

EuroGeoNames – phase one

Survey/inventory on the state of the art of European geographical names data sources and assessment of a future European geographical names data infrastructure (SI-EGN)

SI-EGN Final Report

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1. Executive summary

Aims: The Survey/Inventory on European Geographical Names (SI-EGN) has been carried out in order to assess the availability, quality, accessibility and responsibilities regarding geographical names data in Europe. The survey/inventory has been effectuated through a questionnaire, sent out early 2005 to all National Mapping and Cadastral Agencies (NMCAs) in Europe as well as all European geographical names authorities.

Partners: Partners in the SI-EGN consortium to effectuate the survey/inventory were

- EuroGeographics
- University of Utrecht (UU)
- Land Survey Office (BEV), Austria
- Land Survey Office in Slovenia
- ESRI Germany
- Federal Agency for Cartography and Geodesy (BKG), Germany

Procedure: In order to find the persons in charge of the existing geographical names programmes, a short questionnaire was sent out to these NMCA's and geographical names authorities beforehand. These short questionnaires were returned by 31 countries. Thus having located the proper addressees, these received the detailed questionnaires, which were answered by representatives from NMCAs or geographical names authorities from 28 countries. The analysis and evaluation of the results took place in the summer of 2005, and the report was prepared in September, in order to be sent out to those that responded to the questionnaire to check the correctness of the questionnaire interpretation. Where necessary the report was adjusted, to be submitted as part of the EuroGeoNames project proposal for the eContentplus funding programme of the European Commission (EC).

Results:

One stand alone database for geographical names is most common (17 countries) in Europe. An integrated database is found for 11 countries, and it was remarked that more countries were working towards this solution. 9 countries had distributed databases and 3 had analogue repositories. Multiple ticks were possible for that specific question concerning the scenario in the country, because mixed scenarios did occur in some countries.

Of the 28 countries that answered this question, 24 would allow the EGN project to use extracts of their database during a test phase; 3 did not know yet and 1 answered no. 24 countries answered they would cooperate with EGN, 1 did not know yet and 1 answered no.

2. The background of the SI-EGN project

2.1 Introduction

The first access to geoinformation is via geographical names. They are used for the search in and comparison of maps and other geospatial information products. Geographical names are considered to be the main search item within Geographic Information Systems (GIS) and search engines for geospatially referenced information. Clear and consistent use of geographical names is important not only for cartographic/topographic purposes, but also for administrative tasks for the EC itself as well as for all individual European countries. It is important for the economy, for postal services, telecommunication, health & risk management, safety and rescue services, transportation, tourism as well as for the purpose of popular education or for use in the mass media. Clear and consistent use of geographical names will promote a better understanding amongst the wider public of the significance of the geographical names inherited, and so strengthen the local, regional and national cultural heritage as well as the sense of identity. As for all processes relevant for society, standardization brings economic benefit and profit.

