

# **My INSPIRE Data Scope**

# 1. Selected Objects

## 1.1. Building Part

**Definition:** A BuildingPart is a sub-division of a Building that might be considered itself as a building.

**Description:** NOTE 1: A BuildingPart is homogeneous related to its physical, functional or temporal aspects. NOTE 2: Building and BuildingPart share the same set of properties. EXAMPLE: A building may be composed of two building parts having different heights above ground.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

**Subtype of:** Abstract Building

**Supertype of:** Building Part, Building Part

### 1.1.1. Attributes of Building Part

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
building Nature	0...*	voidable	Building Nature Value	Characteristic of the building that makes it generally of interest for mappings applications . The characteristic may be related to the physical aspect and/or to the function of the building.	AbstractBuilding
current Use	0...*	voidable	Current Use	Activity hosted within the building. This attribute addresses mainly the buildings hosting human activities.	AbstractBuilding
number Of Dwellings	0...1	voidable	Integer	Number of dwellings.	AbstractBuilding

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
number Of Building Units	0...1	voidable	Integer	Number of building units in the building. A BuildingUnit is a subdivision of Building with its own lockable access from the outside or from a common area (i.e. not from another BuildingUnit ), which is atomic, functionally independent, and may be separately sold, rented out, inherited, etc.	AbstractBuilding
number Of Floors Above Ground	0...1	voidable	Integer	Number of floors above ground.	AbstractBuilding
begin Lifespan Version	1	voidable	Date Time	Date and time at which this version of the spatial object was inserted or changed in the spatial data set.	AbstractConstruction
condition Of Construction	1	voidable	Condition Of Construction Value	Status of the construction .	AbstractConstruction
date Of Construction	0...1	voidable	Date Of Event	Date of construction .	AbstractConstruction
date Of Demolition	0...1	voidable	Date Of Event	Date of demolition.	AbstractConstruction
date Of Renovation	0...1	voidable	Date Of Event	Date of last major renovation.	AbstractConstruction

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
elevation	0...*	voidable	Elevation	Vertically-constrained dimensional property consisting of an absolute measure referenced to a well-defined surface which is commonly taken as origin (geo? water level, etc.).	AbstractConstruction
end Lifespan Version	0...1	voidable	Date Time	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	AbstractConstruction
external Reference	0...*	voidable	External Reference	Reference to an external information system containing any piece of information related to the spatial object.	AbstractConstruction
height Above Ground	0...*	voidable	Height Above Ground	Height above ground.	AbstractConstruction
inspire Id	1		Identifier	External object identifier of the spatial object.	AbstractConstruction
name	0...*	voidable	Geographical Name	Name of the construction .	AbstractConstruction

### 1.1.2. Associations of Building Part

## 1.2. Abstract Building

**Definition:** Abstract spatial object type grouping the common semantic properties of the spatial object types

Building and BuildingPart.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

**Subtype of:** Abstract Construction

**Supertype of:** Building, Building Part

### 1.2.1. Attributes of Abstract Building

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
building Nature	0...*	voidable	Building Nature Value	Characteristic of the building that makes it generally of interest for mappings applications . The characteristic may be related to the physical aspect and/or to the function of the building.	AbstractBuilding
current Use	0...*	voidable	Current Use	Activity hosted within the building. This attribute addresses mainly the buildings hosting human activities.	AbstractBuilding
number Of Dwellings	0...1	voidable	Integer	Number of dwellings.	AbstractBuilding

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
number Of Building Units	0...1	voidable	Integer	Number of building units in the building. A BuildingUnit is a subdivision of Building with its own lockable access from the outside or from a common area (i.e. not from another BuildingUnit ), which is atomic, functionally independent, and may be separately sold, rented out, inherited, etc.	AbstractBuilding
number Of Floors Above Ground	0...1	voidable	Integer	Number of floors above ground.	AbstractBuilding
begin Lifespan Version	1	voidable	Date Time	Date and time at which this version of the spatial object was inserted or changed in the spatial data set.	AbstractConstruction
condition Of Construction	1	voidable	Condition Of Construction Value	Status of the construction .	AbstractConstruction
date Of Construction	0...1	voidable	Date Of Event	Date of construction .	AbstractConstruction
date Of Demolition	0...1	voidable	Date Of Event	Date of demolition.	AbstractConstruction
date Of Renovation	0...1	voidable	Date Of Event	Date of last major renovation.	AbstractConstruction

