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Activities relating to the Working Group on Toponymic Data Files and Gazetteers

**Project EuroGeoNames (EGN) –
Results of the eContentplus-funded period 2006-2009 ***

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Project EuroGeoNames (EGN) – Results of the eContentplus-funded period 2006-2009

Summary

A summary of the findings and results of the EuroGeoNames (EGN) project after the completion of the European Commission eContentplus Programme-funded period in March 2009 is presented. EGN will be providing a Europe wide gazetteer service infrastructure. It allows access to national authoritative geographical names data through a distributed web feature service technology. EGN started on 1st September 2006. It was co-financed by the *eContentplus Programme* (contributing 50% of the total costs). The funded period lasted until 28th February 2009 (30 months). The project budget amounted to 1,8M € and was coordinated by the Federal Agency for Cartography and Geodesy (BKG). Since March 2009 the geographical names data of about ten countries can be accessed online (www.eurogeonames.com/refappl).

In spring 2009 the EGN project coordination will be transferred to EuroGeographics – the association of the European National Mapping and Cadastral Agencies (NMCAs). The aim of the then following “Implementation phase 2009 - 2012” is the connection of the geographical names databases of at least “EU27”, i.e. EU Member States, with the EGN gazetteer service.

1. Rationale

According to United Nations Resolution VIII/6 [UNCSGN, 2002] as well as to the Directive 2007/2/EC of the European Parliament and of the Council [INSPIRE, 2007], EGN addresses the setup of a European (gazetteer) services’ infrastructure which provides access to the authoritative, multilingual geographical names data held at the national level across Europe. Access is provided by a network of distributed Web Feature Service (WFS) interfaces implemented at each data provider’s database [OGC, 2005] [ISO, 2001]. A reference Web Service (the so-called “EGN Central Service”) accesses these distributed WFS (the so-called “EGN Local Services”) to query the EGN infrastructure and return standardised result sets to the inquirer. Single searches for geographical names within the EGN infrastructure are free of charge.

The user as well as value added service providers have access to this EGN infrastructure and searching is enabled by using names in almost all official European languages, including minority languages (if authoritative data is available). [UNGEEN1, 2006], [UNCSGN, 2007], [UNGEEN, Bulletin]

2. Participants & roles

The project Consortium brought together partners from the public (3 National Mapping and Cadastral Agencies – NMCAs from Austria, Slovenia and Germany), academia (Utrecht University, EDINA National Data Centre, Edinburgh University) and the private sectors (Geodan, Amsterdam (NL), GeoTask/PRO DV Group, Dortmund (DE), ESRI Geoinformatik GmbH, Kranzberg (DE)) as well as the association of European NMCAs, EuroGeographics, Paris (FR), embracing the full ‘value chain’ from data providers to technology partners to value added service applications. These partners have well established working relationships based on other work, including the Survey/Inventory on European Geographical Names data (SI-EGN) [SI-EGN, 2005] that was completed in advance of the project proposal in 2005 [UNGEEN2, 2006]. In March 2009 eighteen National Mapping and Cadastral Agencies from Austria, Belgium, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Latvia, Lithuania, Norway, Slovakia, Slovenia, Spain, The Netherlands, Turkey – form the *EGN Reference Group*.

The NMCAs have all testified their cooperation in providing access to their geographical names data sources, thus populating the EGN infrastructure. Some more countries/NMCAs from Croatia, Romania, Switzerland and the United Kingdom have already raised interest in joining the EGN Reference Group.

Furthermore, the EGN project established a so-called *EGN Group of Interest*. This group is comprised of stakeholders of the geographic information (GI) sector and has provided a conduit by which their views have been incorporated into the evolution of the EGN infrastructure. So far 26 GI stakeholders are registered as a member in the *EGN Group of Interest*.

3. Summary of the findings and results after the completion of the eContentplus-funded period

The establishment of the EuroGeoNames (EGN) infrastructure and associated services consisted of four periods, the initiation phase (month 1 to 8), the development phase (month 9 to 17), the implementation phase 2008/2009 (month 18 to 26) and the completion phase (month 27 to 30). Generally, the EGN Consortium aimed at being as much compliant as possible with findings of the *INSPIRE initiative*. Nevertheless, subsequent developments within INSPIRE and the implementation of the EGN services in 2008 have led to further amendments of EGN project deliverables – mainly of the *EGN gazetteer schema (data model)*, against which the national data models have to be converted to, and of the *EGN web services architecture* – in order to keep in line with INSPIRE. Now, it can be stated that EGN is fully compliant with the current INSPIRE gazetteer model. Although the INSPIRE regulations are still in a process of being adopted in summer 2009, minor amendments only for EGN are expected and will be tackled within the following “implementation phase 2009 - 2012”.

