

# ArcGIS for INSPIRE 10.5: INSPIRE Geodatabase Templates Installation Guide

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## 1 Introduction

The purpose of this document is to provide instructions on installation of the ArcGIS for INSPIRE 10.5 Geodatabase Templates. The target audience of this document is existing ArcGIS for INSPIRE users who want to upgrade the geodatabase to ArcGIS for INSPIRE and first-time users who want to install ArcGIS for INSPIRE 10.5 directly on their machines.

# 2 System Requirements

See the System Requirements section of the ArcGIS for INSPIRE web help at

- English
- French
- German
- Spanish

# 3 Installation

To apply the ArcGIS for INSPIRE 10.5 Geodatabase Template, you must first install the template and then follow instructions to load data for the INSPIRE database. If you already have ArcGIS 10.3, 10.3.1, ArcGIS 10.3.1 Update 1, or ArcGIS 10.4 geodatabase, you can still use it with 10.5 software. If you have ArcGIS 10.2.1 or 10.2.2 for INSPIRE Geodatabase, you will need to upgrade to 10.3 or newer version.

# 3.1 Prerequisites

## 3.1.1 Database User Rights

## 3.1.1.1 ArcGIS for INSPIRE 10.5

Prior to ArcGIS 10.1 SP1 for INSPIRE, there have been some limitations when connecting to an enterprise geodatabase. The user connecting to the geodatabase when running the service needed to be the data owner.

Start from 10.1 service pack 1, this limitation has been eliminated. The product now supports connecting to and creating INSPIRE services as a user but not necessarily the INSPIRE data owner. This upgrade allows a clear separation of database roles, as the "service user" only needs read access to the INSPIRE schema data. This is more in alignment with common security practices for IT production environments.

Starting from 10.1 service pack 1, the following privileges are necessary for the user to connect to the INSPIRE geodatabase, and it no longer requires the create view privilege.

- Read privilege to the INSPIRE geodatabase.
- Insert, update, and delete access for the PredefinedDatasets table. The table is used for creating stored queries for INSPIRE download services.

Make sure that the user interacting with the database layer is allowed to create and delete database views. For that, grant specific rights on the database level to the user:

```
GRANT CREATE VIEW TO <USER|ROLE>;
GRANT DELETE VIEW TO <USER|ROLE>;
```

## 3.2 Install

The geodatabase implementation of the INSPIRE data models is defined using the Esri geodatabase XML description. For more detailed information, see "XML Schema of the Geodatabase" at <a href="mailto:support.esri.com/en/knowledgebase/whitepapers/view/productid/43w/metaid/695">support.esri.com/en/knowledgebase/whitepapers/view/productid/43w/metaid/695</a>.

The latest version of the INSPIRE Esri geodatabase template file can be found in the ArcGIS for INSPIRE distribution folder (e.g., <a href="https://www.arcGIS">ArcGIS for INSPIRE\_DVD>\GDB Templates</a>).

#### 3.3 Create a new INSPIRE Geodatabase

In order to support additional data themes for INSPIRE II and III, start with 10.3 more flexibility are added so that user have the option to create geodatabase for Annex I, data themes for Annex II and III such as LC, GE, either individually or any of the combinations, the overall process is like the following:

- 1. Create the common info tables for ArcGIS for INSPIRE
  - Import ArcGIS XML workspace document a4icomon.xml (e.g., <ArcGIS for INSPIRE\_DVD>\GDB Templates)
- 2. If you would like to create or add the ArcGIS Geodatabase for INSPIRE Annex I, load the respective record sets into the tables created in step 1. Precisely:
  - a. Select the "Load XML RecordSet Document" option on LayerInfo table and select <ARCGIS FOR INSPIRE DVD>\GDB Templates\A1\A1 LayerInfo.xml as the source to load
  - b. Select the "Load XML RecordSet Document" option on RelationshipInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\A1\A1\_RelationshipInfo.xml as the source to load
  - c. Select the "Load XML RecordSet Document" option on SpatialObjectTypeInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\A1\A1\_SpatialObjectTypeInfo.xml as the source to load

