

CONNECTING YOU TO THE AUTHORITATIVE GEO-INFORMATION FRAMEWORK FOR EUROPE

Influence of INSPIRE on European/national data specifications

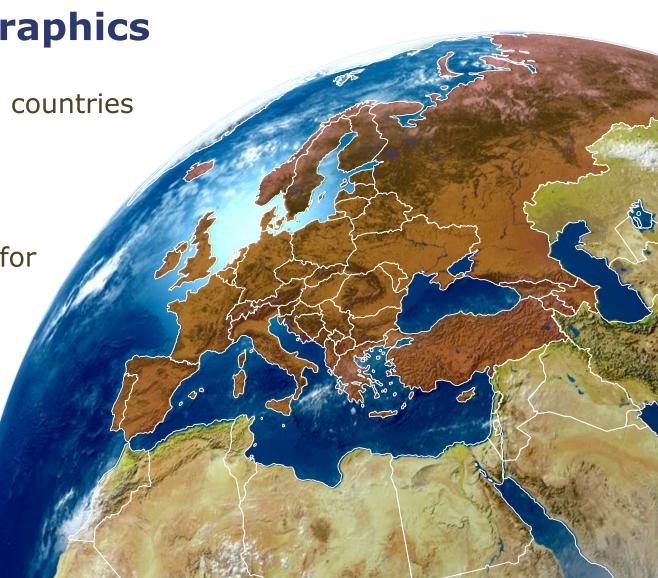
Saulius Urbanas, EuroGeographics



Copyright ©2013 EuroGeographics

EuroGeographics

- 46 European countries
- 63 members
- Responsible for geodetic, cadastral, land registry and mapping activities





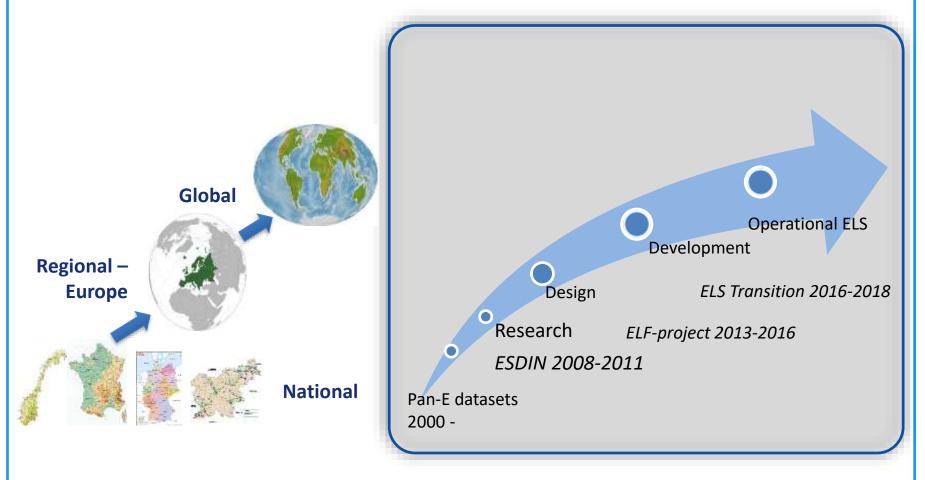
EuroGeographics vision



a European society which makes decisions informed by our members' accurate, authoritative and qualityassured land and geo-information data, services and expertise.



Attempts harmonizing national data for pan-European use





Vision for European Location Services

To provide the single access point for international users of harmonised, pan-European, authoritative geospatial information and services.

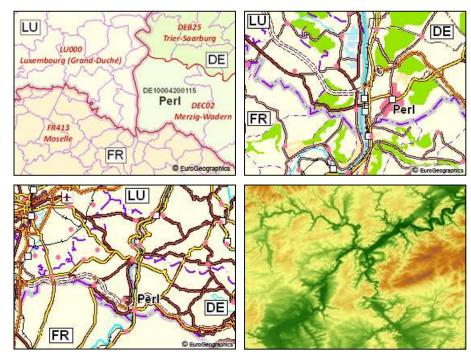
For national mapping, cadastral and land registry authorities to be recognised in our International effort to contribute to the wider public good.

Euro Geographics

EuroGeographics pan-European products

- EuroBoundaryMap (EBM) Administrative and statistical regions 1 : 100 000
- EuroRegionalMap (ERM) Topography
 1:250:000
- EuroGlobalMap (EGM) Topography
 1:1000000
- EuroDEM
 Digital Elevation Model
 1 arc second grid





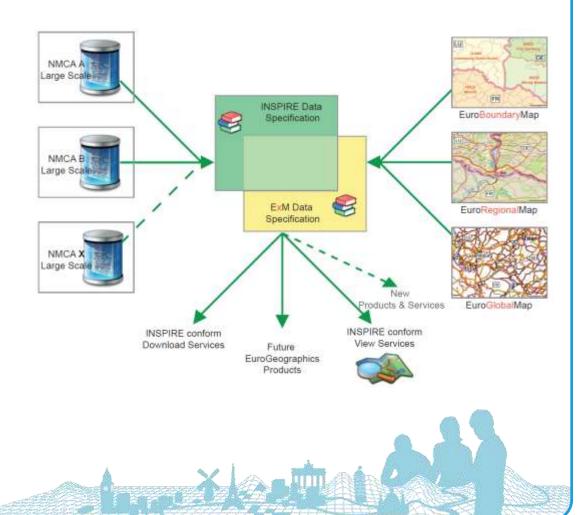


European Spatial Data Infrastructure Network

ExM specification

- Interoperability across: resolutions, themes, countries
- User requirements: additional spatial objects in comparison with INSPIRE
 - HY: Offshore features, land area mask
 - TN: ferry lines and ports, access to other transport modes, border
 - crossing points
 - Settlements and city areas
 - Points of Interest (e.g. schools, hospitals)