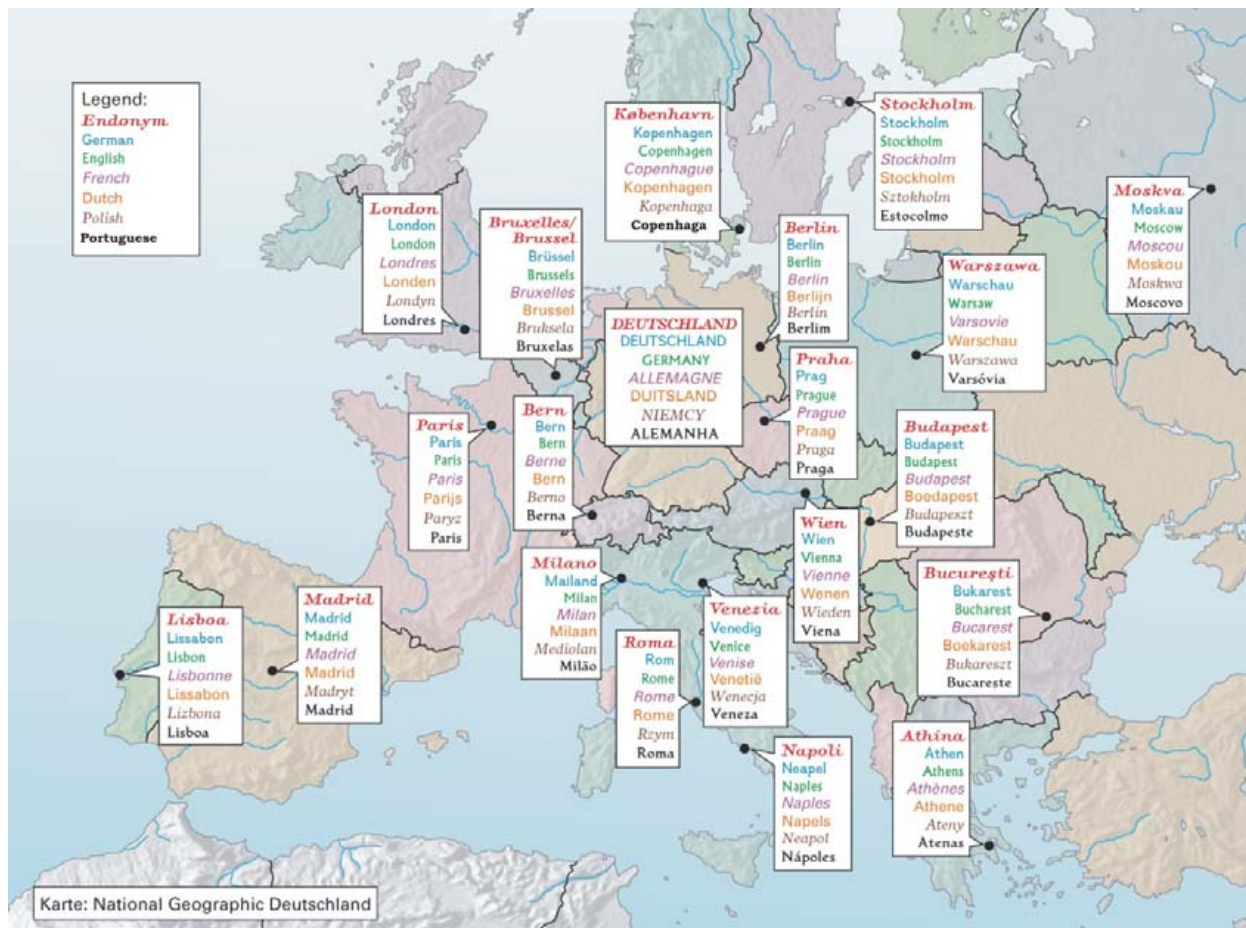


Figure 1 If different in spelling from the official local name versions (endonyms, the red version on top) the name versions in other languages (German blue, English green, French purple, Dutch yellow, Polish brown, Portuguese black) for geographical objects in areas where the language is not official, are called exonyms.

Presumably, in some countries databases are already including geographical names data. They are mainly used by surveying and mapping authorities supporting processes in cartographic map production and they mainly consider national linguistic specifics. But, in some cases various feature categories of geographical names (e.g. names of populated places, administrative units, hydrography, mountains, islands, etc.) are very often not yet based on the same data model and are therefore not yet compatible with each other. Additionally, the distributed administrative responsibilities for specific names categories (e.g. statistical offices

may be responsible for names of administrative units or hydrographic offices for names of hydrographic features) has to be taken into account. Some geographical names databases have not been created to satisfy cartographic purposes but rather for linguistic and other purposes, e.g. to preserve the cultural heritage. Furthermore, not all of these national files of geographical names may even be available in digital format, as some of them are published as simple analogue gazetteers. If they exist in digital form at all, these files may be stored in complex databases or in digital file lists (e.g. MS Excel files) or even in text documents (e.g. Word format). Additional toponymic attributes to geographical names, e.g. exonyms (figure 1), the pronunciation, the language or script of geographical names are currently hardly available.

2.2 Motives for realizing a European geographical names infrastructure

INSPIRE is a legal framework being developed by the European Commission services with officials and experts in Member States and accession countries from national, regional and local levels. It is to be implemented throughout the European Union (EU) from 2006 onwards with different types of geographical information gradually harmonised and integrated, resulting in a European Spatial Data Infrastructure (ESDI). In the context of the current INSPIRE initiative geographical names are considered to be one of the three most important data components (priority reference data). EuroSpec is the EuroGeographics (Association of the European National Mapping and Cadastral Agencies (NMCA)) programme that will prepare, influence, and contribute to the implementation of INSPIRE, from the member organisations perspective. EuroSpec, with its related projects, such as EuroRoadS, RISE, etc. is already addressing a number of the INSPIRE reference information priority components, such as roads, elevation, hydrography, direct referencing systems. However geographical names have not been given attentive focus as yet.

Soon after the establishment of the United Nations Conferences on the Standardization of Geographical Names in 1967 guidelines were adopted for the creation of national names authorities and for the production of national gazetteers with a view to the harmonisation and publication of standardized official geographical names. But, the technical prerequisites for rendering diacritics of different languages in (digital) files and databases satisfactorily only exist since the year 2000. Therefore, the Eighth United Nations Conference on the Standardization of Geographical Names (Berlin, 2002) recommends that standardized geographical names data shall be considered in the establishment of national and regional spatial data infrastructures and included in their design, development and implementation (see Appendix 4).

The current state of the art in information technology makes it now possible to realise a network based on distributed multi-lingual databases. That was the reason why the Dutch- and German-speaking Division of the United Nations Group of Experts on Geographical Names (UNGEGN) and the German Federal Agency for Cartography and Geodesy (BKG) jointly initiated the project EuroGeoNames (EGN), the vision of integrated geographical names data within a European SDI. EGN shall ultimately be an Internet service linking the official sources of geographical names throughout Europe, and it intends to remove the shortcomings resulting from those previous technical shortcomings. Its concepts were first discussed extensively at the recent session of the United Nations Group of Experts on Geographical Names (UNGEGN) held from 20 to 29 April 2004 at the UN Headquarters in New York.