Note: When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).

d. Select the "Load XML RecordSet Document" option on SubtypesInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\A1\A1\_SubtypesInfo.xml as the source to load

Note: When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases,

- sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).
- e. Import (schema only) the XML workspace document *<ARCGIS FOR INSPIRE\_DVD>\GDB Templates\A1\*A1.xml into the geodatabase
- 3. If you would like to create or add the ArcGIS Geodatabase for INSPIRE Land Cover, load the respective record sets into the tables created in step 1. Precisely:
  - a. Select the "Load XML RecordSet Document" option on LayerInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\LC\lc\_LayerInfo.xml as the source to load
  - b. Select the "Load XML RecordSet Document" option on RelationshipInfo table and select <a href="mailto:ARCGIS FOR INSPIRE\_DVD">ARCGIS FOR INSPIRE\_DVD<a href="mailto:GDB Templates<a href="mailto:LC\lc">LC\lc</a>\_RelationshipInfo.xml as the source to load
  - c. Select the "Load XML RecordSet Document" option on SpatialObjectTypeInfo table and select <a href="mailto:ARCGIS FOR INSPIRE\_DVD">ARCGIS FOR INSPIRE\_DVD>\GDB Templates\LC\lc\_SpatialObjectTypeInfo.xml">LC\lc\_SpatialObjectTypeInfo.xml</a> as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).

d. Select the "Load XML RecordSet Document" option on SubtypesInfo table and select <a href="mailto:ARCGIS FOR INSPIRE\_DVD">ARCGIS FOR INSPIRE\_DVD>\GDB Templates\LC\lc\_SubtypesInfo.xml">LC\lc\_SubtypesInfo.xml</a> as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).

- e. Import (schema only) the XML workspace document <*ARCGIS FOR INSPIRE\_DVD*>\*GDB Templates*\*LC*\lc.xml into the geodatabase
- 4. If you would like to create or add the ArcGIS Geodatabase for INSPIRE Geology, load the respective record sets in the tables created in step 1. Precisely:
  - a. Select the "Load XML RecordSet Document" option on LayerInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\GE\ge\_LayerInfo.xml as the source to load
  - b. Select the "Load XML RecordSet Document" option on RelationshipInfo table and select <a href="mailto:ARCGIS FOR INSPIRE\_DVD">ARCGIS FOR INSPIRE\_DVD<a href="mailto:ARCGIS FOR INSPIRE\_DVD">GDB Templates<a href="mailto:GE\ge">GE\ge</a> RelationshipInfo.xml as the source to load
  - c. Select the "Load XML RecordSet Document" option on SpatialObjectTypeInfo table and select  $\langle ARCGIS\ FOR\ INSPIRE\_DVD \rangle \backslash GDB\ Templates \backslash GE \backslash ge\_SpatialObjectTypeInfo.xml$  as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this have been observed for PostgreSQL).

d. Select the "Load XML RecordSet Document" option on SubtypesInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\GE\ge\_SubtypesInfo.xml as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).

- e. Import (schema only) the XML workspace document <*ARCGIS FOR INSPIRE\_DVD*>\*GDB Templates*\*GE*\ge.xml into the geodatabase
- 5. Follow steps as above if you want to create or add the ArcGIS Geodatabase template for INSPIRE Mineral resources, Land use, Statistical units, etc. Please note that some data themes specifications have dependencies on other data themes. For example, Mineral Resources requires the Geology data model and therefore the Geology geodatabase template must be loaded in the enterprise geodatabase as well. The following table lists the dependencies:

Data theme	Dependencies
MR	GE
НВ	SD
SU	A1 (if link to AdministrativeUnits)

**Note**: when creating a map document including a theme with dependencies on other themes, all related themes must be added to the map document as well.

