

ANNEX II

Annex II to Regulation (EU) No 1089/2010 is amended as follows:

- (1) Throughout the text, the sentence ‘This code list shall not be extended by Member States.’ is replaced by the sentence ‘The allowed values for this code list comprise only the values in the table below.’.
- (2) Throughout the text, in the headings of all tables that are specifying code list values, the text ‘Allowed values for the code list’ is replaced by the text ‘Values for the code list’.
- (3) In Section 1.1, the following indents are added:
 - “mean sea level” (MSL) means the average height of the surface of the sea at a tide station for all stages of the tide over a 19-year period, usually determined from hourly height readings measured from a fixed predetermined reference level (chart datum).
 - “lowest astronomical tide” (LAT) means the lowest tide level which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.
- (4) Section 1.3.3 is amended as follows:
 - (a) the second indent is replaced by the following:
 - For the vertical component in the free atmosphere, barometric pressure, converted to height using ISO 2533:1975 International Standard Atmosphere, or other linear or parametric reference systems shall be used. Where other parametric reference systems are used, these shall be described in an accessible reference using EN ISO 19111-2:2012.
 - (b) the following indents are added:
 - For the vertical component in marine areas where there is an appreciable tidal range (tidal waters), the Lowest Astronomical Tide (LAT) shall be used as the reference surface.
 - For the vertical component in marine areas without an appreciable tidal range, in open oceans and effectively in waters that are deeper than 200 meters, the Mean Sea Level (MSL) or a well-defined reference level close to the MSL shall be used as the reference surface..
- (5) Section 2.2 is amended as follows:
 - (a) The first paragraph is replaced by the following:

Either of the grids with fixed and unambiguously defined locations defined in Sections 2.2.1 and 2.2.2 shall be used as a geo-referencing framework to make gridded data available in INSPIRE, unless one of the following conditions holds:

 - (1) Other grids may be specified for specific spatial data themes in Annexes II-IV. In this case, data exchanged using such a theme-specific grid shall use standards in which the grid definition is either included with the data, or linked by reference.

Changes to legislation: There are currently no known outstanding effects for the
Commission Regulation (EU) No 1253/2013, ANNEX II. (See end of Document for details)

- (2) For grid referencing in regions outside of continental Europe Member States may define their own grid based on a geodetic coordinate reference system compliant with ITRS and a Lambert Azimuthal Equal Area projection, following the same principles as laid down for the grid specified in Section 2.2.1. In this case, an identifier for the coordinate reference system shall be created.
- (b) Section 2.2.1 is amended as follows:
- (1) the title is replaced by ‘Equal Area Grid’.
- (2) the sentences ‘The grid defined in this Section shall be used as a geo-referencing framework where grids with fixed and unambiguously defined locations of equal-area grid cells are required.’ and ‘The reference point of a grid cell shall be the lower left corner of the grid cell.’ are deleted.
- (c) Section 2.2.2 is replaced by the following:
- 2.2.2. *Zoned Geographic Grid*
1. When gridded data is delivered using geodetic coordinates as specified in Section 1.3 of this Annex the multi-resolution grid defined in this Section may be used as a geo-referencing framework.
 2. The resolution levels are defined in Table 1.
 3. The grid shall be based on the ETRS89-GRS80 geodetic coordinate reference system.
 4. The origin of the grid shall coincide with the intersection point of the Equator with the Greenwich Meridian (GRS80 latitude $\varphi=0$; GRS80 longitude $\lambda=0$).
 5. The grid orientation shall be south-north and west-east according to the net defined by the meridians and parallels of the GRS80 ellipsoid.
 6. For grid referencing in regions outside of continental Europe data providers may define their own grid based on a geodetic coordinate reference system compliant with ITRS, following the same principles as laid down for the Pan-European Grid_ETRS89-GRS80zn. In this case, an identifier for the coordinate reference system and the corresponding identifier for the grid shall be created.
 7. This grid shall be subdivided in zones. The south-north resolution of the grid shall have equal angular spacing. The west-east resolution of the grid shall be established as the product of angular spacing multiplied by the factor of the zone as defined in Table 1.
 8. The grid shall be designated Grid_ETRS89-GRS80zn_res, where *n* represents the number of the zone and *res* the cell size in angular units, as specified in Table 1.

