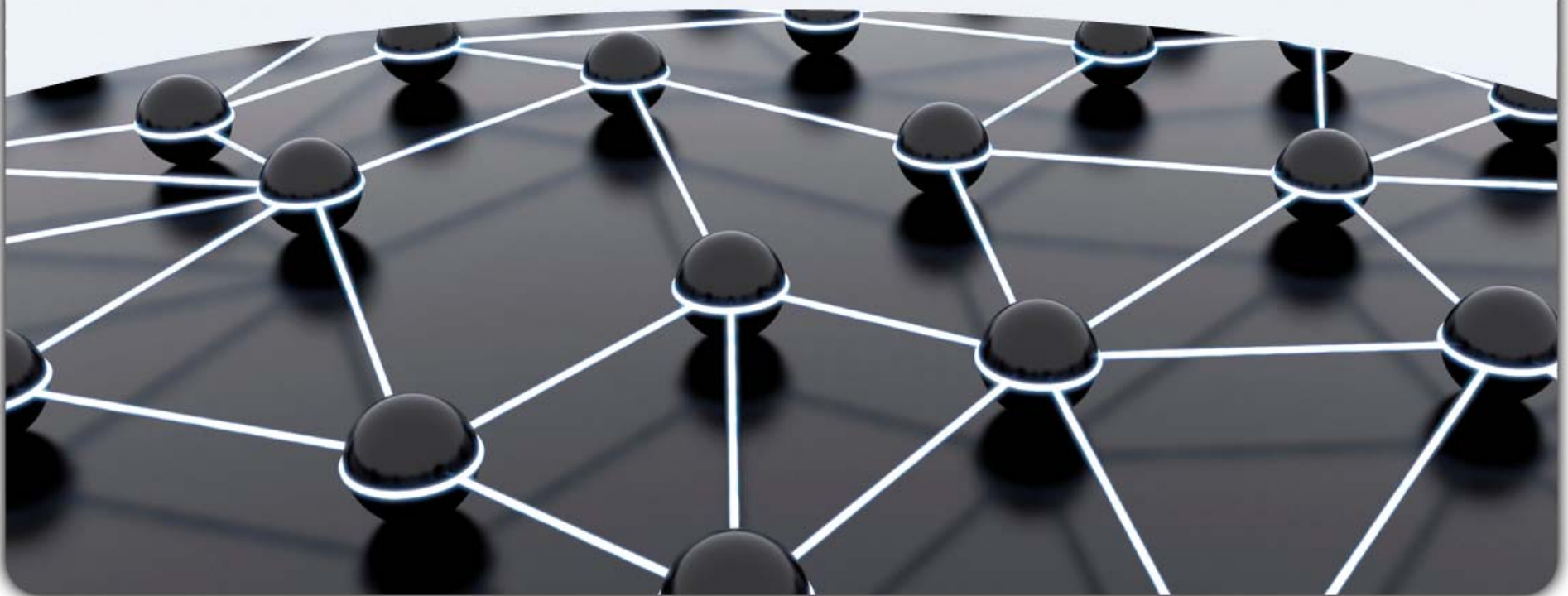




New trends for the EuroGeoNames infrastructure implementation

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Background



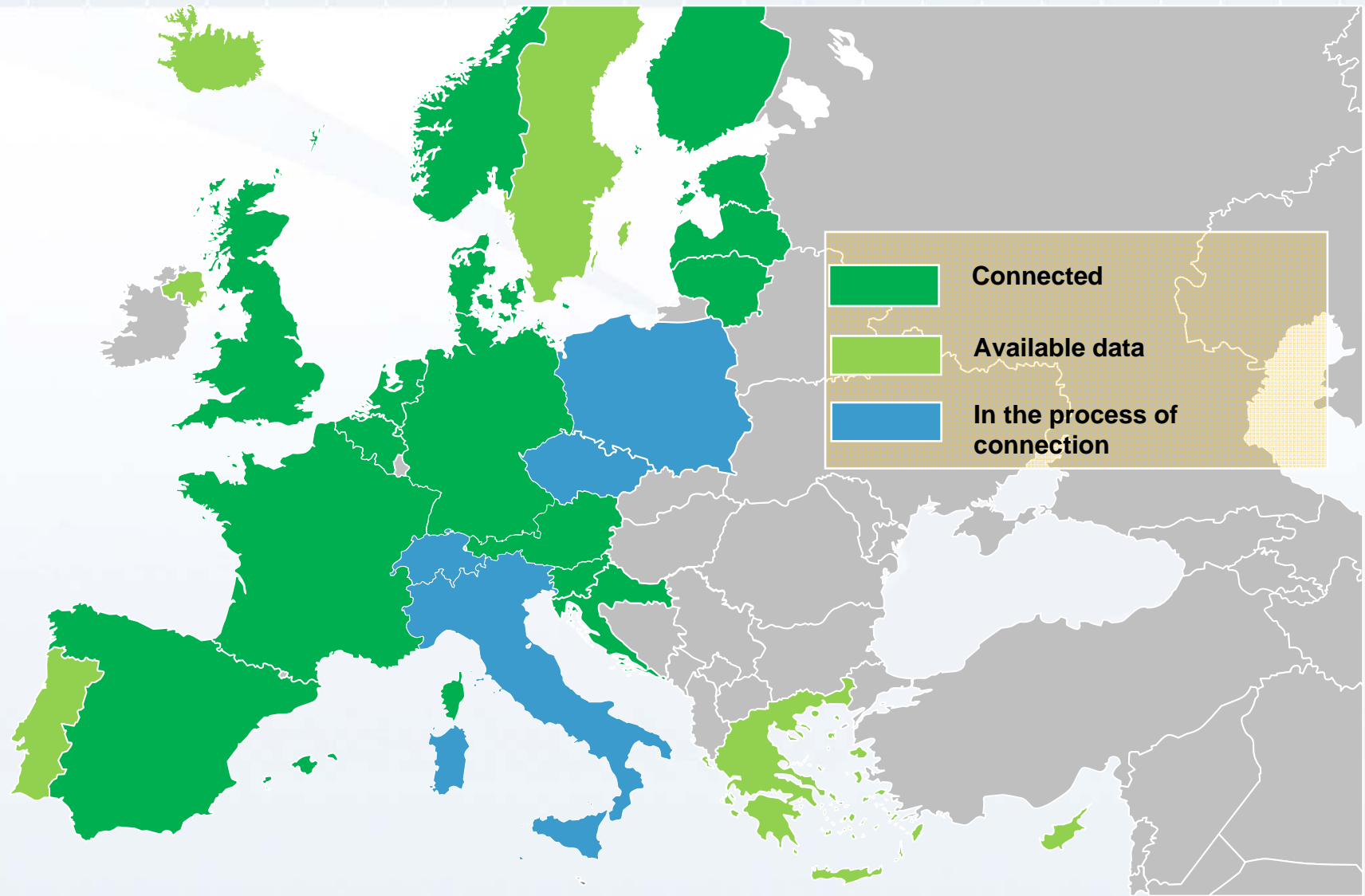
- The EuroGeoNames (EGN) project (2006 – 2009) was implemented by BKG (Germany) under support of other project partners as a part of the eContentPlus project. EGN service is maintained by EuroGeographics since 2009
- EGN service is a Gazetteer service that serves geographical names data from several European countries
- EGN service consists of:
 - Several national EGN services (hosted by NMCAs)
 - Central EGN service (hosted by BKG, Germany)