**Note**: Some domains (e.g. VoidReasonValue) are used by multiple geodatabase templates, when importing XML workspace document, ArcCatalog might report a name conflict and suggest a new name by adding "\_1" at the end when importing. If you are using GP tool "import XML Workspace Document" for the import task you can turn option "Overwrite the outputs of geoprocessing operations" on.

If you want load all implemented data themes (Annex I, LC, GE, MR, LU, SU) all at once, you can load ArcGIS Workspace document "A4I\_AllInOne\_10.5.xml" in one simple step.

After completing the steps above, the geodatabase can be used as target geodatabase for populating INSPIRE data for the data themes installed in the geodatabase.

**Example**: General steps for importing ArcGIS XML workspace:

- 1. Start ArcCatalog.
- 2. Right-click your spatial database connection and choose Import > XML Workspace Document (figure 1).

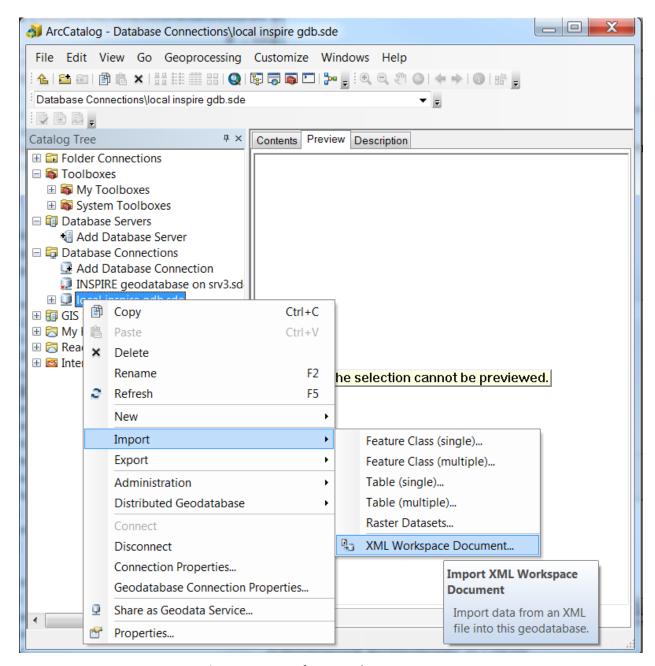


Figure 1: Import of XML Workspace Document

3. Navigate to the desired xml workspace file (e.g. <a href="ArcGIS">ArcGIS for INSPIRE\_DVD>\GDB Templates\a4icommon.xml">and click Next (figure 2). Make sure you have selected the Data option, because the workspace document contains some information required to run ArcGIS for INSPIRE correctly.

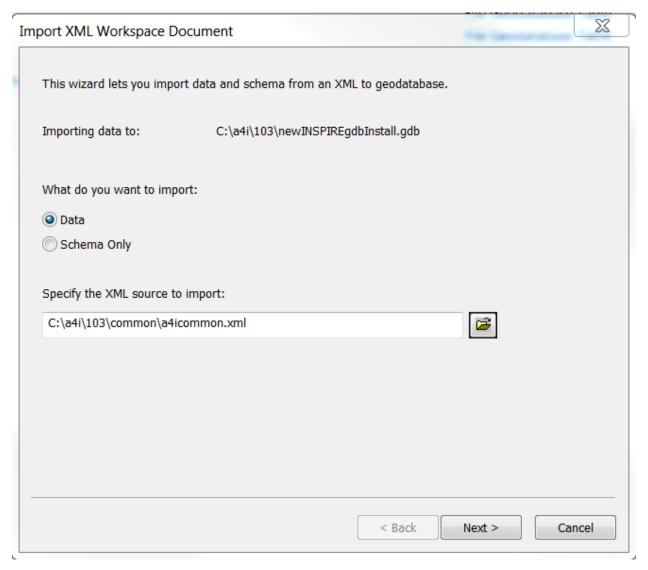


Figure 2: Specify XML Workspace Document to Be Imported

4. Click Next. ArcCatalog displays a table that indicates the details of objects to be created (figure 3). The table includes the following columns: Type, Source Name, Target Name, and Config. Keyword. Each type can be a table, a feature class, or a domain.

