ANNEX II

REQUIREMENTS FOR SPATIAL DATA THEMES LISTED IN ANNEX I TO DIRECTIVE 2007/2/EC

5. ADDRESSES

5.1. **Definitions**

In addition to the definitions set out in Article 2, the following definition shall apply:

 - 'addressable object' means a spatial object to which it is meaningful to associate addresses.

5.2. Spatial Object Types

The following spatial object types shall be used for the exchange and classification of spatial objects from data sets that relate to the spatial data theme Addresses:

- Address
- Address Area Name
- Address Component
- Administrative Unit Name
- Postal Descriptor
- Thoroughfare Name

5.2.1. Address (Address)

An identification of the fixed location of property by means of a structured composition of geographic names and identifiers.

Attributes of the spatial object type Address

Attribute	Definition	Туре	Voidability
alternativeIdentifier	External, thematic identifier of the address spatial object, which enables interoperability with existing legacy systems or applications.	CharacterString	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endLifespanVersion	Date and time at which this version of the spatial object was superseded or retired in the spatial data set.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
inspireId	External object identifier of the spatial object.	Identifier	

locator	Human readable designator or name.	AddressLocator	
position	Position of a characteristic point which represents the location of the address according to a certain specification, including information on the origin of the position.	GeographicPosition	
status	Validity of the address within the life-cycle (version) of the address spatial object.	StatusValue	voidable
validFrom	Date and time of which this version of the address was or will be valid in the real world.	DateTime	voidable
validTo	Date and time at which this version of the address ceased or will cease to exist in the real world.	DateTime	voidable

Association roles of the spatial object type Address

Association role	Definition	Туре	Voidability
building	Building that the address is assigned to or associated with.	Type to be specified in the spatial data theme Buildings	voidable
component	Represents that the address component is engaged as a part of the address.	AddressComponent	
parcel	Cadastral parcel that this address is assigned to or associated with.	CadastralParcel	voidable
parentAddress	Main (parent) address with which this (sub) address is tightly connected	Address	voidable

Constraints of the spatial object type Address

An address shall have an administrative unit address component spatial object whose level is 1 (Country).

An address shall have exactly one default geographic position (the 'default' attribute of the GeographicPosition spatial object must be 'true').

5.2.2. Address Area Name (AddressAreaName)

An address component which represents the name of a geographic area or locality that groups a number of addressable objects for addressing purposes, without being an administrative unit.

This type is a sub-type of AddressComponent.

ATTRIBUTES OF THE SPATIAL OBJECT TYPE ADDRESSAREANAME

Attribute	Definition	Туре	Voidability
name	Proper noun applied to the address area.	GeographicalName	

ASSOCIATION ROLES OF THE SPATIAL OBJECT TYPE ADDRESSAREANAME

Association role	Definition	Туре	Voidability
namedPlace	The named place that this address area name represents.	NamedPlace	voidable

5.2.3. Address Component (AddressComponent)

Identifier or geographic name of a specific geographic area, location, or other spatial object which defines the scope of an address.

This type is abstract.

ATTRIBUTES OF THE SPATIAL OBJECT TYPE ADDRESSCOMPONENT

Attribute	Definition	Туре	Voidability
alternativeIdentifier	External, thematic identifier of the address component spatial object, which enables interoperability with existing legacy systems or applications.	CharacterString	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
inspireId	External object identifier of the spatial object.	Identifier	
status	Validity of the address component within the life-cycle (version) of the address component spatial object.	StatusValue	voidable
validFrom	Date and time of which this version of the address component was or will be valid in the real world.	DateTime	voidable
validTo	Date and time at which the address component ceased/ will cease to exist in the real world.	DateTime	voidable

ASSOCIATION ROLES OF THE SPATIAL OBJECT TYPE ADDRESSCOMPONENT

Association role	Definition	Туре	Voidability
situatedWithin	Another address component within which the spatial object represented by this address component is situated.	AddressComponent	voidable

5.2.4. Administrative Unit Name (AdminUnitName)

An address component which represents the name of a unit of administration where a Member State has and/or exercises jurisdictional rights, for local, regional and national governance.

This type is a sub-type of AddressComponent.