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
elevation	0...*	voidable	Elevation	Vertically-constrained dimensional property consisting of an absolute measure referenced to a well-defined surface which is commonly taken as origin (geo? water level, etc.).	AbstractConstruction
end Lifespan Version	0...1	voidable	Date Time	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	AbstractConstruction
external Reference	0...*	voidable	External Reference	Reference to an external information system containing any piece of information related to the spatial object.	AbstractConstruction
height Above Ground	0...*	voidable	Height Above Ground	Height above ground.	AbstractConstruction
inspire Id	1		Identifier	External object identifier of the spatial object.	AbstractConstruction
name	0...*	voidable	Geographical Name	Name of the construction	AbstractConstruction

### 1.2.2. Associations of Abstract Building

### 1.3. Building Part

**Definition:** A BuildingPart is a sub-division of a Building that might be considered itself as a building.

**Description:** NOTE 1: A BuildingPart is homogeneous related to its physical, functional or temporal aspects. NOTE 2: Building and BuildingPart share the same set of properties. EXAMPLE: A building may be composed of two building parts having different heights above ground.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building 2D - <https://inspire.ec.europa.eu/applicationschema/bu-core2d>

**Subtype of:** Building Part

### 1.3.1. Attributes of Building Part

Attribute name	Multiplicity	Stereotype	Value type	Definition	Inherited from
geometry2D	1...*		Building Geometry2D	<font color="#0f0f0f">2D or 2.5D geometric representation of the building part.</font><font color="#0f0f0f"></font><font color="#0f0f0f">	BuildingPart
building Nature	0...*	voidable	Building Nature Value	Characteristic of the building that makes it generally of interest for mappings applications. The characteristic may be related to the physical aspect and/or to the function of the building.	AbstractBuilding
current Use	0...*	voidable	Current Use	Activity hosted within the building. This attribute addresses mainly the buildings hosting human activities.	AbstractBuilding



Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
number Of Dwellings	0...1	voidable	Integer	Number of dwellings.	AbstractBuilding
number Of Building Units	0...1	voidable	Integer	Number of building units in the building. A BuildingUnit is a subdivision of Building with its own lockable access from the outside or from a common area (i.e. not from another BuildingUnit), which is atomic, functionally independent, and may be separately sold, rented out, inherited, etc.	AbstractBuilding
number Of Floors Above Ground	0...1	voidable	Integer	Number of floors above ground.	AbstractBuilding
begin Lifespan Version	1	voidable	Date Time	Date and time at which this version of the spatial object was inserted or changed in the spatial data set.	AbstractConstruction
condition Of Construction	1	voidable	Condition Of Construction Value	Status of the construction.	AbstractConstruction
date Of Construction	0...1	voidable	Date Of Event	Date of construction.	AbstractConstruction
date Of Demolition	0...1	voidable	Date Of Event	Date of demolition.	AbstractConstruction
date Of Renovation	0...1	voidable	Date Of Event	Date of last major renovation.	AbstractConstruction

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
elevation	0...*	voidable	Elevation	Vertically-constrained dimensional property consisting of an absolute measure referenced to a well-defined surface which is commonly taken as origin (geo? water level, etc.).	AbstractConstruction
end Lifespan Version	0...1	voidable	Date Time	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.	AbstractConstruction
external Reference	0...*	voidable	External Reference	Reference to an external information system containing any piece of information related to the spatial object.	AbstractConstruction
height Above Ground	0...*	voidable	Height Above Ground	Height above ground.	AbstractConstruction
inspire Id	1		Identifier	External object identifier of the spatial object.	AbstractConstruction
name	0...*	voidable	Geographical Name	Name of the construction	AbstractConstruction