2.3 The EuroGeoNames (EGN) project

As claimed above, in order to effectuate a clear and consistent use of geographical names and its benefits, a European infrastructure for geographical names data, comprising of a distributed multi-lingual geographical names data network, services and standards is proposed. This infrastructure is called "EuroGeoNames (EGN)" and shall respond to the specific geospatial needs within the European economic area regarding decision-making in planning, management, assessment, monitoring and reporting tasks. When realised, EGN will ultimately provide a distributed multi-lingual Internet service linking official geographical names sources across Europe.

The objectives for such a future EGN service, are envisaged to be the following:

- Improved availability and usability of standardized official national geographical names data a.o. through value-added resale by commercial enterprises;
- Harmonisation of the European geographical names digital data by developing common specifications;
- Integration of geographical names data as a part of spatial data infrastructures;
- Improvement of efficiency regarding the collection, handling, storage, maintenance and distribution of geographical names data;
- Provision of multi-lingual access to geographical names data users through the Internet, making it equally accessible for all languages officially spoken in European countries.

These objectives will be effectuated by the following deliverables in the EGN project:

- Services which will enable access to national official geographical names databases, and enable extraction of names data, as well as point coordinate data and/or bounding box data on the respective named geographical objects;
- Services that provide for the visualisation of the geographical object names in its geometrical context as well of that of spatially related features;
- A data model to which countries that have not yet developed and implemented their own data models in which geographical names have been integrated might conform;
- A system for integrating endonyms and exonyms and thus overcoming the checkered military past of our continent.

By implementing EGN, a European geographical names data infrastructure will be established under the umbrella of EuroGeographics (the Association of Europe's National Mapping Agencies) by integrating the national data sources of the European National and cadastral Mapping Agencies (NMCAs) and other relevant organisations. This network will be kept updated in a consistent way and maintained at the source level by the responsible, proprietary organisations.

In view of the envisaged future situation, some business goals can be stated as well. The intended EGN data infrastructure will populate the European Spatial Data Infrastructure (ESDI) as it will be an essential part of it. Hence, the future EGN project will help to remove obstacles to the availability of geospatial information and stimulate the wider use of the public European digital content, by increasing interoperability of and facilitating access to a wealth of geo-located information and services. The increased availability and accessibility of the data will ease the development of pan-European services by commercial companies (as well as by public sector entities), as these will no longer need to chase geographical names data across Europe.

Finally, the EuroGeoNames infrastructure will help to promote mutual understanding and strengthen the cultural diversity in the European Union as well as it will help to preserve the cultural heritage of countries and regions.

2.4 Background for the questions in the Survey/Inventory on European Geographical Names (SI-EGN)

A prerequisite to set up EGN is a detailed European cross-border survey/inventory on geographical names. It should investigate the availability, quality, accessibility and responsibility for national official geographical names data in the countries concerned. It should include an investigation of spatial data sources held by organisations providing European geographical names data as collated and harmonized data sets.

Geographical names data already exist within each European country in some form, but they have been created to firstly meet national needs. The various feature categories of geographical names (e.g. names of populated places, administrative units, hydrography, mountains, islands) are very often not yet based on the same data model and are therefore not compatible with each other. Additionally, not all of these national sources of geographical names are even available in digital format, as some of them have been published as simple analogue gazetteers. The storage mode of the digital sources can be databases or digital file lists (e.g. Excel files) or even text documents (e.g. Word format).

Figure 2 shows three possible types of storage of geographical names data. Geographical names data can be stored in a stand-alone database including all relevant geographical names data (e.g. a Geographical Names Database – GNDB, case 1). Or they can be stored in distributed databases, e.g., some containing administrative units, others hydrographic features or other geographic features (case 2). These data sources are yet incompatible because an encoding system, e.g. by a unified object identifier, as well as common standards and protocols for data exchange are missing. Or thirdly, the geographical names data can be integrated in geographic information systems, sometimes featuring different scales, and can be connected with each other, at best within a regional or national spatial data infrastructure (SDI) (case 3).

Geographical names related data sources – current scenarios (selected)