ATTRIBUTES OF THE SPATIAL OBJECT TYPE ADMINUNITNAME

Attribute	Definition	Туре	Voidability
level	The level of administration	AdministrativeHi	erarchyLevel

	in the national administrative hierarchy.		
name	Official, geographical name of the administrative unit, given in different languages where required.	GeographicalName	

ASSOCIATION ROLES OF THE SPATIAL OBJECT TYPE ADMINUNITNAME

Association role	Definition	Туре	Voidability
adminUnit	The administrative unit that is the source of the content of the administrative unit name.	AdministrativeUnit	voidable

5.2.5. Postal Descriptor (PostalDescriptor)

An address component which represents the identification of a subdivision of addresses and postal delivery points in a country, region or city for postal purposes.

This type is a sub-type of AddressComponent. Attributes of the spatial object type PostalDescriptor

Attribute	Definition	Туре	Voidability
postCode	A code created and maintained for postal purposes to identify a subdivision of addresses and postal delivery points.	CharacterString	
postName	One or more names created and maintained for postal purposes to identify a subdivision of addresses and postal delivery points.	GeographicalName	

Constraints of the spatial object type PostalDescriptor

If no post code exists, a post name is required.

If no post name exists, a post code is required.

5.2.6. *Thoroughfare Name (ThoroughfareName)*

An address component which represents the name of a passage or way through from one location to another.

This type is a sub-type of AddressComponent.

ATTRIBUTES OF THE SPATIAL OBJECT TYPE THOROUGHFARENAME

Attribute	Definition	Туре	Voidability
name	Name of the thoroughfare.	ThoroughfareNameVal	ue

ASSOCIATION ROLES OF THE SPATIAL OBJECT TYPE THOROUGHFARENAME

Association role	Definition	Туре	Voidability
transportLink	One or several transport network links to which the spatial object of the thoroughfare name has been designated.	TransportLink	voidable

5.3. Data Types

5.3.1. Address Locator (AddressLocator)

Human readable designator or name that allows a user or application to reference and distinguish the address from neighbour addresses, within the scope of a thoroughfare name, address area name, administrative unit name or postal descriptor, in which the address is situated. Attributes of the data type AddressLocator

Attribute	Definition	Туре	Voidability
designator	A number or a sequence of characters that uniquely identifies the locator within the relevant scope(s).	LocatorDesignator	
level	The level to which the locator refers.	LocatorLevelValue	
name	A geographic name or descriptive text associated to a property identified by the locator.	LocatorName	

Association roles of the data type AddressLocator

Association role	Definition	Туре	Voidability
withinScopeOf	The address	AddressComponent	voidable
	component that		

Constraints of the data type AddressLocator

If no designator exists, a name is required.

If no name exists, a designator is required.

5.3.2. Address Representation (AddressRepresentation)

Representation of an address spatial object for use in external application schemas that need to include the basic, address information in a readable way.

Attribute	Definition	Туре	Voidability
addressArea	The name or names of a geographic area or locality that groups a number of addressable objects for addressing purposes, without being an administrative unit.	GeographicalName	voidable
adminUnit	The name or names of a unit of administration where a Member State has and/or exercises jurisdictional rights, for local, regional and national governance.	GeographicalName	
locatorDesignator	A number or a sequence of characters which allows a user or an application to interpret, parse and format the locator within the relevant scope. A locator may include more locator designators.	CharacterString	
locatorName	Proper noun(s) applied to the real world entity	GeographicalName	

ATTRIBUTES OF THE DATA TYPE ADDRESSREPRESENTATION

	identified by the locator.		
postCode	A code created and maintained for postal purposes to identify a subdivision of addresses and postal delivery points.	CharacterString	voidable
postName	One or more names created and maintained for postal purposes to identify a subdivision of addresses and postal delivery points.	GeographicalName	voidable
thoroughfare	The name or names of a passage or way through from one location to another like a road or a waterway.	GeographicalName	voidable

ASSOCIATION ROLES OF THE DATA TYPE ADDRESSREPRESENTATION

Association role	Definition	Туре	Voidability
	Reference to the address spatial object.	Address	voidable

5.3.3. Geographic Position (GeographicPosition)

The position of a characteristic point which represents the location of the address according to a certain specification, including information on the origin of the position.