EGN data suppliers

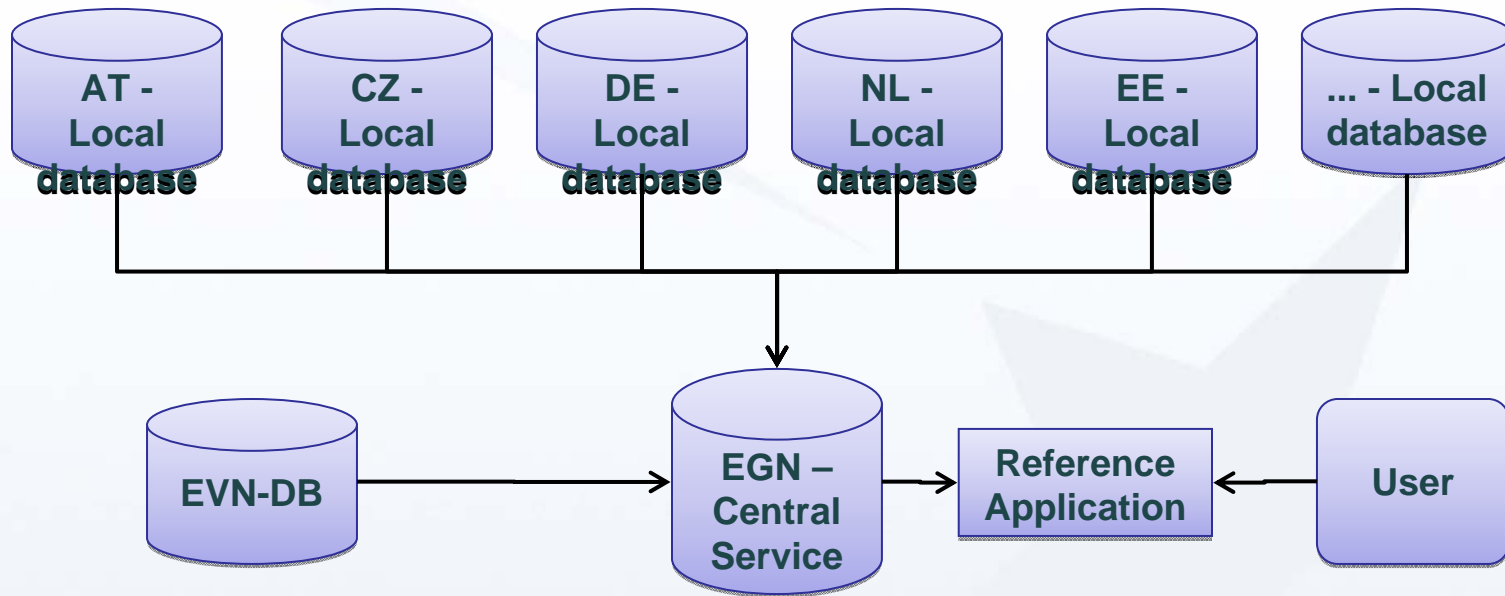


- EGN data are provided from National Mapping and Cadastral Agencies
 - Geographical names from 15 countries are currently in use
 - 4 countries are in the process of connection
- Short term target – EU members states (27 countries)
- Long term target – an entire European coverage
- Origin source datasets vary in scale from 1:1 000 to 1:250 000