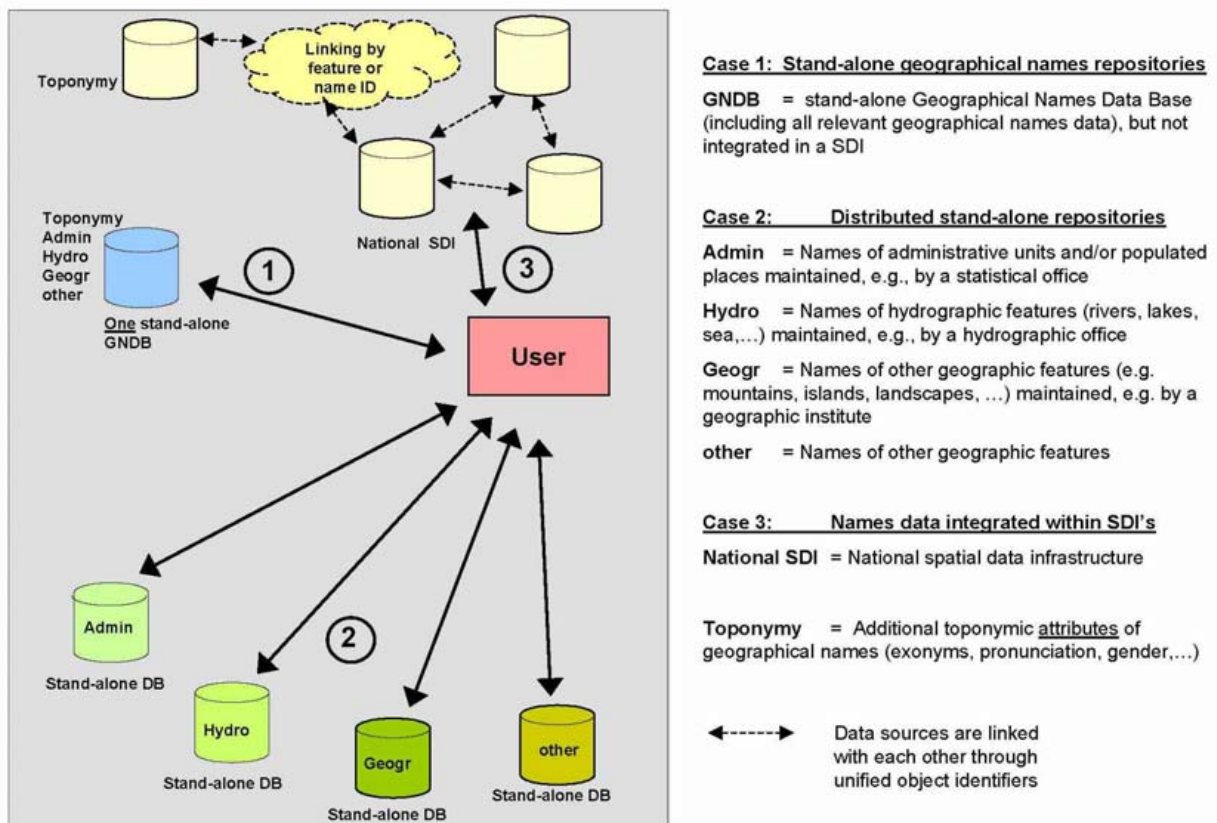


Figure 2 – Three typical examples of storing geographical names data, showing the distributed access to databases

This heterogeneous situation has arisen due to distributed administrative responsibilities prevailing for specific names categories (e.g., statistical offices are very often responsible for names of administrative units, hydrographic offices for names of hydrographic features). Another reason is that some geographical names data have been created to satisfy linguistic or other purposes on a different official or administrative level (e.g. environment), for research (e.g. onomastics or name science) or economic purposes (e.g. private postal services or railway companies).

Even the European reference data products EuroGlobalMap (EGM) and EuroRegionalMap (ERM), which will be made available through EuroGeographics, contain only a selection of place names from all European countries, rendered within every country in the relevant official national version and additionally sources, in an English-like transcription without the language-specific diacritical marks. The main reason for this unsatisfactory rendering and display of the various geographical names was that the portrayal of language specific diacritics was not tackled sufficiently in the past. Therefore, both the cultural diversity and the multilingualism aspects of geographical names have not yet been dealt with properly.

3. The SI-EGN partners

For the realization of the survey/inventory on behalf of the EGN project the following parties cooperated: Federal Agency for Cartography and Geodesy (BKG, Germany), Utrecht University (UU, Netherlands), Bundesamt für Eich- und Vermessungswesen (BEV, Austria), Surveying and Mapping Authority of the Republic of Slovenia, EuroGeographics (France), ESRI Geoinformatik GmbH (Germany). Except for ESRI Geoinformatik GmbH (Head Office, Germany) and Utrecht University (UU), all Consortium partners are members of the EuroGeographics network. All partners acquired already some experience with Europe-wide co-ordination during previous projects. The Federal Agency for Cartography and Geodesy (BKG) took the role of Project Co-ordinator.

The management structure for this project was based on consensus between the Consortium partners, in order to carry out the survey/inventory on European geographical names (SI-EGN) as effectively as possible. All members of the EuroGeographics network not directly participating in the Consortium would have the chance to communicate their opinion through the questionnaire, so that the project could reach a truly pan-European scope. The latter in particular is the reason why EuroGeographics Head Office (EGHO) was part of the Consortium, giving the opportunity to tie the future EGN project to the necessity of a wider consensus within the entire EuroGeographics network.

The Consortium, chaired by the Project Co-ordinator, monitored this Survey/Inventory Project and took all major decisions for the project by consensus. The Consortium partners collaborated in the monitoring and in specific technical tasks of the project. The Consortium met regularly to assess the specified milestones of the SI-EGN project.