### 1.3.2. Constraints of Building Part

Name	Note
singleReferenceGeometry	/*Exactly one geometry2D attribute must be a reference geometry, i.e. the

Name	Note
	referenceGeometry attribute must be 'true'./inv: self.geometry2D->select(referenceGeometry=true)->size() = 1

### 1.3.3. Associations of Building Part

## 2. Complex Types

### 2.1. External Reference

**Definition:** Reference to an external information system containing any piece of information related to the spatial object.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

#### Attributes of External Reference

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
information System	1		URI	Uniform Resource Identifier of the external information system.	ExternalReference
information System Name	1		PT_FreeText	The name of the external information system.	ExternalReference
reference	1		Character String	Thematic identifier of the spatial object or of any piece of information related to the spatial object.	ExternalReference

### 2.2. Integer

**Definition:** An exact integer value, with no fractional part.

**Package:** Numerics

**Subtype of:** Number

**Supertype of:** Positive Integer

### 2.3. Date Of Event

**Definition:** This data type includes the different possible ways to define the date of an event.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

#### 2.3.1. Attributes of Date Of Event

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
any Point	0...1	voidable	Date Time	A date and time of any point of the event, between its beginning and its end.	DateOfEvent
beginning	0...1	voidable	Date Time	Date and time when the event begun.	DateOfEvent
end	0...1	voidable	Date Time	Date and time when the event ended.	DateOfEvent

### 2.3.2. Constraints of Date Of Event

Name	Note
atLeastOneEvent	/*At least, one of the attributes beginning, end or anyPoint shall be supplied.*/inv: dateOfEvent->notEmpty()
beginning is before anyPoint is before end	inv: beginning <= anyPoint and anyPoint <= end and beginning <= end

## 2.4. Building Geometry2 D

**Definition:** This data types includes the geometry of the building and metadata information about which element of the building was captured and how.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

### 2.4.1. Attributes of Building Geometry2 D

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
vertical Geometry Estimated Accuracy	0...1	voidable	Length	The estimated absolute positional accuracy of the Z coordinates of the building geometry,	BuildingGeometry2D

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
				in the INSPIRE official Coordinate Reference System. Absolute positional accuracy is defined as the mean value of the positional uncertainties for a set of positions where the positional uncertainties are defined as the distance between a measured position and what is considered as the corresponding true position.	
geometry	1		GM_Object	2D or 2.5D geometric representation	BuildingGeometry2D
reference Geometry	1		Boolean	The geometry to be taken into account by view services, for portrayal.	BuildingGeometry2D
horizontal Geometry Reference	1		Horizontal Geometry Reference Value	Element of the building that was captured by (X,Y) coordinates.	BuildingGeometry2D
vertical Geometry Reference	0...1		Elevation Reference Value	Element of the building that was captured by vertical coordinates.	BuildingGeometry2D

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
horizontalGeometryEstimatedAccuracy	1	voidable	Length	The estimated absolute positional accuracy of the (X,Y) coordinates of the building geometry, in the INSPIRE official Coordinate Reference System. Absolute positional accuracy is defined as the mean value of the positional uncertainties for a set of positions where the positional uncertainties are defined as the distance between a measured position and what is considered as the corresponding true position.	BuildingGeometry2D

#### 2.4.2. Constraints of Building Geometry2 D

Name	Note
geometryIsPointOrSurfaceOrMultiSurface	/*Geometry shall be of type GM_Point or GM_Surface or GM_MultiSurface.*/
horizontalGeometryEstimatedAccuracyUoMsMetre	/* The value of horizontalGeometryEstimatedAccuracy shall be given in meters. */inv: self.horizontalGeometryEstimatedAccuracy.uom.uomSymbol='m'
referenceGeometry	/*For exactly one item of BuildingGeometry, the value of the attribute referenceGeometry shall be 'true'.*/

Name	Note
verticalGeometryEstimatedAccuracyUoMIsMetre	/* The Value of verticalGeometryEstimatedAccuracy has to be given in meters. */inv: self.verticalGeometryEstimatedAccuracy.uom.uomSymbol='m'