Current EGN coverage

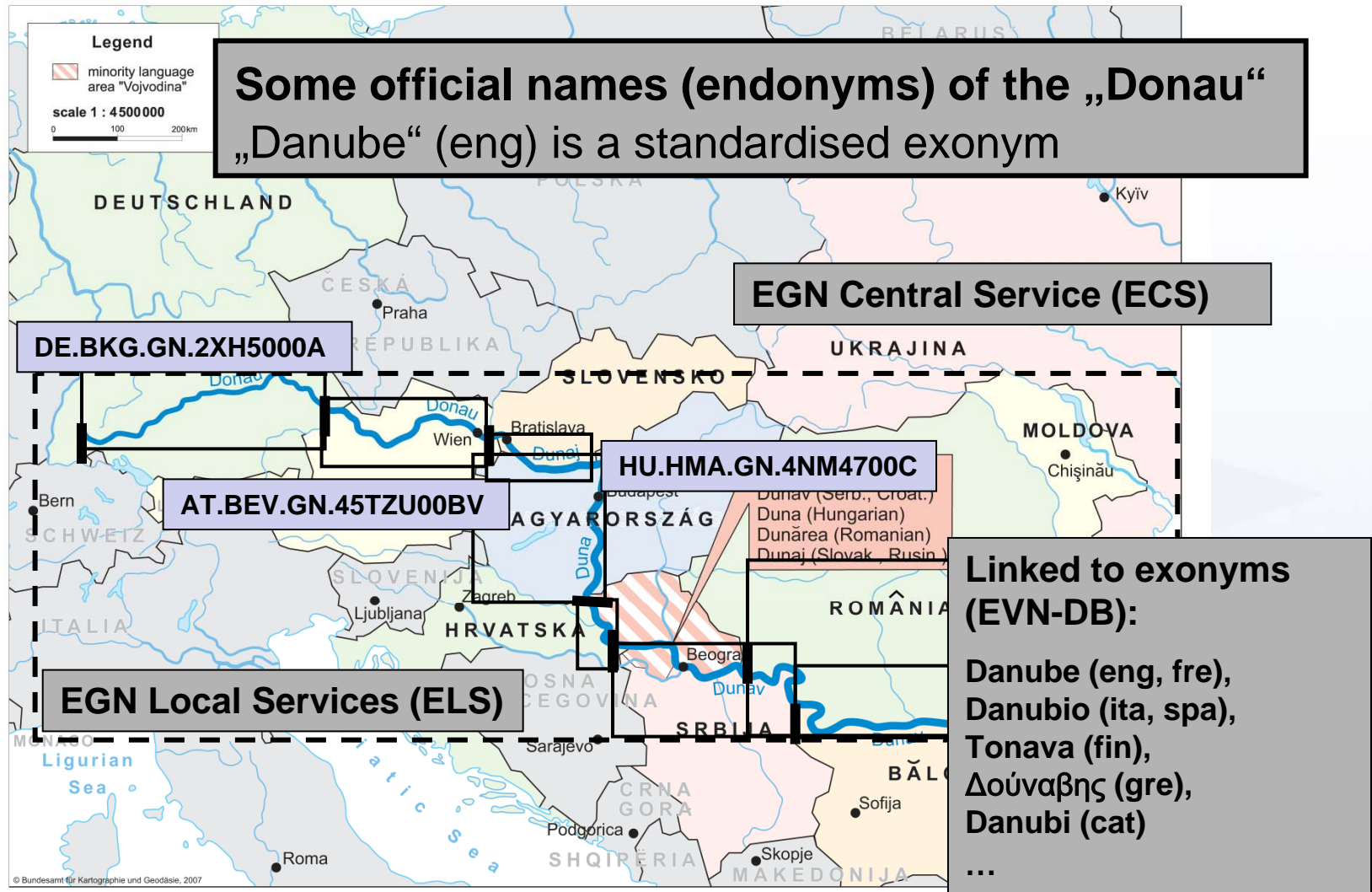


The structure of EGN service

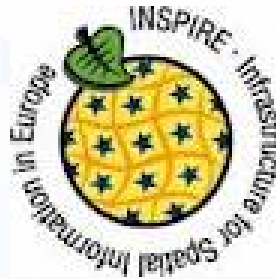


- EGN: *EuroGeoNames*
- EVN-DB: *Database of exonyms and other variant names*

Implementation – complexity of all EGN components



Network users and pilot tester



Unique selling points



- the names data provided are from a primary source,
- it is continuously updated,
- it is more detailed than other names data,
- it is closer to the experts that collect the names,
- there is a better quality control through official cooperation,
- it is based on European standards,
- the data is generated by trustworthy institutions providing unbiased products.

Reasons for the service renewal



- The original output schema is considered to be too heavy for web applications and also too complicated
- The original database structure is very difficult to understand and manage
- Data update procedures are difficult to handle because of the complicated database structure
 - This has ultimately resulted in data corruption in the Central Service
- New countries have been difficult to convince to join to the EGN service