The fact that one representative from the EuroGeographics Head Office (EGHO) was part of the Consortium ensured that the project operated well along the lines of EuroGeographics strategic orientations and projects, and helped to interest other EuroGeographics members, so as to facilitate later involvement of new partners in the follow-up EGN project. EGN sections were installed in the EuroGeographics website. EuroGeographics having also been a major actor in the various INSPIRE working groups since the start of the initiative, ensured that the EGN work was in line with that major European initiative.

ESRI Geoinformatik GmbH (Head Office, Germany) assisted in formulating the technical issues of the questionnaire. After the carrying out of the survey/inventory, ESRI assisted in elaborating the market potential for the future multi-lingual European geographical names infrastructure.

The Project Co-ordinator was in charge of project management, the inventory and its analysis. The Consortium partners played an advisory role in the project management. All Consortium partners collaborated in the design of the questionnaire, led by Utrecht University. The questionnaire was to be the core element for conducting the survey/inventory. Some Consortium partners assisted the Project Co-ordinator in the performance of the survey/inventory and were stand by to complete it, if necessary, by taking interviews in countries, from which questionnaire replies appeared to be incomplete or unclear. Due to the high response rate this was not deemed necessary, however. Regarding the analysis of the survey/inventory, the Consortium partners collaborate in documenting the results of the survey/inventory. The EuroGeographics Head Office (EGHO) was in charge of exploiting and disseminating the results of the survey/inventory throughout Europe.

For the actual report, detailed assessments of the questionnaire were made by Utrecht University. The Surveying and Mapping Authority of the Republic of Slovenia did a first assessment of part III of the questionnaire, the Bundesamt für Eich- und Vermessungswesen did likewise for part II and the BKG did likewise for part IV. These assessments were discussed at the consortium meeting held July 26, 2005 in Frankfurt. For the final SI-EGN report the Federal Agency for Cartography and Geodesy produced drafts of chapter 2 (SI-EGN

Background), chapter 4 (SI-EGN goals), chapter 5 (Questionnaire design and distribution), chapter 7 (Conclusion of SI-EGN) and chapter 8 (Road map for EuroGeoNames), while Utrecht University produced the draft of chapter 1 (Executive Summary), chapter 3 (Consortium Partners), chapter 6 (Analysis of the questionnaire results), and Chapter 9 (the Vision of the EGN project) and had the final editorial supervision.

Overview for SI-EGN consortium partners roles and tasks:

Consortium partners	Role and tasks
1) Federal Agency for Cartography and Geodesy (BKG), Germany (DE)	<ul style="list-style-type: none"> - Project Co-ordinator/Manager - In charge of the organisation, co-ordination, documentation and reporting - Contribution to design of the questionnaire - In charge of carrying out the survey/inventory - In charge of the evaluation and assessment of the survey/inventory (documenting and reporting)
2) Utrecht University (UU), The Netherlands (NL)	<ul style="list-style-type: none"> - Leading the design of the questionnaire - Supervision of the evaluation and assessment of the survey/inventory
3) Bundesamt für Eich- und Vermessungswesen (BEV) (GEONAM), Austria (AT) 4) Surveying and Mapping Authority of the Republic of Slovenia (SMA), Slovenia (SI)	<ul style="list-style-type: none"> - Contribution to the design of the questionnaire - Contribution to the evaluation and assessment of the survey/inventory (documenting and reporting)
5) EuroGeographics (Head Office), France (FR)	<ul style="list-style-type: none"> - Communication with the National Mapping and Cadastral Agencies (NMCAs) - Contribution to the design of the questionnaire - Contribution to the carrying out the survey/inventory - Contribution to the evaluation and assessment of the market potential (documenting and reporting) - In charge of raising awareness and dissemination of the project objectives
6) ESRI Geoinformatik GmbH (Head Office), Germany (DE).	<ul style="list-style-type: none"> - Contribution to the design of the questionnaire - Contribution to the evaluation and assessment of the market potential (documenting and reporting)

4. The goals of the SI-EGN project

The main objectives of the SI-EGN project, that is the project for the survey and inventory of European geographical names, are:

- To provide an accurate and detailed image of the contemporary availability, quality, and usability of official geographical names files in Europe;
- To analyse the state of the art in order to assess the feasibility of a possible future EuroGeoNames project linking official geographical names sources across Europe in order to provide a European geographical names data infrastructure ;
- To provide information on the market potential of such European geographical names data infrastructure .

Figure 3 shows the spiral engineering process necessary to set-up the future EGN infrastructure and highlights the tasks covered by the survey/inventory on European geographical names (SI-EGN):