## 2.5. Current Use

**Definition:** This data type enables to detail the current use(s).

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

### 2.5.1. Attributes of Current Use

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
current Use	1		Current Use Value	The current use.	CurrentUse
percentage	1	voidable	Integer	The proportion of the real world object, given as a percentage, devoted to this current use.	CurrentUse

### 2.5.2. Constraints of Current Use

Name	Note
percentageSum	/* The total of all percentages shall be less or equal to 100. */inv: self.percentage.sum()<=100

## 2.6. Identifier

**Definition:** External unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object.

**Description:** NOTE1 External object identifiers are distinct from thematic object identifiers. NOTE 2 The voidable version identifier attribute is not part of the unique identifier of a spatial object and may be used to distinguish two versions of the same spatial object. NOTE 3 The unique identifier will not change during the life-time of a spatial object.

**INSPIRE Application schema:** Base Types - <https://inspire.ec.europa.eu/applicationschema/base>



## Attributes of Identifier

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
local Id	1		Character String	A local identifier, assigned by the data provider. The local identifier is unique within the namespace, that is no other spatial object carries the same unique identifier.	Identifier
namespace	1		Character String	Namespace uniquely identifying the data source of the spatial object.	Identifier

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
version Id	0...1	lifeCycleInfo	Character String	The identifier of the particular version of the spatial object, with a maximum length of 25 characters. If the specification of a spatial object type with an external object identifier includes life-cycle information, the version identifier is used to distinguish between the different versions of a spatial object. Within the set of all versions of a spatial object, the version identifier is unique.	Identifier

## 2.7. Elevation

**Definition:** This data types includes the elevation value itself and information on how this elevation was measured.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

### Attributes of Elevation

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
elevation Reference	1		Elevation Reference Value	Element where the elevation	Elevation

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
				was measured.	
elevation Value	1		Direct Position	Value of the elevation.	Elevation

## 2.8. Height Above Ground

**Definition:** Vertical distance (measured or estimated) between a low reference and a high reference.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

### 2.8.1. Attributes of Height Above Ground

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
height Reference	1	voidable	Elevation Reference Value	Element used as the high reference.	HeightAboveGround
low Reference	1	voidable	Elevation Reference Value	Element as the low reference.	HeightAboveGround
status	1	voidable	Height Status Value	The way the height has been captured.	HeightAboveGround
value	1		Length	Value of the height above ground.	HeightAboveGround

### 2.8.2. Constraints of Height Above Ground

Name	Note
valueUoMIsMetre	/* Value shall be in meters. */inv: self.value.uom.uomSymbol='m'

## 2.9. Geographical Name

**Definition:** Proper noun applied to a real world entity.

**INSPIRE Data Theme:** Geographical Names - <https://inspire.ec.europa.eu/theme/gn>

**INSPIRE Application schema:** Geographical Names - <https://inspire.ec.europa.eu/applicationschema/gn>

### Attributes of Geographical Name

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
language	1	voidable	Character String	Language of the name, given as a three letters code, in accordance with either ISO 639-3 or ISO 639-5.	GeographicalName
nativeness	1	voidable	Nativeness Value	Information enabling to acknowledge if the name is the one that is/was used in the area where the spatial object is situated at the instant when the name is/was in use.	GeographicalName
name Status	1	voidable	Name Status Value	Qualitative information enabling to discern which credit should be given to the name with respect to its standardisation and/or its topicality.	GeographicalName

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
source Of Name	1	voidable	Character String	Original data source from which the geographical name is taken from and integrated in the data set providing/publishing it. For some named spatial objects it might refer again to the publishing data set if no other information is available.	GeographicalName
pronunciation	1	voidable	Pronunciation Of Name	Proper, correct or standard (standard within the linguistic community concerned) pronunciation of the geographical name.	GeographicalName
spelling	1...*		Spelling Of Name	A proper way of writing the geographical name.	GeographicalName
grammatical Gender	0...1	voidable	Grammatical Gender Value	Class of nouns reflected in the behaviour of associated words.	GeographicalName
grammatical Number	0...1	voidable	Grammatical Number Value	Grammatical category of nouns that expresses count distinctions.	GeographicalName