The following countries (8) have implemented the EGN Local Services until February 2009: Slovenia, Latvia, The Netherlands, Hungary, Cyprus, Norway, Austria, and Germany. Some other countries (5) are expected to have finalized their implementation until May 2009: Finland, Lithuania, Estonia, Spain and Belgium. Three more countries have committed themselves to set up the EGN Local Services by the end of 2009 at the latest: Czech Republic, Greece, and France. This status of implementation can be doubtlessly stated as a success which shall be further extended to at least “EU 27” countries within the implementation phase 2009 – 2012.

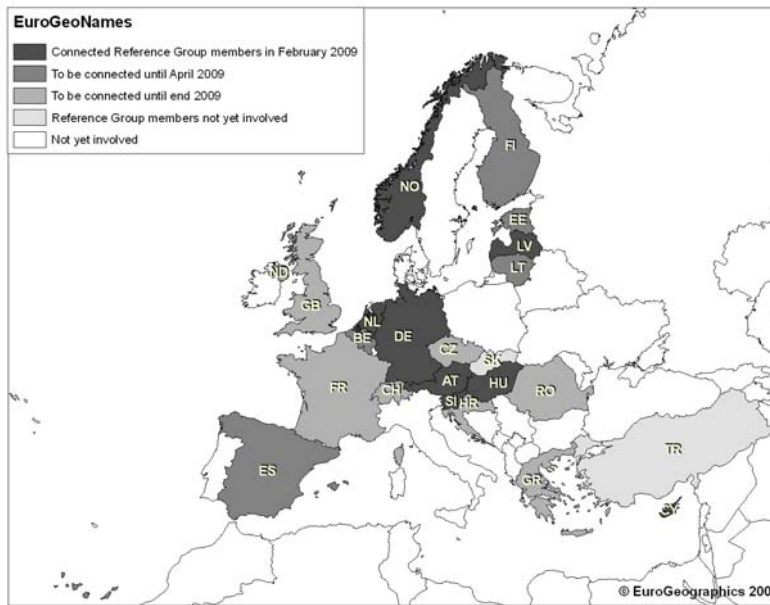


Figure 1: Implementation status of connected Reference Group members

Associated with the EGN gazetteer model a *feature classification* was developed under the aegis of the Reference Group with substantial input from the Spanish colleagues. The EGN data model allows for different feature classifications to be used (e.g. the INSPIRE feature dictionary concept to be adopted in 2009). The EGN feature classification is satisfactory for the purposes to which it is required (essentially, query filtering). It consists of 8 classes and 27 sub-classes.

Furthermore, a definition of a *metadata profile* for metadata of the national contributions according to common standards was completed. In 2008 the metadata profile was adapted to the INSPIRE Implementing Rule on Metadata (2008) and it has been completed by 13 countries yet. The respective metadata sets have been uploaded to a Catalogue Web Service (CSW) hosted by BKG (Germany), which provides on demand metadata on the national databases, which can be visualized by any application.

An *exonyms and other variant names database (EVN-DB)* was developed. This database contains important geographical names used in a specific language for a geographical feature situated outside the area where that language is spoken, and differing in its form from the name used in an official or well-established language of that area where the geographical feature is located. These names are generally not part of the national databases of the EGN Reference Group of the EGN project. Therefore, the EVN-DB functions as a supplement database to the EGN Central (gazetteer) Service, the latter one being the main component of the distributed EGN services' infrastructure. For the future maintenance of the EVN-DB database the (standardized) exonyms and other variant names are linked unambiguously with the appropriate official endonym. An *online-editing service* serves to maintain the EVN-DB in future. It provides the necessary functionality for adding and editing datasets. Access can be conceded to experts denominated by NMCAs and to geographical names experts of language communities, well known from the UNGEGN community. By that, national names authorities and experts of all European countries can be invited to contribute and improve the content of the EVN-DB.

The *EGN Reference Application* was finished and can be seen as one “window” of the EGN infrastructure. The reference application is one potential end-user interface for names searches and for the visualization of the search results (www.eurogeonames.com/refappl) .

Additionally a commercial example was developed to show the full functionality of the EGN infrastructure. The so-called *EGN ArcGIS extension* is available free of charge and can be added to the licensed ESRI ArcGIS product family.

4. Downloads

Several documents – so-called “*deliverables*” – were prepared and submitted to the European Commission. Deliverables of status “public” are available through the EuroGeoNames website: www.eurogeonames.com , under ‘Downloads’, amongst others:

D1.7 Final Project Report
D3.3 Metadata Profile
D4.2e Conceptual schema & documentation (EGN gazetteer profile)
D5.6 Exonyms and variant names database specification
D6.5 EGN Web Services profile/specification for implementation
D7.4 EGN Web GIS Reference Application documentation
D8.2 EGN ArcGIS Extension documentation

Further information about the objectives of all seven *workshops* as well as the presentations and their outcomes is also available through the EuroGeoNames website: www.eurogeonames.com , under ‘Workshops / Meetings’.

5. Contact

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