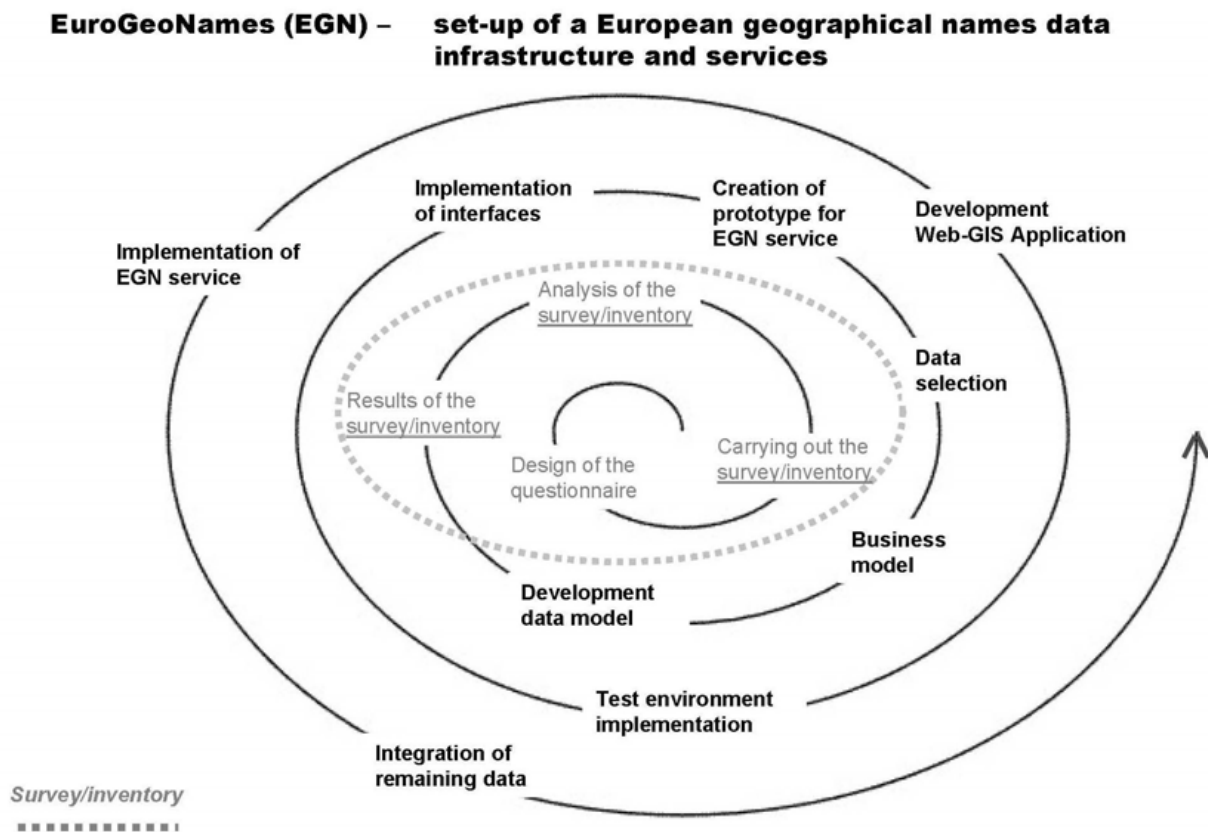


Figure 3 – Tasks of SI-EGN: the first loops of the spiral model for the set-up of the future EGN project (rendered in grey)

5. Questionnaire design and distribution

5.1 Project management

The tasks of the SI-EGN project was to be tackled by executing different work packages. There are some that lasted for the entire project duration, such as project management and awareness and dissemination. Other, more specialized work packages consisted of the preparation of the detailed questionnaire, its carrying out and its analysis and documentation.

The project management activities ensured the proper and efficient management and co-ordination of the project during its whole life-cycle. It included the overall project management as well as the administrative monitoring. It also ensured the continuous project assessment. The output from these activities were used by the Project Co-ordinator in reporting the progress of the project to EuroGeographics, functioning as the umbrella organization for the EuroGeoNames project.

The questionnaire design activities comprised the preparation of the survey/inventory including the design of a detailed questionnaire. The questionnaire was to be finalised by the Consortium partners in the first stage of the project, based on existing expertise and preparatory work. It was to cover all aspects of the national repositories of geographical names that would have an impact on the design of the envisaged EGN service and on the market potential. These aspects were, e.g., the availability of geographical names data and their specifications (data model, resolution, format, etc.), the access and distribution policies, as well as the responsibilities for the data maintenance. Additionally, the willingness of the data owner to participate in the future initiative was to be discovered.

The carrying out of the survey/inventory also included investigating the availability, quality, accessibility and responsibility for national official geographical names data and similar sources in the countries concerned. It too included an investigation of spatial data sources held by organisations providing European geographical names data sets. The collection of information was to be based on the detailed questionnaire. It would have to be complemented by interviews in those countries from which questionnaire replies proved incomplete or unclear. This proved not to be necessary, however.

The analysis and evaluation of the survey/inventory was to provide information on the state of the art in terms of European geographical names repositories, on the proposed content of the future EGN service and on the market potential for multi-lingual geographical names data sources. In addition, the results were to be the foundation for the preparation, organisation and co-ordination of the planned EGN project, leading to a full proposal for the implementation of the EGN implementation, to be submitted to the EC in 2005 (e.g. within the eContentPlus Programme).

Activities in the field of Awareness and dissemination would ensure continuous dissemination of the progress results and would raise the awareness of the project. The objective was also to promote the future EGN project amongst potential users, in order to maximise its use as soon as the data would come available. These activities would include website creation and maintenance, as well as dissemination of project progress and results.

