

EEA geospatial data requirements – status 2008

There is an increasing demand for spatial assessments using coherent geospatial data required for integrated environmental policy development (i.e., soil protection, water management, spatial planning, urban environment, etc.). Several EEA key products and services require the use of geospatial data along with spatial modelling and mapping tools.

The work on spatial assessment will imply the integration of several geospatial data layers (topographic, environmental, socio-economic, etc). The use of environmental relevant analytical and reporting units (such as river catchments, urban morphological zones, biogeographical regions, etc) is needed to produce information relevant to environmental management and reporting. Together with geospatial environmental data, common geospatial reference data (such as roads, coastline, digital elevation model, etc) is needed.

Table 1 provides an overview of the 20 geospatial datasets, which are currently prioritised within the EEA work programme. Data providers include the European Commission (DG Eurostat; DG Joint Research Centre) as well as commercial organisations (such as EuroGeographics, TeleAtlas and Collins Bartholomew).

Most of these datasets correspond to one or more themes listed in Annex I, II and III of the INSPIRE Directive. EEA will follow the principles proposed by INSPIRE for implementing a European spatial data infrastructure.

Table 2 provides an overview of the grouping of datasets according to EEA's main reference scales.

**Table 1. Top 20 of most requested geospatial datasets in 2008
for environmental assessments at European scale**

	<i>Description geospatial dataset</i>	<i>Present data source used by EEA</i>	<i>INSPIRE Annex I data</i>	<i>INSPIRE Annex II data</i>	<i>INSPIRE Annex III data</i>
1	Administrative units	EuroGeographics GISCO NUTS	✓		
2	Land cover (CLC)	EEA, JRC		✓	
3	Analytical units (zones)	EEA,			✓
4	Geographical names	World locator, TeleAtlas, EuroGeographics	✓		
5	Land accounts	EEA			
6	Natura2000 sites	DG ENV	✓		
7	River catchments	JRC, EUROSTAT GISCO	✓		
8	Ortho-imagery (IMAGE2000)	EEA/JRC		✓	
9	Population distribution	EUROSTAT/JRC			✓
10	Settlements	EuroGeographics, TeleAtlas			✓
11	Transport networks*	EuroGeographics, TeleAtlas	✓		
12	Coastline	EEA, EuroGeographics		✓	
13	Standard European reference grid	EEA	✓		
14	Soil map of Europe	JRC			✓
15	Elevation and bathymetry	USGS , EUROSTAT GISCO		✓	
16	Groundwater bodies	EEA	✓		
17	Lakes	EEA, EuroGeographics	✓		
18	Rivers	EuroGeographics	✓		
19	Sea regions	DG ENV/EEA			✓
20	Meteorological data	ECMWF			✓

***Note:** transport networks include road, rail, air and water transport networks and related infrastructure. Includes links between different networks.

A major challenge is to get complete coverage of commonly used geospatial datasets for all EEA member countries at a more detailed scale than 1 : 1 million (preferred scale: 1 : 100 000).

Table 2: Grouping of datasets according to EEA's main reference scales

Description geospatial datasets	Group 1:			Group 2	Group 3
	10K	100K	250K	1M	>=10M
Administrative units		EBM		GISCO NUTS	
Land cover		CLC1990		GLC2000 Globcover	
		CLC2000			
		LCC1990-2000			
Analytical units		Urban morphological zones			
		Mountain areas			
		Coastal zones			
Geographical names		World locator		EGM	
Land accounts 1990-2000				LEAC	
Natura2000 sites		N2K			
River catchments			CCM2	ERC	
Ortho-imagery		IMAGE2000			
Population distribution		Pop density (JRC)			
		Commune Census 2001 (GISCO)			
Settlements	Tele Atlas		ERM	EGM	
Roads	Tele Atlas		ERM	EGM	
Coastline		CLC coast	ERM	EGM	
European reference grid	EEAGRID				
Soil map of Europe v2				JRC	
Elevation and bathymetry		SRTM		GTOPO30	GEBCO
Groundwater bodies					
Lakes		CLC	ERM	EGM	
Rivers			ERM	EGM	
Sea regions					
Meteorology					ERA40