## 2.10. Date Time

**Package:** Dateand Time

**Subtype of:** Date, Clock Time

### Attributes of Date Time

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
century	1		Character String		Date
year	0..1		Character String		Date
month	0..1		Character String		Date
day	0..1		Character String		Date
hour	1		Character String		ClockTime
minute	0..1		Character String		ClockTime
second	0..1		Character String		ClockTime
time Zone	0..1		Character String		ClockTime

### 2.11. PT\_FreeText

**Package:** Culturalandlinguisticadapdability

### 2.12. Direct Position

**Definition:** DirectPosition object data types (Figure 14) hold the coordinates for a position within some coordinate reference system. The coordinate reference system is described in ISO 19111. Since DirectPositions, as data types, will often be included in larger objects (such as GM\_Objects) that have references to ISO19111::SC\_CRS, the DirectPosition::coordinateReferenceSystem may be left NULL if this particular DirectPosition is included in a larger object with such a reference to a SC\_CRS. In this case, the DirectPosition::coordinateReferenceSystem is implicitly assumed to take on the value of the containing object's SC\_CRS.

**Package:** Coordinategeometry

**Supertype of:** MC\_MeasurePosition

### Attributes of Direct Position

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
coordinate					DirectPosition

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
dimension					DirectPosition

## 2.13. GM\_Object

**Definition:** GM\_Object (Figure 6) is the root class of the geometric object taxonomy and supports interfaces common to all geographically referenced geometric objects. GM\_Object instances are sets of direct positions in a particular coordinate reference system. A GM\_Object can be regarded as an infinite set of points that satisfies the set operation interfaces for a set of direct positions, TransfiniteSet<DirectPosition>. Since an infinite collection class cannot be implemented directly, a Boolean test for inclusion shall be provided by the GM\_Object interface. This international standard concentrates on vector geometry classes, but future work may use GM\_Object as a root class without modification. NOTE As a type, GM\_Object does not have a well-defined default state or value representation as a data type. Instantiated subclasses of GM\_Object will.

**Package:** Geometryroot

**Supertype of:** GM\_Aggregate, GM\_Complex, GM\_Primitive, MF\_OneParamGeometry, MF\_LocalGeometry

### 2.13.1. Constraints of GM\_Object

Name	Note
boundary().isEmpty() = isCycle()	
boundary().notEmpty() implies boundary().dimension() = dimension() -1	
dimension() > boundary().dimension	

## 2.14. Spelling Of Name

**Definition:** Proper way of writing a name.

**Description:** SOURCE Adapted from [UNGEGN Manual 2006]. NOTE Proper spelling means the writing of a name with the correct capitalisation and the correct letters and diacritics present in an accepted standard order.

**INSPIRE Data Theme:** Geographical Names - <https://inspire.ec.europa.eu/theme/gn>

**INSPIRE Application schema:** Geographical Names - <https://inspire.ec.europa.eu/applicationschema/gn>

### Attributes of Spelling Of Name

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
text	1		Character String	Way the name is written.	SpellingOfName

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
script	1	voidable	Character String	Set of graphic symbols (for example an alphabet) employed in writing the name, expressed using the four letters codes defined in ISO 15924, where applicable.	SpellingOfName
transliteration Scheme	0..1	voidable	Character String	Method used for the names conversion between different scripts.	SpellingOfName

## 2.15. URI

**Package:** basic Types

**Subtype of:** Character String

### Attributes of URI

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
character Set	1		Character Set Code		CharacterString
elements	size		Character		CharacterString
max Length	1		Integer		CharacterString
size	1		Integer		CharacterString

## 2.16. Pronunciation Of Name

**Definition:** Proper, correct or standard (standard within the linguistic community concerned) pronunciation of a name.