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TABLE I

Common Grid_ETRS89-GRS80: Latitude spacing (resolution level) and longitude spacing for each zone

Resolution Levels	LONGITUDE SPACING (Arc seconds)						Cell size
	Latitude SPACING (Arc seconds)	Zone 1 (Lat. 0°–50°)	Zone 2 (Lat. 50°–70°)	Zone 3 (Lat. 70°–75°)	Zone 4 (Lat. 75°–80°)	Zone 5 (Lat. 80°–90°)	
LEVEL 0	3 600	3 600	7 200	10 800	14 400	21 600	1 D
LEVEL 1	3 000	3 000	6 000	9 000	12 000	18 000	50 M
LEVEL 2	1 800	1 800	3 600	5 400	7 200	10 800	30 M
LEVEL 3	1 200	1 200	2 400	3 600	4 800	7 200	20 M
LEVEL 4	600	600	1 200	1 800	2 400	3 600	10 M
LEVEL 5	300	300	600	900	1 200	1 800	5 M
LEVEL 6	120	120	240	360	480	720	2 M
LEVEL 7	60	60	120	180	240	360	1 M
LEVEL 8	30	30	60	90	120	180	30 S
LEVEL 9	15	15	30	45	60	90	15 S
LEVEL 10	5	5	10	15	20	30	5 S
LEVEL 11	3	3	6	9	12	18	3 S
LEVEL 12	1,5	1,5	3	4,5	6	9	1 500 MS
LEVEL 13	1	1	2	3	4	6	1 000 MS
LEVEL 14	0,75	0,75	1,5	2,25	3	4,5	750 MS
LEVEL 15	0,5	0,5	1	1,5	2	3	500 MS

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LEVEL 16	0,3	0,3	0,6	0,9	1,2	1,8	300 MS
LEVEL 17	0,15	0,15	0,3	0,45	0,6	0,9	150 MS
LEVEL 18	0,1	0,1	0,2	0,3	0,4	0,6	100 MS
LEVEL 19	0,075	0,075	0,15	0,225	0,3	0,45	75 MS
LEVEL 20	0,03	0,03	0,06	0,09	0,12	0,18	30 MS
LEVEL 21	0,015	0,015	0,03	0,045	0,06	0,09	15 MS
LEVEL 22	0,01	0,01	0,02	0,03	0,04	0,06	10 MS
LEVEL 23	0,0075	0,0075	0,015	0,0225	0,03	0,045	7 500 MMS
LEVEL 24	0,003	0,003	0,006	0,009	0,012	0,018	3 000 MMS
FACTOR	—	1	2	3	4	6	—

(6) Section 4 is replaced by the following:

4. ADMINISTRATIVE UNITS

4.1. Structure of the Spatial Data Theme Administrative Units

The types specified for the spatial data theme Administrative Units are structured in the following packages:

- Administrative Units
- Maritime Units

4.2. Administrative Units

4.2.1. Spatial object types

The package Administrative Units contains the following spatial object types:

- Administrative Boundary
- Administrative Unit
- Condominium

4.2.1.1. Administrative Boundary (AdministrativeBoundary)

A line of demarcation between administrative units.

Attributes of the spatial object type AdministrativeBoundary

Attribute	Definition	Type	Voidability
beginLifespanVersion	Date and time at which this version of the spatial object	DateTime	voidable

Changes to legislation: There are currently no known outstanding effects for the
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	was inserted or changed in the spatial data set.		
country	Two-character country code according to the Interinstitutional style guide published by the Publications Office of the European Union.	CountryCode	
endLifespanVersion	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	DateTime	voidable
geometry	Geometric representation of border line.	GM_Curve	
inspireId	External object identifier of the spatial object.	Identifier	
legalStatus	Legal status of this administrative boundary.	LegalStatusValue	voidable
nationalLevel	The hierarchy levels of all adjacent administrative units this boundary is part of.	AdministrativeHierarchyLevel	
technicalStatus	The technical status of the administrative boundary.	TechnicalStatusValue	voidable

Association roles of the spatial object type AdministrativeBoundary

Association role	Definition	Type	Voidability
admUnit	The administrative units separated by this administrative boundary.	AdministrativeUnit	voidable

4.2.1.2. Administrative Unit (AdministrativeUnit)

Changes to legislation: There are currently no known outstanding effects for the
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Unit of administration where a Member State has and/or exercises jurisdictional rights, for local, regional and national governance.