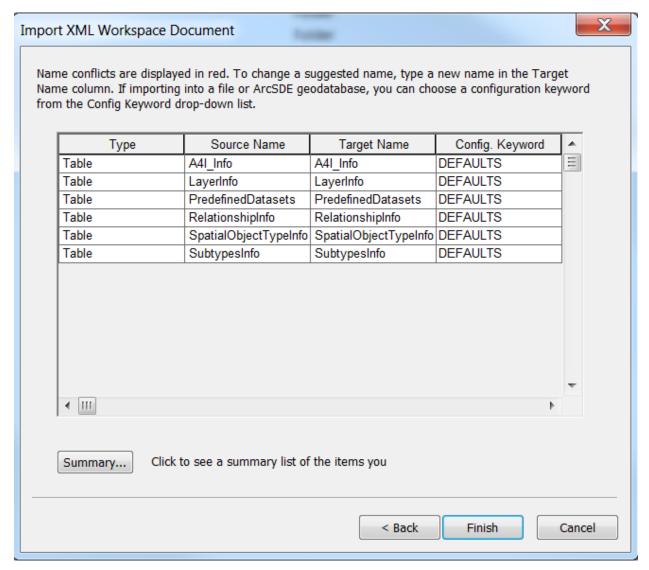


Figure 3: Overview of Feature Classes and Tables to Be Imported

5. Click Finish to complete the import. ArcCatalog imports the data and creates the geodatabase for INSPIRE common tables.

Detailed documentation can also be found in the web help topic "Importing a geodatabase schema from an XML workspace document," at

http://resources.arcgis.com/en/help/main/10.2/#/Importing a geodatabase schema from an XML w orkspace document/003n0000002q0000000.

# 3.4 Update the INSPIRE Geodatabase

You would need to read this section only if you would like to upgrade from an earlier version of ArcGIS for INSPIRE geodatabase template, please also verify that your database is still supported at ArcGIS for INSPIRE.

**Note:** You will need to apply the changes below incrementally starting from your current version to 10.4.

#### 3.4.1 Updating the INSPIRE Geodatabase from ArcGIS 10.4 to 10.5

ArcGIS for INSPIRE 10.5 will continue to work with 10.4 version of the geodatabase template without any changes. ArcGIS for INSPIRE 10.5 implemented four new data themes: Buildings, Species distribution, Habitats and biotopes, and Soil. You can add these new themes individually or add them on top of other data themes by following the steps in Section 3.3.

Comparing to the 10.4 (V4) version of the INSPIRE schema, following are the updates has been made to the template:

- For Annext I (A1.xml), the field names for tables and feature classes has been restored to camel cases, and some deprecated objects has been removed
- For Geology (GE.xml), data type for the following fields has been changed from esriFieldTypeSingle to esriFieldTypeDouble: geBorehole.length, geMappedInterval.mappedIntervalBegin, geMappedInterval.mappedIntervalEnd, geCompositionPart.proporttion\_valueL, geCompositionPart.proporttion\_valueH.

# 3.4.2 Updating the INSPIRE Geodatabase from ArcGIS 10.3.1 Update 1 to 10.4

INSPIRE 10.3.1. Update 1 geodatabase implements the new V4 of the INSPIRE schema, it includes Annex I, LC, GE data themes. If you are using this geodatabase template version of Annex I, LC or GE, there is no other updates are needed for 10.4. If you want to use new data themes added in 10.4, you can add those data themes (MR, LU and SU) by following the steps in Section 3.3.