**Description:** SOURCE Adapted from [UNGEGN Manual 2006].

**INSPIRE Data Theme:** Geographical Names - <https://inspire.ec.europa.eu/theme/gn>

**INSPIRE Application schema:** Geographical Names - <https://inspire.ec.europa.eu/applicationschema/gn>



### 2.16.1. Attributes of Pronunciation Of Name

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
pronunciationSoundLink	0...1	voidable	URI	Proper, correct or standard (standard within the linguistic community concerned) pronunciation of a name, expressed by a link to any sound file.	PronunciationOfName
pronunciationIPA	0...1	voidable	Character String	Proper, correct or standard (standard within the linguistic community concerned) pronunciation of a name, expressed in International Phonetic Alphabet (IPA).	PronunciationOfName

### 2.16.2. Constraints of Pronunciation Of Name

Name	Note
pronunciationSoundLink or pronunciationIPA not empty	/* At least one of the two attributes pronunciationSoundLink and pronunciationIPA shall not be void. */inv: self.pronunciationIPA -> notEmpty() or self.pronunciationSoundLink -> notEmpty()

### 2.17. Character String

**Package:** Text

**Subtype of:** Sequence< Character>

**Supertype of:** O C L, Language Specific Character String, Code, Coordinates, URI

### Attributes of Character String

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
character Set	1		Character Set Code		CharacterString
elements	size		Character		CharacterString
max Length	1		Integer		CharacterString
size	1		Integer		CharacterString

### 2.18. Length

**Definition:** The measure of distance as an integral, i.e. the limit of an infinite sum of distances between points on a curve. For example the length of curve, the perimeter of a polygon as the length of the boundary.

**Package:** Units of Measure

**Subtype of:** Measure

**Supertype of:** Distance

### Attributes of Length

Attribute name	Multiplicity	Stereotype	Valuetype	Definition	Inherited from
uom					Length
value					Measure

### 3. Code List / Enumeration

#### 3.1. Building Nature Value

**Definition:** Values indicating the nature of a building.

**Description:** NOTE 1 : This code list does not aim to be exhaustive as the attribute buildingNature addresses only noticeable buildings. NOTE 2: The values included in this code list address mainly (but not only) two international use cases: air flights where buildings may be obstacles and marine navigation where buildings may be landmarks. NOTE 3: This code list should only be applied for buildings, even if it may be applicable to other constructions (for example, not all dams are buildings).

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

#### Code list Values of Building Nature Value

Label	Definition
lighthouse	A tower designed to emit light from a system of lamps and lenses.
mosque	Building or structure whose primary aim is to facilitate the religious practice of a Muslim community.
shed	A building of light construction, which usually has one or more open sides, that is typically used for storage.
silo	A large storage structure, generally cylindrical, used for storing loose materials.
arch	A man-made structure in the form of an arch.
bunker	A facility, partly underground, intended for or used by the military either for location of command/control centers or for troop encampment.
canopy	An overhead roof providing shelter to things below. Canopies may be free standing frameworks over which a covering is attached or may be linked or suspended to the outside of a building.
cave building	A space hosting human or economic activity which is usually enclosed within rock with the addition of man-made exterior walls and which may contain structures comparable to the interior structures of freestanding buildings.
chapel	A Christian place of worship, usually smaller than a church.
castle	A large ornate or fortified building usually constructed for the purpose of a private residence or security.

Label	Definition
church	Building or structure whose primary aim is to facilitate the religious practice of a Christian community.
dam	A permanent barrier across a watercourse used to impound water or to control its flow.
greenhouse	A building that is often constructed primarily of transparent material (for example: glass), in which temperature and humidity can be controlled for the cultivation and/or protection of plants.
stadium	A place or venue for sports, concerts or other events and consists of a field or stage either partly or completely surrounded by a structure designed to allow spectators to stand or sit and view the event.
storage tank	A container usually for holding liquids and compressed gases.
synagogue	Building or structure whose primary aim is to facilitate the religious practice of a Jewish or Samaritan community.
temple	Building or structure whose primary aim is to facilitate religious practices.
tower	A relatively tall, narrow structure that may either stand alone or may form part of another structure.
windmill	A building which converts the energy of the wind into rotational motion by means of adjustable sails or blades.
wind turbine	A tower and associated equipment that generates electrical power from wind.