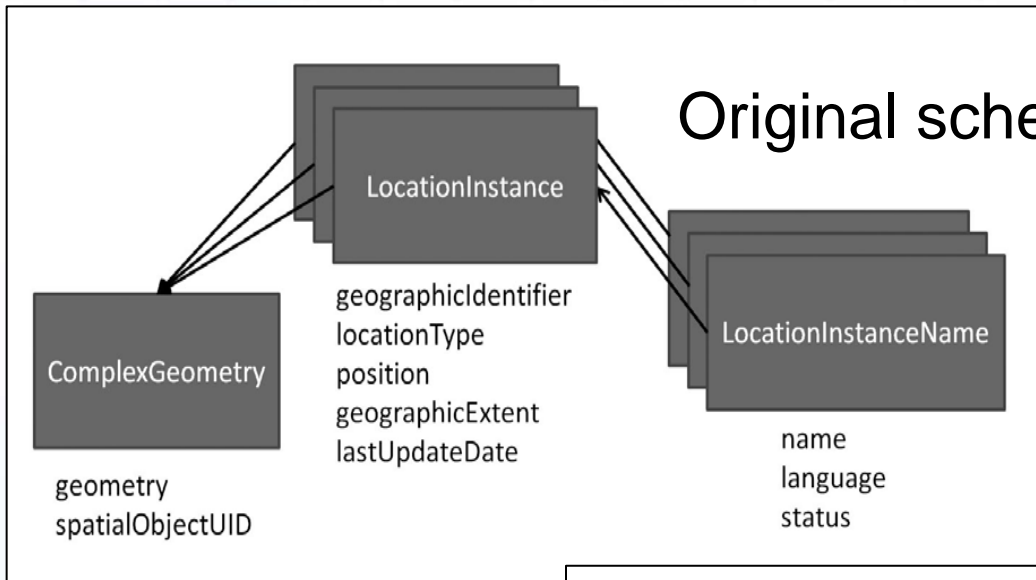
Renewed EGN Service Infrastructure



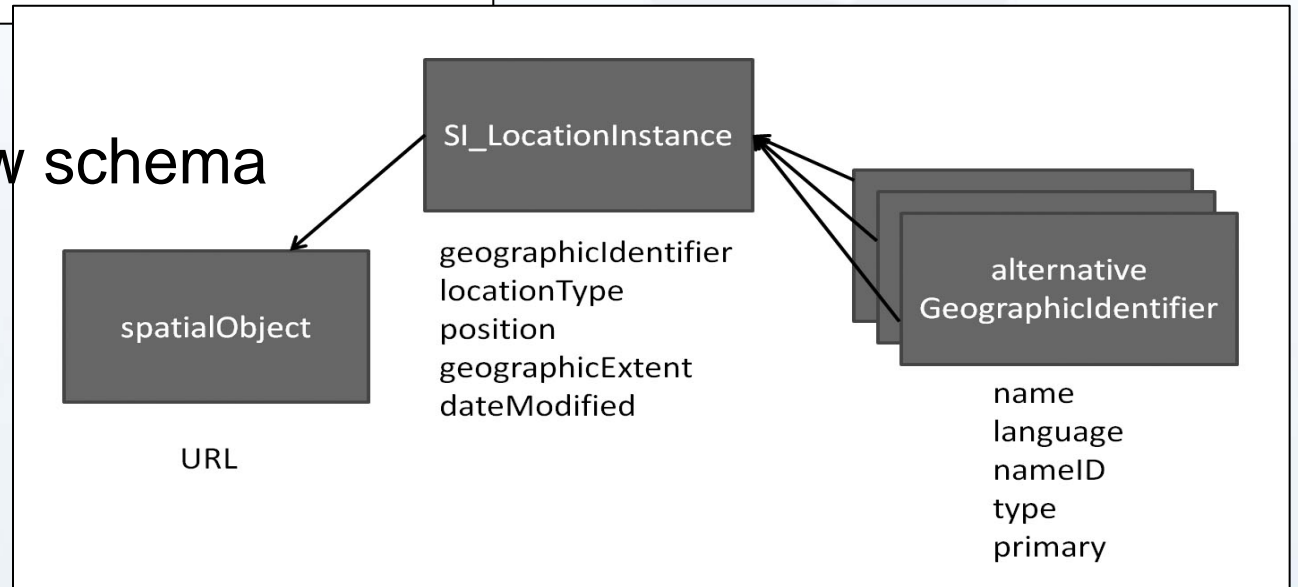
- The EGN Central Service is to be renewed and the national EGN services are left untouched
- The renewed service is based on the ISO19112 schema from the OGC Gazetteer Service AP Best Practice document
 - Simpler schema in comparison to the original schema
 - Will be used as the main input and output schema
 - Database schema is derived from this schema
- Data is loaded from the existing National EGN Services via a schema transformation process
 - Exonym database will be merged into the central service
 - In future, the INSPIRE Geographical Names services are seen as source for the EGN data
- The EGN central service is established as a Cloud Service-based instance with its own service database
 - The production database will be kept as a separate instance

- **EGN Central Service**
 - Production database (PostgrsSQL + PostGIS)
 - WFS application (deegree WFS)
- **National EGN services**
 - National EGN nodes
- **INSPIRE GN nodes in the future**
- **Amazon cloud service**
 - Service database (PostgreSQL + PostGIS)
 - WFS application (deegree WFS)
- **Custom-made Java-based WFS front-end for final XML formatting**
 - Uses SAX (Simple API for XML) parser

Schemas comparison



New schema



- **Left out**
 - complexGeometry
 - classificationScheme
 - script (as part of xml:lang 'ell-Latn')
- **'Status'** (to be indicated by type/primary)

