



## Action plan for the implementation of INSPIRE in Luxembourg 2016-2021

### 1. INTRODUCTION

As agreed with representatives of DG ENV in Brussels on 21<sup>st</sup> March 2016, Luxembourg proposes an action plan to cope with the punctual gaps between the requirements of the INSPIRE directive and the as-is state on national level. This document, as mentioned in the DG ENV's report on the meeting, is meant to draft the action plan and the related timing.

### 2. METADATA

Luxembourg operates its national geoportal since 2005, a platform of official geodata, metadata and collaboration projects. Many datasets are related to environmental issues and cover INSPIRE annexes. To avoid the complexity of multilingualism, which is typical for Luxembourg, and to be as compliant as possible to the INSPIRE specifications a second geoportal was developed in English only, which contains INSPIRE related data sets and metadata.

This INSPIRE-geoportal of Luxembourg is available at:

<http://inspire.geoportail.lu/geoportal/>

The 2015 Luxembourg INSPIRE monitoring document, edited in May 2016, lists a total of 272 national datasets. However, the INSPIRE geoportal catalog only lists 80 (as of 9<sup>th</sup> May 2016). Missing INSPIRE metadata sets will be added in 2016 to complete and correspond to the monitoring information.

### 3. DATA SETS

Following on from a detailed assessment, an action plan ranging from 2016 to 2021 was developed (see page 2 diagram). According to this plan, external help will be used to help complete Luxembourg's INSPIRE infrastructure.

This detailed assessment not only produced this plan, but also helped set budgets and an improved list of INSPIRE-related datasets, used in the 2016 monitoring, delivered with this document. As indicated in the report, an extra budget has been set aside in 2017 to account for the supplementary tasks in the action plan.



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Administration du cadastre  
et de la topographie

Phases	Activity		Theme	2016	2017	2018	2019	2020	2021
	Cat.	Description	ID						
Conformity corrections	DATA	Conformity corrections							
Proof Of Concept	INFRA	GeoNetwork 3.0							
	INFRA	Virtual Machine & VPN access							
	INFRA	Installation, configuration GeoNetwork							
	INFRA	Installation, configuration Geoserver							
	DATA	Add theme 'Protected Sites' in existing infrastructure	1.9-PS						
		Protected Sites							
	ORGA	RoadMap update							
Create new INSPIRE infrastructure									
	INFRA	Configuration and personalisation of GeoNetwork							
	INFRA	Stop ArcGIS4Inspire							
	ORGA	Generate automatic monitoring							
Annex II data									
		Elevation	2.1-EL						
		Land Cover	2.2-LC						
		Ortho-imagery	2.3-OI						
		Geology	2.4-GE						
Annex III data									
		Statistical Unit	3.1-SU						
		Buildings	3.2-BU						
		Soil	3.3-SO						
		Land Use	3.4-LU						
		Human Health	3.5-HH						
		Utility and Government Services	3.6-US						
		Environmental Monitoring Facilities	3.7-EF						
		Production and Industrial Facilities	3.8-PF						
		Agricultural and Aquaculture Facilities	3.9-AF						
		Population Distribution	3.10-PD						
		Area Management / Restriction / Regulation Zones and Reporting Units	3.11-AM						
		Natural Risk Zones	3.12-NZ						
		Atmospheric Conditions	3.13-AC						
		Meteorological Geographical Features	3.14-MF						
		Bio-geographical Regions	3.17-BR						
		Habitats and Biotopes	3.18-HB						
		Species Distribution	3.19-SD						
		Energy Resources	3.20-ER						
		Mineral Resources	3.21-MR						
Annex I data									
	DATA	Transfer Annex I data from old to new INSPIRE infrastructure							
		Coordinate Reference Systems	1.1-RS						
		Grid Systems	1.2-GG						
		Geographical Names	1.3-GN						
		Administrative Units	1.4-AU						
		Addresses	1.5-AD						
		Cadastral Parcels	1.6-CP						
		Transport Networks	1.7-TN						
		Hydrography	1.8-HY						
Maintenance									
	DATA	Maintenance of data & services							
	INFRA	Maintenance Geoserver et GeoNetwork							



The next step in 2016 will be the implementation of a new infrastructure for INSPIRE, based on GeoNetwork and GeoServer, while the “old” infrastructure based on ArcGIS for INSPIRE is kept running.

A currently missing Annex I theme, protected sites, will be used as proof of concept for the new infrastructure. The data sets covering this theme will be integrated in both the new and old infrastructure (Annex I data sets have until now been integrated in ArcGIS for INSPIRE using the incorporated data model to make them compliant). After this pilot is completed, an updated road map will be produced.

In 2017 the new infrastructure will be refined and the Annex I data, until now hosted in ArcGIS for INSPIRE, will be transferred to the GeoNetwork-based infrastructure. After this migration, it is planned to leave ArcGIS for INSPIRE and to stop its maintenance. Following on from the migration of existing Annex I data, the agenda plans to deal with Luxembourg’s Annex II datasets, i.e. ‘elevation’, ‘land cover’, ‘ortho-imagery’ and ‘geology’ as well as the theme ‘statistical units’ from Annex III. This work will include the creation of transformation scripts between existing data models and the INSPIRE model and the creation of spatial data services.

The rest of the Annex III datasets are planned to be transformed and made available in compliance to the INSPIRE rules and agenda, during the years 2018, 2019 and 2020.

In case other datasets are discovered, made available or proposed by the European commission to be integrated into the INSPIRE scope, a budgetary margin has been included to be able to cope with the related supplementary workload.