Attributes of the spatial object type AdministrativeUnit

Attribute	Definition	Type	Voidability
beginLifespanVersion	Date and time at which this version of the spatial object was inserted or changed in the spatial data set.	DateTime	voidable
country	Two-character country code according to the Interinstitutional style guide published by the Publications Office of the European Union.	CountryCode	
endLifespanVersion	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	DateTime	voidable
geometry	Geometric representation of spatial area covered by this administrative unit.	GM_MultiSurface	
inspireId	External object identifier of the spatial object.	Identifier	
name	Official national geographical name of the administrative unit, given in several languages where required.	GeographicalName	
nationalCode	Thematic identifier corresponding to the national administrative codes defined in each country.	CharacterString	

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nationalLevel	Level in the national administrative hierarchy, at which the administrative unit is established.	AdministrativeHierarchyLevel	
nationalLevelName	Name of the level in the national administrative hierarchy, at which the administrative unit is established.	LocalisedCharacterString	voidable
residenceOfAuthority	Center for national or local administration.	ResidenceOfAuthority	voidable

Association roles of the spatial object type AdministrativeUnit

Association role	Definition	Type	Voidability
administeredBy	Administrative unit established at same level of national administrative hierarchy that administers this administrative unit.	AdministrativeUnit	voidable
boundary	The administrative boundaries between this administrative unit and all the units adjacent to it.	AdministrativeBoundary	voidable
coAdminister	Administrative unit established at same level of national administrative hierarchy which is co-administered by this administrative unit.	AdministrativeUnit	voidable
condominium	Condominium administered by this administrative unit.	Condominium	voidable
lowerLevelUnit	Units established at a lower level of the national administrative hierarchy which	AdministrativeUnit	voidable

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	are administered by the administrative unit.		
upperLevelUnit	Unit established at a higher level of national administrative hierarchy that this administrative unit administers	AdministrativeUnit	voidable

Constraints of the spatial object type AdministrativeUnit

Association role condominium applies only for administrative units which nationalLevel="1st order" (country level).

No unit at lowest level can associate units at lower level.

No unit at highest level can associate units at a higher level.

4.2.1.3. Condominium (Condominium)

An administrative area established independently to any national administrative division of territory and administered by two or more countries.

Attributes of the spatial object type Condominium

Attribute	Definition	Type	Voidability
beginLifespanVersion	Date and time at which this version of the spatial object was inserted or changed in the spatial data set.	DateTime	voidable
endLifespanVersion	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	DateTime	voidable
geometry	Geometric representation of spatial area covered by this condominium	GM_MultiSurface	
inspireId	External object identifier of the spatial object.	Identifier	
name	Official geographical name of this condominium,	GeographicalName	voidable

Changes to legislation: There are currently no known outstanding effects for the
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given in several languages where required.		
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Association roles of the spatial object type Condominium

Association role	Definition	Type	Voidability
admUnit	The administrative unit administering the condominium	AdministrativeUnit	voidable

4.2.2. Data Types

4.2.2.1. Residence Of Authority (ResidenceOfAuthority)

Data type representing the name and position of a residence of authority.

Attributes of the data type ResidenceOfAuthority

Attribute	Definition	Type	Voidability
geometry	Position of the residence of authority.	GM_Point	voidable
name	Name of the residence of authority.	GeographicalName	

4.2.3. Enumerations

4.2.3.1. Legal Status (LegalStatusValue)

Description of the legal status of administrative boundaries.

Allowed values for the enumeration LegalStatusValue

Value	Definition
agreed	The edge-matched boundary has been agreed between neighbouring administrative units and is stable now.
notAgreed	The edge-matched boundary has not yet been agreed between neighbouring administrative units and could be changed.

4.2.3.2. Technical Status (TechnicalStatusValue)

Description of the technical status of administrative boundaries.

Allowed values for the enumeration TechnicalStatusValue

Value	Definition
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Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EU) No 1253/2013, ANNEX II. (See end of Document for details)

edgeMatched	The boundaries of neighbouring administrative units have the same set of coordinates.
notEdgeMatched	The boundaries of neighbouring administrative units do not have the same set of coordinates.

4.2.4. Code Lists

4.2.4.1. Administrative Hierarchy Level (AdministrativeHierarchyLevel)

Levels of administration in the national administrative hierarchy. This code list reflects the level in the hierarchical pyramid of the administrative structures, which is based on geometric aggregation of territories and does not necessarily describe the subordination between the related administrative authorities.

This code list shall be managed in a common code list register.

4.3. Maritime Units

4.3.1. Spatial object types

The package Maritime Units contains the following spatial object types:

- Baseline
- Maritime Boundary
- Maritime Zone

4.3.1.1. Baseline (Baseline)

The line from which the outer limits of the territorial sea and certain other outer limits are measured.