ATTRIBUTES OF THE DATA TYPE GEOGRAPHICPOSITION

Attribute	Definition	Туре	Voidability
default	Specifies whether or not this position should be considered as the default.	Boolean	
geometry	The position of the point expressed in coordinates in the chosen spatial reference system.	GM_Point	
method	Description of how and by whom the geographic position	GeometryMethodValu	evoidable

	of the address was created or derived.		
specification	Information defining the specification used to create or derive this geographic position of the address.	GeometrySpecification	Væliulæble

5.3.4. Locator Designator (LocatorDesignator)

A number or a sequence of characters that uniquely identifies the locator within the relevant scope(s). The full identification of the locator could include one or more locator designators.

Attribute	Definition	Туре	Voidability
designator	The identifying part of the locator designator composed by one or more digits or other characters.	CharacterString	
type	The type of locator value, which enables an application to interpret, parse or format it according to certain rules.	LocatorDesignatorTyp	eValue

ATTRIBUTES OF THE DATA TYPE LOCATORDESIGNATOR

5.3.5. Locator Name (LocatorName)

Proper noun applied to the real world entity identified by the locator.

ATTRIBUTES OF THE DATA TYPE LOCATORNAME

Attribute	Definition	Туре	Voidability
name	The identifying part of the locator name.	GeographicalName	
type	The type of locator value, which enables an application to interpret, parse or format it according to certain rules.	LocatorNameTypeValu	ie

5.3.6. Part Of Name (PartOfName)

A part of the full name resulting from the subdivision of the thoroughfare name into separate, semantic parts, using the same language and script as the full thoroughfare name.

ATTRIBUTES (OF THE DATA	TYPE PARTOFNAME

Attribute	Definition	Туре	Voidability
part	The character string that expresses the separate part of the name using the same language and script as the full thoroughfare name.	CharacterString	
type	A classification of the part of name according to its semantics (meaning) in the complete thoroughfare name.	PartTypeValue	

5.3.7. Thoroughfare Name Value (ThoroughfareNameValue)

Proper noun applied to thoroughfare optionally including a subdivision of the name into parts.

Attribute	Definition	Туре	Voidability
name	Proper noun applied to the thoroughfare.	GeographicalName	
nameParts	One or several parts into which the thoroughfare name can be subdivided.	PartOfName	voidable

5.4. Code Lists

5.4.1. Geometry Method (Geometry Method Value)

Description of how and by whom this geographic position of the address was created or derived.

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

5.4.2. *Geometry Specification (Geometry Specification Value)*

Information defining the specification used to create or derive this geographic position of the address.

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

5.4.3. Locator Designator Type (LocatorDesignatorTypeValue)

Description of the semantics of the locator designator.

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

5.4.4. Locator Level (LocatorLevelValue)

The level to which the locator refers.

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

5.4.5. Locator Name Type (LocatorNameTypeValue)

Description of the semantics of the locator name.

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

5.4.6. *Part Type (PartTypeValue)*

A classification of the part of name according to its semantics in the complete thoroughfare name.

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

5.4.7. *Status (Status Value)*

Current validity of the real world address or address component.

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

5.5. Theme-specific Requirements

5.5.1. The Address Position

- 1. In the data set, the position of the address shall be represented by the coordinates of the actual location with the best available accuracy. This will be the most precise directly captured coordinates or, if none exist, then coordinates derived from one of the address components, with priority given to the component that allows the position to be most accurately determined.
- 2. If an address has more than one position, the specification attribute shall be populated with a different value for each of these.

5.5.2. Association roles

- 1. The withinScopeOf association role shall be populated for all locators which are assigned according to rules that seek to ensure unambiguousness within a specific address component (that is thoroughfare name, address area name, postal descriptor or administrative unit name).
- 2. The association role parentAddress shall be populated for all addresses which are connected to a parent (or main) address.
- 3. An address shall have an association to the name of the country in which it is located. Furthermore, an address must have associations to the additional address components necessary to the unambiguous identification and location of the address instance.

5.6. Layers

Layer Name	Layer Title	Spatial object type
AD.Address	Addresses	Address

LAYER FOR THE SPATIAL DATA THEME ADDRESSES