### 3.2. Condition Of Construction Value

**Definition:** Values indicating the condition of a construction.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

#### Code list Values of Condition Of Construction Value

Label	Definition
declined	The construction cannot be used under normal conditions, though its main elements (walls, roof) are still present.
demolished	The construction has been demolished. There are no more visible remains.
functional	The construction is functional.

Label	Definition
projected	The construction is being designed. Construction has not yet started.
ruin	The construction has been partly demolished and some main elements (roof, walls) have been destroyed. There are some visible remains of the construction.
under construction	The construction is under construction and not yet functional. This applies only to the initial construction of the construction and not to maintenance work.

### 3.3. Boolean

**Definition:** Most valuable in the predicate calculus, where items are either True or False, unless they are ill formed.

**Package:** Truth

#### Enumeration Values of Boolean

Label	Definition
TRUE	
FALSE	

### 3.4. Horizontal Geometry Reference Value

**Definition:** Values indicating the element considered to capture a horizontal geometry.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

#### Code list Values of Horizontal Geometry Reference Value

Label	Definition
above ground envelope	The building horizontal geometry has been captured using the above ground envelope of the building, i.e. the maximum extent of the building above ground.
combined	The building horizontal geometry has been obtained from the combination of the geometries of its building parts with the geometries of the building parts using different horizontal geometry references.

Label	Definition
entrance point	The building geometry is represented by a point located at the entrance of the building.
envelope	The building horizontal geometry has been captured using the whole envelope of the building, i.e. the maximum extent of the building above and under ground.
foot print	The building horizontal geometry has been captured using the footprint of the building, i.e. its extent at ground level.
lowest floor above ground	The building horizontal geometry has been captured using the lowest floor above ground of the building.
point inside building	The building horizontal geometry is represented by a point located within the building.
point inside cadastral parcel	The building horizontal geometry is represented by a point located within the parcel the building belongs to.
roof edge	The building horizontal geometry has been captured using the roof edges of the building.

### 3.5. Elevation Reference Value

**Definition:** List of possible elements considered to capture a vertical geometry.

**Description:** NOTE: The values of this code list are used to describe the reference of elevation both where elevation has been captured as attribute or as Z coordinate.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

#### Code list Values of Elevation Reference Value

Label	Definition
above ground envelope	The elevation has been captured at the level of the maximum extent of the above ground envelope of the construction.
bottom of construction	The elevation has been captured at the bottom of the usable part of the construction.
entrance point	The elevation has been captured at the entrance of the construction, generally the bottom of entrance door.
general eave	The elevation has been captured at eave level, anywhere between the lowest and the highest eave levels of the construction.

Label	Definition
general ground	The elevation has been captured at ground level, anywhere between the lowest and the highest ground points of the construction.
general roof	The elevation has been captured at roof level, anywhere between the lowest edge roof level and the top of the construction.
general roof edge	The elevation has been captured at roof edge level, anywhere between the lowest and the highest roof edges of the construction.
highest eave	The elevation has been captured at the highest eave level of the construction.
highest ground point	The elevation has been captured at the highest ground point of the construction.
highest point	The elevation has been captured at the highest point of the construction, including the installations, such as chimneys and antennas.
highest roof edge	The elevation has been captured at the highest roof edge level of the construction.
lowest eave	The elevation has been captured at the lowest eave level of the construction.
lowest floor above ground	The elevation has been captured at the level of the lowest floor above ground.
lowest ground point	The elevation has been captured at the lowest ground point level of the construction.
lowest roof edge	The elevation has been captured at the lowest roof edge level of the construction.
top of construction	The elevation has been captured at the top level of the construction.