ESDIN concepts implementation in the European Location Framework project

LoD	Source data	
ELF Global: 1:500 000 and smaller	European product (EGM)	
ELF Regional: 1:100 000 - >1:500 000	European products (ERM - EBM)	
ELF Master Level 2 (LoD2): 1:25 000 - >1:100 000	National data Administrative Units Addresses Geographical Names, 	
ELF Master Level 1 (LoD1): 1:5 000 - > 1:25 000	 Hydrography Land Cover, Transport Networks Elevation 	
ELF Master Level 0	 Buildings Cadastral parcels 	
(LoD0): 1:5 000 and larger	 Protected Sites Sea Regions Geology 	





European Location Services (ELS)



ELS products compliancy to INSPIRE

Service Type	ELF service	Conform to INSPIRE	Added value, comment
Search	GeoLocator	V	Utilises INSPIRE services Exonyms, variant names
Download	WFS: 12 themes		Cross-country (cascading services)
View	Topographic Base Map		ELF specific service
	Cadastral Index Map		INSPIRE portrayal improved GetInfoFeature operation Cross-country (cascading services)



European Location Services Transition Programme objectives

ELF Project ConsortiumEuroGeographics2013201520162018Services

European Location Framework project

Established standards, tools, technical infrastructure and pilot services – the ELF Platform

Pilot products & services to defined standards (INSPIREcompliant spatial reference data, harmonised at a crossborder and pan-European level)

Transition Programme (Oct 2016 – Oct 2018)

Build on ELF Platform and handover ownership of the ELF platform from ELF Consortium to EuroGeographics

Design and build operational and customer focused services with key partners (Kartverket, Kadaster, OSGB, NLSFI, BKG)

Establish the organisational model for operations

Operational European Location Services

Provide reliable and efficient products/services for pan-European users

Single point of access for licensing official data on European level Business model and business case in place

Delivery organisation decided Operational model implemented



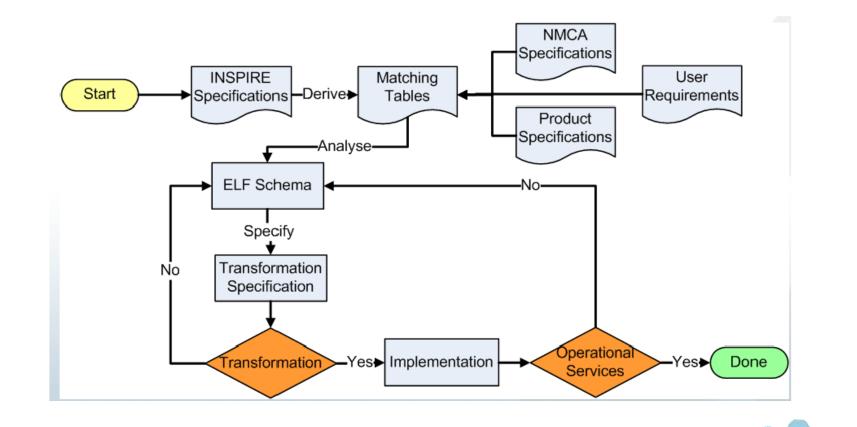
Levels of details (LoD)

	MASTER LoD0	Master LoD1/2	REGIONAL	GLOBAL
Cadastral Parcels (CP)	x			
Addresses (AD)	x			
Buildings (BU)	x	x	х	
Administrative Units (AU)		x	х	x
Geographical Names (GN)	?	x	х	x
Transport Networks (TN)		x	x	x
Hydrography (HY)		x	x	х
Land Cover (LC)		x	х	х
Elevation (EL)	?	х	Х	х

- INSPIRE data models are the same for all LoDs (same GML schema)
- However some feature types are not relevant to all LoDs
 - RunwayArea: not convenient at Regional level
 - Building description depends on scale



ELF/ELS application schema and data transformation



Added value of ELF/ELS specifications in regard to INSPIRE

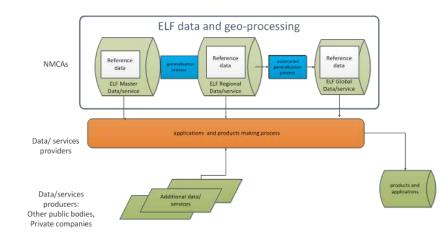
- Why extension to the INSPIRE data models
 - Respecting the rules given by the Generic Conceptual Model
 - Inheritance of the INSPIRE models
 - Additional attributes or constraints

=>data that conform to ELF/ELS data models are conform to INSPIRE

- What extensions
 - Keep the (few) additional features and attributes of EuroGeographics products (ERM, EBM, EGM)
 - Add some attributes required by the ELF/ELS products

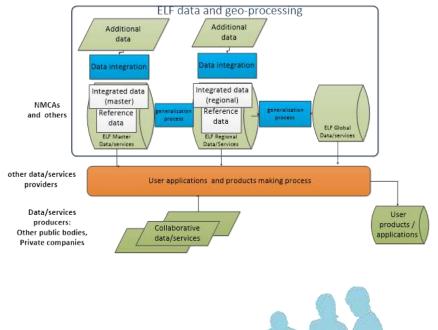


ELS – long terms scenarios



Reference data, additional data linked

Reference data are integrated with additional data in the ELS products





Summary



- INSPIRE is the ""driving train" influencing product specifications in Europe
- Why Extensions?
 - From isolated national components to integrated, cross-border content
 - Add additional data to "authoritative"
 - Works only if data providers implement extensions in interoperable way (same data schema)





Together we are stronger and smarter, more efficient and more effective!

Thank you for your attention!