5.2 Questionnaire design

In order to find the persons qualified to answer the questionnaire, a preliminary short questionnaire was sent out (see [Appendix 1](#)) by EuroGeographics, which described the aim of the EuroGeoNames project and explained the consortium wanted to contact those in charge of the nation-wide topographic databases or national geographical names databases. On the basis of the address details that were sent back, a detailed questionnaire was sent out. This questionnaire was structured around four aspects: availability, quality, accessibility and responsibilities regarding geographical names in Europe. It can be found in [Appendix 2](#). It contained questions on the basis of which the geographical names set-up could be ascertained, regarding the kind of database, its composition and source documents, and the potential output in the form of gazetteers. It then targeted the availability of such gazetteers and the quality of the geographical names in the database. The kinds of quality checks were asked for as well as their frequency for the various names categories discerned. This was continued by questions about the responsibilities to approve the names and to help customers to find them.

Detailed questions targeted the situation regarding data availability, with the number of records held and the attribute information linked to the names records. There were more detailed questions regarding availability, that asked for the kind of operating systems and database packages and the standard formats in which the names were accessible, as well as the languages through which to effectuate this. Finally the market potential was assessed, and the willingness to cooperate in the test phase and the operational phase of EuroGeoNames.

The questionnaire was sent out again by EuroGeographics, both to all NMCAs being members of EuroGeographics and directly to experts known from the UNGEGN network as national experts to the EuroGeoNames project. A cover letter explained the relationship between the EuroSpec initiative and the EGN project.

Finally, an interview form was designed in the talks with value added resellers, distributors and customers, to make their reactions comparable. It provided an overview of the EGN project and assessed the willingness of the interviewed to participate and their assessment of the market potential. Their role as potential resellers was also investigated as well as the conditions they thought fit to submit the sales of names to. This interview form is contained in [Appendix 3](#). It was sent out by EuroGeographics and the interviews were held by BKG.

5.3 Survey/Inventory analysis

The analysis of part II of the detailed questionnaire, data availability, quality and responsibility, was prepared by BEV and finalized by Utrecht University; part III with detailed questions on Data availability and accessibility, was prepared by the Surveying and Mapping Authority of Slovenia and finalized by Utrecht University, and part IV with questions related to the future EuroGeoNames project, was analysed by BKG. The results of the analyses are contained in the chapter 6.1 to 6.7.

The results of the interviews with value adding resellers were analysed by BKG and Utrecht University. The results of this analysis are contained in section 6.8, Market potential estimation.

6. Survey/Inventory Results

In this chapter we will deal with the answers to the various questions in the detailed questionnaire sent out to NMCAs and the geographical names boards and with the reactions of the distributors and value adding resellers of geographic information products to the questions put to them in the interviews held.

6.1 Replies to the questionnaire

28 countries participated by filling in and returning the SI-EGN questionnaire: Iceland, Norway, Sweden, Finland, Estonia, Latvia, Lithuania, Poland, Germany, Denmark, Netherlands, Belgium, Great Britain, Republic of Ireland, France, Spain, Portugal, Switzerland, Austria, Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Albania, Bulgaria, Turkey and Cyprus. That is, all present EuroGeographics members apart from Russia, Moldova, Romania, Serbia and Montenegro, Greece, Malta, Northern Ireland, Luxemburg, and all Eurogeographics associate members apart from Italy participated. The results are not representative for South-Eastern Europe therefore.