Attributes of the spatial object type Baseline

Attribute	Definition	Type	Voidability
inspireId	External object identifier of the spatial object.	Identifier	
beginLifespanVersion	Date and time at which this version of the spatial object was inserted or changed in the spatial data set.	DateTime	voidable
endLifespanVersion	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	DateTime	voidable

Association roles of the spatial object type Baseline

Changes to legislation: There are currently no known outstanding effects for the
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Association role	Definition	Type	Voidability
segment	Segment of a baseline.	BaselineSegment	

4.3.1.2. Maritime Boundary (MaritimeBoundary)

A line depicting the separation of any type of maritime jurisdiction.

Attributes of the spatial object type MaritimeBoundary

Attribute	Definition	Type	Voidability
inspireId	External object identifier of the spatial object.	Identifier	
geometry	Geometric representation of the maritime boundary.	GM_Curve	
country	The country that the maritime zone of this boundary belongs to.	CountryCode	
legalStatus	Legal status of this maritime boundary.	LegalStatusValue	voidable
technicalStatus	The technical status of the maritime boundary.	TechnicalStatusValue	voidable
beginLifespanVersion	Date and time at which this version of the spatial object was inserted or changed in the spatial data set.	DateTime	voidable
endLifespanVersion	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	DateTime	voidable

4.3.1.3. Maritime Zone (MaritimeZone)

A belt of sea defined by international treaties and conventions, where coastal State executes jurisdictional rights.

Attributes of the spatial object type MaritimeZone

Attribute	Definition	Type	Voidability
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Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EU) No 1253/2013, ANNEX II. (See end of Document for details)

inspireId	External object identifier of the spatial object.	Identifier	
geometry	Geometric representation of spatial area covered by this maritime zone.	GM_MultiSurface	
zoneType	Type of maritime zone.	MaritimeZoneTypeValue	
country	The country that this maritime zone belongs to.	CountryCode	
name	Name(s) of the maritime zone.	GeographicalName	voidable
beginLifeSpanVersion	Date and time at which this version of the spatial object was inserted or changed in the spatial data set.	DateTime	voidable
endLifeSpanVersion	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	DateTime	voidable

Association roles of the spatial object type MaritimeZone

Association role	Definition	Type	Voidability
baseline	Baseline or baselines used for the delineation of this maritime zone.	Baseline	voidable
boundary	The boundary or boundaries of this maritime zone.	MaritimeBoundary	voidable

4.3.2. Data types

4.3.2.1. Baseline Segment (BaselineSegment)

Segment of the baseline from which the outer limits of the territorial sea and certain other outer limits are measured.

Attributes of the data type BaselineSegment

Attribute	Definition	Type	Voidability
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Changes to legislation: There are currently no known outstanding effects for the
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geometry	Geometric representation of the baseline segment.	GM_Curve	
segmentType	The baseline type used for this segment.	BaselineSegmentTypeValue	

4.3.3. Code lists

4.3.3.1. Baseline Segment Type (BaselineSegmentTypeValue)

The types of baselines used to measure the breadth of the territorial sea.

The allowed values for this code list comprise only the values specified in the table below.

Values for the code list BaselineSegmentTypeValue

Value	Name	Definition
normal	normal	The normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State.
straight	straight	The baseline for measuring the breadth of the territorial sea is the straight baseline established by joining the appropriate points.
archipelagic	archipelagic	The baseline for measuring the breadth of the territorial sea is the straight baseline joining the outermost points of the outermost islands and drying reefs of the archipelago.

4.3.3.2. Maritime Zone Type (MaritimeZoneTypeValue)

Type of maritime zone.

The allowed values for this code list comprise only the values specified in the table below.

Values for the code list MaritimeZoneTypeValue

Changes to legislation: There are currently no known outstanding effects for the
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Value	Name	Definition
internalWaters	Internal Waters	The waters on the landward side of the baselines of the territorial sea of the coastal State.
territorialSea	Territorial Sea	A belt of sea of a defined breadth not exceeding 12 nautical miles measured from the baselines determined in accordance to the United Nations Convention of Law on the Sea.
contiguousZone	Contiguous Zone	A zone contiguous to a territorial sea of a coastal State, which may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.
exclusiveEconomicZone	Exclusive Economic Zone	An area beyond and adjacent to the territorial sea of a coastal State, subject to the specific legal regime under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of the United Nations Convention on Law of the Sea.
continentalShelf	Continental Shelf	A maritime zone beyond and adjacent to the a territorial sea of a coastal State whose outer boundary is determined in accordance with Article 76 of the United Nations Convention on the Law of the Sea.