#### 3.4.3 Updating the INSPIRE Geodatabase from ArcGIS 10.3/10.3.1 to 10.3.1 Update 1

10.3/10.3.1 geodatabase implement V3 of the INPIRE schema, it contains Annex I, LC and GE data theme, the 10.4 software continue to work with this version of the INSPIRE geodatabase.

If you are planning to implement the new geodatabase template and you already have the geodatabase at version 10.3/10.3.1, please see table below to help you understanding the differences between version 3 of the application schemas (included in ArcGIS 10.3/10.3.1 for INSPIRE) and the new version 4 (included with ArcGIS 10.3/10.3.1 Update 1 for INSPIRE and ArcGIS 10.4 for INSPIRE). Land Cover and Geology templates are not different from the version in 10.3/10.3.1.

Please also be aware that when transitioning to version 4 the ArcGIS map documents (mxd) previously generated would have to be recreated.

Theme	FeatureType	GDB template change	GML schema change	added	deleted
	ad:Address		х		
	ad:AddressAreaName		х		
AD	ad:AdminUnitName		х		
	ad:PostalDescriptor		х		
	ad:ThoroughfareName		х		

	au:AdministrativeBoundary		х		
	au:AdministrativeUnit				
	au:Condominium		X		
AU					V
AG	stat:NUTSRegion				Х
	mu:Baseline	X	X	X	
	mu:MaritimeBoundary	X	X	X	
	mu:MaritimeZone	Х	Х	Х	
	bgr:Bio-GeographicalRegion		х		Х
	bui:Building				Х
	bui:ControlTower				х
	cp:BasicPropertyUnit				
0.0	cp:CadastralBoundary				
СР	cp:CadastralParcel				
	cp:CadastralZoning		х		
	op.oadaetraizoning				
GN	gn:NamedPlace		Х		
OIV	gii.ivairieur laec		^		
_	hh:Hahitat				Y
	hb:Habitat				х
			v		х
	hy-n:HydroNode		X		Х
	hy-n:HydroNode hy-n:WatercourseLink		x x		Х
	hy-n:HydroNode				Х
	hy-n:HydroNode hy-n:WatercourseLink hy-	ossing			X
	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence	ossing			X
	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence	ossing			X
	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro	pssing			X
	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin	ossing			X
НҮ	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint	pssing			X
НҮ	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint hy-p:Rapids	ossing			X
НҮ	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint hy-p:Rapids hy-p:Falls	ossing	x		X
НҮ	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint hy-p:Rapids hy-p:Falls hy-p:LandWaterBoundary	ossing	x		X
НҮ	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint hy-p:Rapids hy-p:Falls	pssing	x		X
НҮ	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint hy-p:Rapids hy-p:Falls hy-p:LandWaterBoundary hy-p:Crossing	ossing	x x x		X
HY	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint hy-p:Rapids hy-p:Falls hy-p:LandWaterBoundary hy-p:Crossing hy-p:Lock hy-p:ShorelineConstruction hy-p:Sluice	ossing	X X X X X X		X
HY	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint hy-p:Rapids hy-p:Falls hy-p:LandWaterBoundary hy-p:Crossing hy-p:Lock hy-p:ShorelineConstruction hy-p:Ford	ossing	X X X X X X X		X
нү	hy-n:HydroNode hy-n:WatercourseLink hy- n:WatercourseLinkSequence hy-n:WatercourseSeparatedCro hy-p:DrainageBasin hy-p:RiverBasin hy-p:FluvialPoint hy-p:Rapids hy-p:Falls hy-p:LandWaterBoundary hy-p:Crossing hy-p:Lock hy-p:ShorelineConstruction hy-p:Sluice	ossing	X X X X X X		X

