 Metadata point of contact: person

Element number	11.5.2
Element name	Metadata point of contact: person
Definition	Individual name of responsible person for the metadata information.
Inspire	10.1 Metadata point of contact
ISO 19115	381: name *(Table B.16.2 - Party information)*
Multiplicity	0..1
Obligation	Dataset or dataset series: C Service: C; M - if organization is missing
Data type	CharacterString
Domain	Free text
Example	Kvachi Kvachantiradze
Comments	

11.5.3 Metadata point of contact: contact info

Element number	11.5.3
Element name	Metadata point of contact: contact info
Definition	Address of the electronic mailbox of the responsible organisation or individual.
Inspire	10.1. Metadata point of contact
ISO 19115	394: electronicMailAddress *(Table B.16.3 - Address information)*
Multiplicity	1..*
Obligation	Dataset or dataset series: M Service: M

Data type	CharacterString
Domain	No specified domain
Example	info@napr.gov.ge
Comments	It is recommended to use institutional email instead of personal emails.

11.6   Metadata point of contact role

Element number	11.6
Element name	Metadata point of contact role
Definition	Function performed by the metadata responsible party.
Inspire	9.2 Responsible party role
ISO 19115	377: role *(Table B.16.1 - Responsible party information)*
Multiplicity	1..*
Obligation	dataset or dataset series: M Service: M
Data type	Class
Domain	CI_RoleCode<<CodeList>>
Example	Owner
Comments	In metadata records, roles and responsibilities occur in different contexts and with different meanings, and it is important not to mix them.

CI_RoleCode <<CodeList>>(ISO 19115 B 3.5)			
Nr.	Name / Role name	Domain code	Definition
1	resourceProvider	001	party that supplies the resource
2	custodian	002	party that accepts accountability and responsibility for the resource and ensures appropriate care and maintenance of the resource
3	owner	003	party that owns the resource
4	user	004	party who uses the resource
5	distributor	005	party who distributes the resource
6	originator	006	party who created the resource
7	pointOfContact	007	party who can be contacted for acquiring knowledge about or acquisition of the resource

8	principal Investigator	008	key party responsible for gathering information and conducting research
9	processor	009	party who has processed the data in a manner such that the resource has been modified
10	publisher	010	party who published the resource
11	author	011	party who authored the resource
12	sponsor	012	party who speaks for the resource
13	coAuthor	013	party who jointly authors the resource
14	collaborator	014	party who assists with the generation of the resource other than the principal investigator
15	editor	015	party who reviewed or modified the resource to improve the content
16	mediator	016	a class of entity that mediates access to the resource and for whom the resource is intended or useful
17	rightsHolder	017	party owning or managing rights over the resource
18	contributor	018	party contributing to the resource
19	funder	019	party providing monetary support for the resource
20	stakeholder	020	party who has an interest in the resource or the use of the resource