### 3.6. Current Use Value

**Definition:** List of possible values indicating the current use.

**Description:** SOURCE: This code list is partly based on and adapted from the Eurostat classification of types of constructions (for the classification of residential buildings).NOTE: the values of this code list apply to buildings or building components where building components may be a building part (in core profiles) or a building unit (in extended profiles)

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

#### Code list Values of Current Use Value

Label	Definition
residential	The building (or building component) is used for residential purpose.
agriculture	The building (or building component) is used for agricultural activities.
industrial	The building (or building component) is used for secondary sector activities (industrial).
commerce and services	The building (or building component) is used for any service activities. This value addresses the buildings and building components dedicated to tertiary sector activities (commercial and services).
ancillary	A building (or building component) of small size that is used only in connection with another larger building (or building component) and generally does not inherit the same function and characteristics as the building (or building component) it is linked to.
trade	The building (or building component) hosts trade activities.
office	The building (or building component) hosts offices.
two dwellings	The building (or building component) hosts two dwellings.
collective residence	The building (or building component) hosts more than one dwelling.
more than two dwellings	The building (or building component) hosts at least 3 dwellings.
individual residence	The building (or building component) hosts only one dwelling.
residence for communities	The building (or building component) hosts a residence for communities.
public services	The building (or building component) hosts public services. Public services are tertiary services provided for the benefit of the citizens.

### 3.7. Height Status Value

**Definition:** Values indicating the method used to capture a height.

**INSPIRE Data Theme:** Buildings - <https://inspire.ec.europa.eu/theme/bu>

**INSPIRE Application schema:** Building Base - <https://inspire.ec.europa.eu/applicationschema/bu-base>

#### Code list Values of Height Status Value

Label	Definition
estimated	The height has been estimated and not measured.



Label	Definition
measured	The height has been (directly or indirectly) measured.

### 3.8. Nativeness Value

**Definition:** The nativeness of a geographical name.

**INSPIRE Data Theme:** Geographical Names - <https://inspire.ec.europa.eu/theme/gn>

**INSPIRE Application schema:** Geographical Names - <https://inspire.ec.europa.eu/applicationschema/gn>

#### Code list Values of Nativeness Value

Label	Definition
endonym	Name for a geographical feature in an official or well-established language occurring in that area where the feature is situated.
exonym	Name used in a specific language for a geographical feature situated outside the area where that language is widely spoken, and differing in form from the respective endonym(s) in the area where the geographical feature is situated.

### 3.9. Name Status Value

**Definition:** The status of a geographical name, that is the information enabling to discern which credit should be given to the name with respect to its standardisation and/or its topicality.

**Description:** NOTE The precise definition of the values "Official", "Standardised", "Historical" and "Other" can only be decided by Member States according to their legislation and practice.

**INSPIRE Data Theme:** Geographical Names - <https://inspire.ec.europa.eu/theme/gn>

**INSPIRE Application schema:** Geographical Names - <https://inspire.ec.europa.eu/applicationschema/gn>

#### Code list Values of Name Status Value

Label	Definition
historical	Historical name not in current use.
official	Name in current use and officially approved or established by legislation.
other	Current, but not official, nor approved name.
standardised	Name in current use and accepted or recommended by a body assigned advisory function and/or power of decision in matters of toponymy.

### 3.10. Grammatical Gender Value

**Definition:** The grammatical gender of a geographical name.

**INSPIRE Data Theme:** Geographical Names - <https://inspire.ec.europa.eu/theme/gn>

**INSPIRE Application schema:** Geographical Names - <https://inspire.ec.europa.eu/applicationschema/gn>

#### Code list Values of Grammatical Gender Value

Label	Definition
common	'Common' grammatical gender (the merging of 'masculine' and 'feminine').
feminine	Feminine grammatical gender.
masculine	Masculine grammatical gender.
neuter	Neuter grammatical gender.

### 3.11. Grammatical Number Value

**Definition:** The grammatical number of a geographical name.

**INSPIRE Data Theme:** Geographical Names - <https://inspire.ec.europa.eu/theme/gn>

**INSPIRE Application schema:** Geographical Names - <https://inspire.ec.europa.eu/applicationschema/gn>

#### Code list Values of Grammatical Number Value

Label	Definition
dual	Dual grammatical number.
plural	Plural grammatical number.
singular	Singular grammatical number.