hv-p:StandingWater		X		
			x	
* -				
ny p.vvoudna		X		
geo:SpringOrSeen				Х
				X
geo. variistiirigi oirit				Α
er:HvdroPowerPlant		v		Х
				X
				X
				X
				X
Til Z.iii di date d'Land		^		^
lc:GlacierSnowfield				V
		V		X
		<b>X</b>		X
ic.vvetiariu				Х
not:CrossPoforonso				
		.,		
		X		
net:GradeSeparatedCrossing				
. =				
		X		
		X		
tn:OwnerAuthority		X		
tn-a:AirLinkSequence				
tn-a:AirRoute		X		
tn-a:AirNode				
tn-a:DesignatedPoint				
tn-a:RunwayCentrelinePoint		Х		
tn-a:AerodromeNode				
tn-a:Navaid		Х		
tn-a:TouchDownLiftOff				
tn-a:ProcedureLink				
tn-				
a:StandardInstrumentArrival				
tn-a:StandardInstrumentDepart	ure			
tn-a:InstrumentApproachProced	dure			
tn-a:AirRouteLink		Х		
tn-a:AirspaceArea		Х		
tn-a:TaxiwayArea				
	tn-a:AirNode tn-a:DesignatedPoint tn-a:RunwayCentrelinePoint tn-a:AerodromeNode tn-a:Navaid tn-a:TouchDownLiftOff tn-a:ProcedureLink tn- a:StandardInstrumentArrival tn-a:StandardInstrumentDepart tn-a:InstrumentApproachProced tn-a:AirRouteLink tn-a:AirspaceArea	hy-p:Embankment* hy-p:Shore* hy-p:Wetland*  geo:SpringOrSeep geo:VanishingPoint  er:HydroPowerPlant nrz:Embankment* ugs:PumpingStation ugs:Pipe nrz:InundatedLand  lc:GlacierSnowfield lc:Shore* lc:Wetland*  net:CrossReference net:Network net:NetworkConnection net:GradeSeparatedCrossing  tn:TransportNetwork tn:MaintenanceAuthority tn:AccessRestriction tn:MarkerPost tn:VerticalPosition tn:ConditionOfFacility tn:TrafficFlowDirection tn:RestrictionForVehicles tn:OwnerAuthority  tn-a:AirLinkSequence tn-a:AirRoute tn-a:PosignatedPoint tn-a:RunwayCentrelinePoint tn-a:RunwayCentrelinePoint tn-a:AerodromeNode tn-a:StandardInstrumentArrival tn-a:StandardInstrumentDeparture tn-a:AirRouteLink tn-a:AirspaceArea	hy-p:Embankment* x hy-p:Shore* x hy-p:Shore* x hy-p:Shore* x hy-p:Wetland* x geo:SpringOrSeep geo:VanishingPoint	hy-p:Embankment* x x x x hy-p:Shore* x x x x x hy-p:Shore* x x x x x x x x x x x x x x x x x x x

to a Division Area		
tn-a:RunwayArea	X	
tn-a:ApronArea		
tn-a:AerodromeArea		
tn-a:LowerAltitudeLimit	X	
tn-a:ElementLength	X	
tn-a:AerodromeCategory	X	
tn-a:UpperAltitudeLimit	X	
tn-a:ElementWidth	X	
tn-a:FieldElevation	X	
tn-a:UseRestriction	X	
tn-a:SurfaceComposition	Х	
tn-a:AerodromeType	Х	
tn-a:ConditionOfAirFacility	Х	
tn-c:CablewayLinkSet		
tn-c:CablewayLinkSequence		
tn-c:CablewayNode		
tn-c:CablewayLink	x	
tn-ra:RailwayLine		
tn-ra:RailwayLinkSequence		
tn-ra:RailwayNode	x	
tn-ra:RailwayStationNode		
tn-ra:RailwayYardNode		
tn-ra:RailwayLink		
tn-ra:RailwayYardArea		
tn-ra:RailwayStationArea		
tn-ra:RailwayArea		
tn-ra:RailwayStationCode	X	
tn-ra:RailwayElectrification	X	
tn-ra:DesignSpeed	X	
tn-ra:RailwayUse	X	
tn-ra:RailwayType	x	
tn-ra:NominalTrackGauge	X	
tn-ra:NumberOfTracks	X	
ti ra.ivambererradio	^	
tn-ro:RoadNode	x	
tn-ro:RoadLinkSequence	^	
tn-ro:RoadLink		
tn-ro:RoadServiceArea		
tn-ro:RoadServiceArea		
tn-ro:VehicleTrafficArea		
tn-ro:Road		
tn-ro:ERoad		
tn-ro:RoadServiceType	X	
tn-ro:NumberOfLanes	X	
tn-ro:FormOfWay	X	
tn-ro:RoadSurfaceCategory	X	