4.4. Theme-specific Requirements

1. Each instance of spatial object type AdministrativeUnit, except for the country level unit representing a Member State and co-administered units, shall refer exactly to one unit at a higher level of administrative hierarchy.

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This correspondence shall be expressed by the upperLevelUnit association role of AdministrativeUnit spatial object type.

2. Each instance of spatial object type AdministrativeUnit, except for those at the lowest level, shall refer to their respective lower level units. This correspondence shall be expressed by the lowerLevelUnit association role of AdministrativeUnit spatial object type.
3. If an administrative unit is co-administered by two or more other administrative units the association role administeredBy shall be used. The units co-administering this unit shall apply inverse role coAdminister.
4. Administrative units at the same level of administrative hierarchy shall not conceptually share common areas.
5. Instances of the spatial object type AdministrativeBoundary shall correspond to the edges in the topological structure of the complete (including all levels) boundary graph.
6. The spatial extent of a condominium may not be part of the geometry representing the spatial extent of an administrative unit.
7. Condominiums can only be administered by administrative units at country level.

4.5. Layers

Layers for the spatial data theme Administrative Units

Layer Name	Layer Title	Spatial object type
AU.AdministrativeUnit	Administrative unit	AdministrativeUnit
AU.AdministrativeBoundary	Administrative boundary	AdministrativeBoundary
AU.Condominium	Condominium	Condominium
AU.Baseline	Baseline	Baseline
AU.<CodeListValue> ^a Example: AU.ContiguousZone	<human readable name> Example: Contiguous Zone	MaritimeZone (zoneType: MaritimeZoneTypeValue)
AU.MaritimeBoundary	Maritime boundary	MaritimeBoundary

^a One layer shall be made available for each code list value, in accordance with Art. 14(3).

(7) Section 8 is amended as follows:

- (a) In Section 8.2, the indent ‘Hydro – Reporting’ is deleted.
- (b) In Section 8.5.1, the following indents are deleted:
 - Hydro Power Plant
 - Inundated Land
 - Ocean Region
 - Pipe
 - Pumping Station

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- (c) In Section 8.5.1.4, the sentence ‘This type is a candidate type to be considered by the spatial data theme Natural risk zones in Annex III to Directive 2007/2/EC.’ is deleted.
- (d) Sections 8.5.1.9 Hydro Power Plant (HydroPowerPlant), 8.5.1.10 Inundated Land (InundatedLand), 8.5.1.14 Ocean Region (OceanRegion), 8.5.1.15 Pipe (Pipe), 8.5.1.16 Pumping Station (PumpingStation), 8.5.4.3 Inundation (InundationValue) and 8.6 Hydro – Reporting are deleted.
- (e) Section 8.5.1.19 is amended as follows:
- The sentence ‘This type is a candidate type to be considered by the spatial data theme Land cover in Annex II to Directive 2007/2/EC.’ is deleted.
 - The row for the attribute ‘geometry’ in the attribute table is replaced by the following row:

geometry	The geometry of the shore.	GM_MultiSurface	
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- (f) In Section 8.5.1.24, the following constraint is added after ‘Constraints of the spatial object type Watercourse’:
- The shores on either side of a watercourse shall be provided (using the bank property) as two separate Shore objects.
- (g) In Section 8.5.1.25, the sentence ‘This type is a candidate type to be considered by the spatial data theme Land cover in Annex II to Directive 2007/2/EC.’ is deleted.
- (h) In Section 8.5.4.4, the sentence ‘This type is a candidate type to be considered by the spatial data theme Land cover in Annex II to Directive 2007/2/EC.’ is deleted.
- (i) In Section 8.8, the table is replaced by the following table:

Layer Type	Layer Title	Spatial object type(s)
HY.Network	Hydrographic Network	HydroNode, WatercourseLink
HY.PhysicalWaters.WaterBodies	WaterBodies	Watercourse, StandingWater
HY.PhysicalWaters.LandWaterBoundary	LandWaterBoundary	LandWaterBoundary
HY.PhysicalWaters.Catchments	Catchments	DrainageBasin, RiverBasin
HY.PhysicalWaters.HydroPointsOfInterest	HydroPointsOfInterest	Rapids, Falls
HY.PhysicalWaters.ManMadeObjects	ManMadeObjects	Crossing, DamOrWeir, Embankment, Lock, Ford,

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		ShorelineConstruction, Sluice
HY. PhysicalWaters.Wetland	Wetlands	Wetland
HY. PhysicalWaters.Shore	Shores	Shore

Changes to legislation:

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