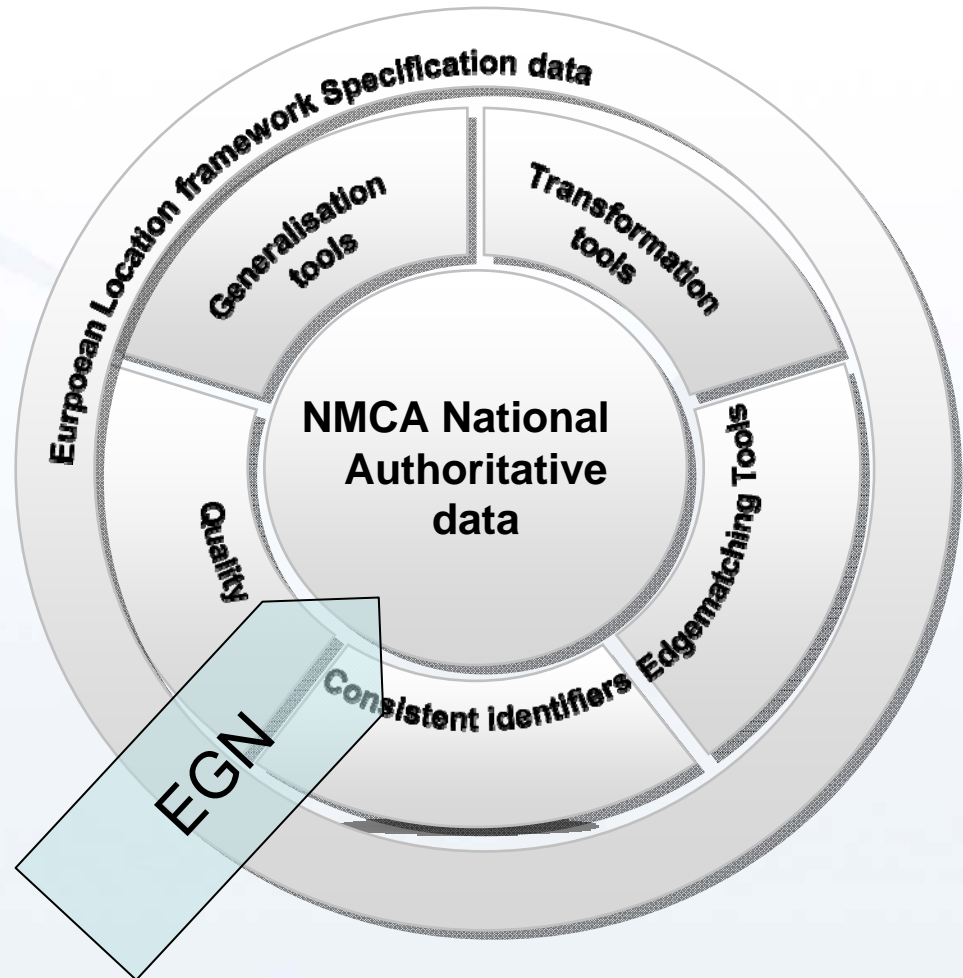
status	type	primary
official_endonym	official	TRUE
other_endonym	official	FALSE
standardized_exonym	variant	TRUE
other	variant	FALSE

- All the INSPIRE mandatory elements can be populated by EGN
- OGC Gazetteer AP's geographicIdentifier now seems the same as spatialObject
- Feature type mapping partially not satisfactory
- Some important data items still missing in OGC Gazetteer AP schema

EGN as a part of European Location Framework (ELFI project)



- The project purpose is to **deliver the technical infrastructure** which delivers authoritative, interoperable, cross-border geospatial reference data provided by the national mapping and cadastral authorities, for analysing and understanding information connected to places and features
- Start in January 2013, Budget of 13 Mill. €



Conclusions



- EGN stimulates an implementation of INSPIRE GN in EU member states.
- EGN further developments consider INSPIRE requirements and output in INSPIRE to be achieved
- Users demand a sustainable EGN service, which should:
 - Target to a coverage of all EuroGeographics member countries
 - Be provided on fair and open data access / dissemination framework
 - Assure operational efficiency, correct and up to date information
- New architecture opens more flexibility and assures better functionality for both, data providers and users
- EGN foreseen as Authoritative Pan-European Gazetteer Service
 - Compliant to international and INSPIRE requirements
 - European contribution to UN SDI Gazetteer Framework
- European Location Framework (ELFI project) - high performance cloud based platform for EGN operational service in combination with other thematic data



Thank you for the attention!