	to roiDoodNome			
	tn-ro:RoadName		Х	
	tn-ro:FunctionalRoadClass		Х	
	tn-ro:SpeedLimit		Х	
	tn-ro:RoadWidth		Х	
	tn-w:WaterwayLink			
	tn-w:WaterLinkSequence			
	tn-w:PortNode			
	tn-w:WaterwayNode		Х	
	tn-w:FairwayArea			
	tn-w:PortArea			
	tn-w:TrafficSeparationSchemeRo	oundabout		
	tn-w:TrafficSeparationSchemeLa			
	tn-w:TrafficSeparationSchemeSe			
	tn-w:TrafficSeparationSchemeCi			
	tn-w:FerryCrossing	9		
	tn-w:MarineWaterway			
	tn-w:InlandWaterway			
	tn-w:Buoy			
	tn-w:Beacon			
	<u> </u>			
	tn-w:FerryUse		X	
	tn-w:CEMTClass		Х	
	tn-w:ConditionOfWaterFacility		Х	
	tn- w:WaterTrafficFlowDirection		v	
	tn-w:RestrictionForWaterVehicle	6	X	
	III-W.RestrictionForwaterverlicle	5	X	
	ps-f:ResponsibleAgency			V
	ps-f:ProtectedSite		V	X
	ps-i.FiolectedSite		Х	Х
PS				
	D - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1			
	ps:ProtectedSite		Х	
	sr:OceanRegion			Х
	10 1 5			
	sd:SpeciesDistribution			Х
	wfd:WFDGroundWaterBody			Х
	wfd:WFDTransitionalWater			Х
Ì	wfd:WFDRiver			Х

wfd:WFDLake		х
wfd:WFDCoastalWater		Х

<sup>\*</sup> Ic:Shore gdb tables (IcShoreS\_hyld, IcShoreS\_name, IcShoreS\_relHyObj) has been reused for newly added hy-p:Shore, same is true for Ic:Wetland and nrz:Embankment (a subtype of hypManMadeObj).

## **About Geographic named place**

When switching to version 4 of the geodatabase template you will be have the option of implementing the simple profile or the full GN profile for NamedPlaces. The simple profile corresponds to the one implemented in previous releases of ArcGIS for INSPIRE.

The A4I\_info table included in the geodatabase template indicates which profile will be used, by default the value (see row with GN\_PROFILE property) is SIMPLE\_NP\_FULL which implements the full and richer content model, if the value is set to "SIMPLE" the simple profile is used. The INSPIRE Feature Download Service for the named place spatial object will honour the A4I\_Info table GN\_PROFILE configuration.

When using the simple profile, the gml property

"gn:name/gn:GeographicalName/gn:spelling/gn:SpellingOfName/gn:text" is mapped to the geodatabase field "gnNamedPlace(P|L|MP|S)\_name/name". When using the full profile, this field is ignored. The property is mapped to "gnNamedPlace(P|L|MP|S)\_name\_spelling/text" instead.

## 3.4.4 Updating the INSPIRE Geodatabase from ArcGIS 10.2.2 to 10.3

If you would like to upgrade an existing 10.2.1 or 10.2.2 INSPIRE geodatabase to 10.3, please follow the steps below:

- Add GDBTEMPLATE\_NAME field to LayerInfo
- Add GDBTEMPLATE NAME field to SpatialObjectTypeInfo
- Use ArcMap to calculate value for GDBTEMPLATE\_NAME field value to "A1" for layerInfo for all Annex I entries
- Use ArcMap to calculate value for GDBTEMPLATE\_NAME field value to "A1" for SpatialObjectTypeInfo for all Annex I entries
- Update value for GDB\_VERSION in A4I\_Info to "10.3"
- If you would like to add Land Cover Theme or Geology Theme (Optional) follow the add geodatabase template instructions in the previous section.

# 3.4.5 Updating the INSPIRE Geodatabase from ArcGIS 10.2.1 to 10.2.2

The geodatabase template has not changed from 10.2.1, it will continue to work with 10.2.2 and no update is needed.

# 3.4.6 Updating the INSPIRE Geodatabase from ArcGIS 10.1 SP1 Patch 1 to 10.2.1

If you already have an ArcGIS for INSPIRE Annex I geodatabase upgraded to ArcGIS 10. 1 SP1 Patch 1 for INSPIRE, the optional change is on Table "A4I\_Info": attribute GDB\_VERSION value is updated to "10.2.1".

#### 3.4.7 Updating the INSPIRE Geodatabase from ArcGIS 10.1 SP1 to ArcGIS 10.1 SP1 Patch1

- A field (width\_void) has been added to indicate whether width\_lower/width\_upper is NIL for hypSurfaceWaterL, hypSurfaceWaterP and hypSurfaceWaterS. You might use the following steps to update the geodatabase: make sure no other user is connecting to the database to be updated when performing the update
  - 1. Rename hypSurfaceWaterL, hypSurfaceWaterP and hypSurfaceWaterS
  - 2. Import GDB\_Template\_Annex\_I\_SP1\_Patch1\_Updates.xml included in the patch package.

#### 3.4.8 Updating the INSPIRE Geodatabase from ArcGIS 10.1 to 10.1 SP1

- The LayerInfo table has been updated to better handle layer order and support definition queries.
  - Updated LayerInfo table changes the ID values of point, multipoint, line, and surface sublayers to allow an "order by" selection from Addin so line layers will automatically be placed above surface layers.
    - All point layers will not reside within the 4000–4999 range.
    - All multipoint layers will not reside within the 5000–5999 range.
    - All line layers will not reside within the 6000–6999 range.
    - All surface layers will not reside within the 7000–7999 range.
    - For example: The layer PS.ProtectedSitesHealthAndWelfare.MP had ID 196; now it has ID 5196.
  - Updated LayerInfo table adds the {0} placeholder for those definition queries pointing to a different table. The placeholder will be replaced during runtime with the qualified table name prefix.
- If you don't have any custom change to the LayerInfo table for 10.1, you can simply rename the old LayerInfo table and import the new LayerInfo table for 10.1 SP1 (GDB\_Template\_Annex\_I\_Table\_LayerInfo.xml).
- There are no other geodatabase template changes to 10.1 SP1.

# 3.4.9 Updating the INSPIRE Geodatabase from ArcGIS 10 to 10.1

There are basically five changes that have been made to the geodatabase template in comparison to the template included in ArcGIS for INSPIRE 1.0 SP2:

- Renaming of field isolation from table sdSpeciesDistribution
   Makes an update of your existing geodatabase mandatory
- Definition queries for Administrative Units theme in table LayerInfo
   Makes an update of your existing geodatabase and services mandatory if you are exposing
   Administrative Units data
- Introduction of several indexed fields on the whole data model
   Update of your geodatabase is strongly recommended as it improves performance

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- New Table A4I\_Info
  - Geodatabase update optional
- Improved antialiasing for feature classes and fields
  - Geodatabase update optional

See " MigrationGuide\_ArcGISForINSPIRE\_10\_1\_EN.pdf " for a detailed explanation of the changes and improvements.