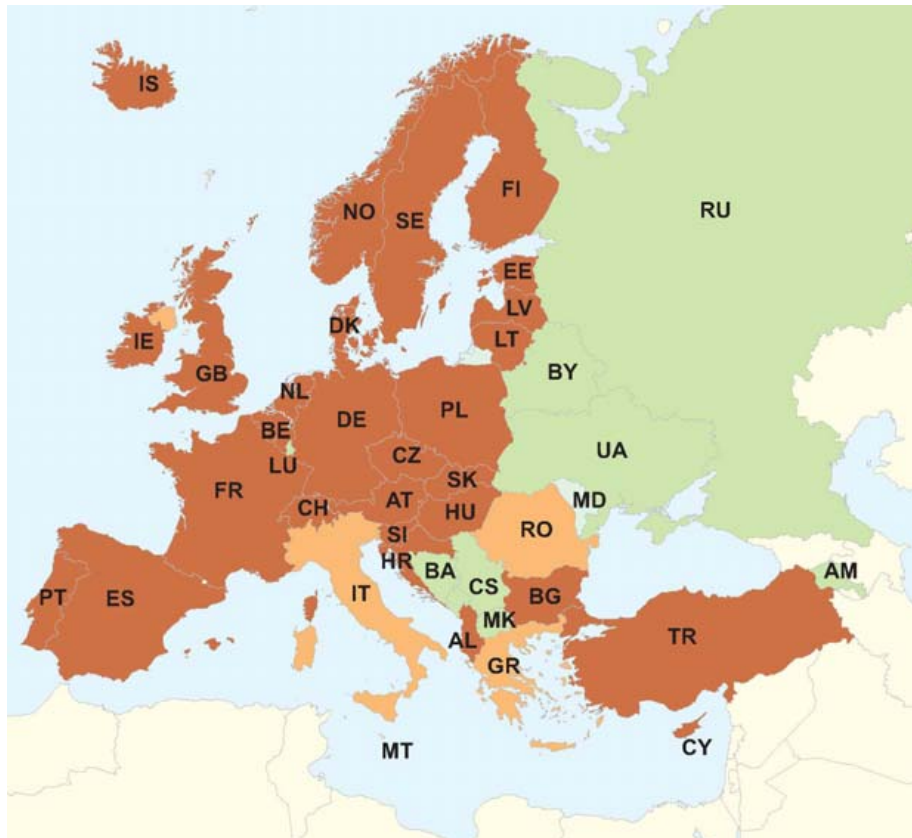


Figure 4 – Status of the survey/inventory, July 2005: Brown -Detailed questionnaire replies; Orange - Contact persons nominated only; Green - No reply.

6.2 Data availability (Detailed Questionnaire II.1)

II.1.1 Names Database scenarios

In this question the countries were asked which of 4 scenarios regarding the set-up of geographical names data repositories applied to them. *Scenario 1 (one digital stand-alone database)* is valid for Sweden, Latvia, Netherlands, Portugal, Austria and Slovenia. A mix between Scenario 1 and *Scenario 2 (distributed databases)* is valid for Spain, and Turkey. Scenario 2 describes the current situation for France, Czech Republic, Croatia, Albania and Bulgaria. A mix between scenarios 1 and *scenario 3 (integrated databases for different scales that can be linked with other topographic data)* characterizes Denmark, Iceland, Norway, Finland, Estonia, Poland, Slovakia, Hungary and Switzerland. Scenario 3 does not occur independently. A mix between scenarios 2 and 3 (distributed databases and integrated databases for different scales that can be linked with other topographic data) is the situation describing both Britain and Lithuania. A combination of scenarios 2 and 4 (distributed analogue repositories) describes the situation for the Republic of Ireland. Belgium and Cyprus answer to both scenarios 3 and 4, while Germany, because of the complexity of its mapping operations at different levels answers to both scenarios 1, 3 and 4.

Broadly speaking, Central and Northern Europe are characterised by scenarios 1 and 3 (stand alone and integrated databases), and Southern Europe by distributed databases (see [figure 5](#)). There seems to be a trend towards integrated databases.

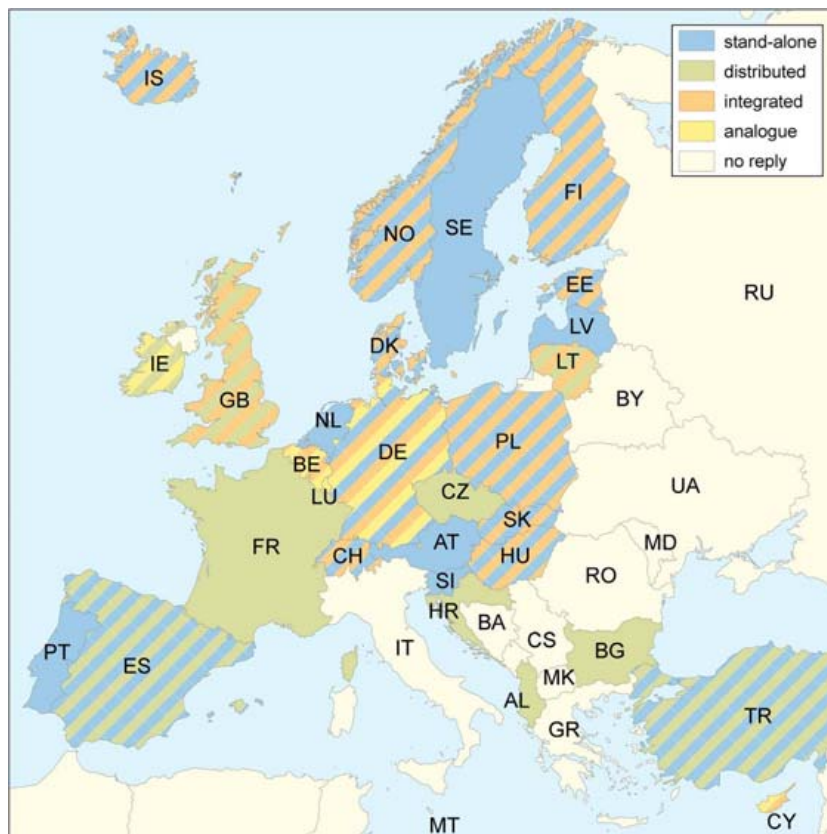


Figure 5: Distribution of the various scenarios for geographical names storage discerned

II.1.2 Name categories identified

The names categories identified by the countries that responded were: administrative names, names of populated places, hydrographical names, orographic and terrain names, transport object names and names of geographical regions. This categorisation was not fine enough as other categories were identified as well: names of buildings, sea names, island names, coastal names and names of cultural features and protected areas. Of these, sea, island and coastal names can be easily accommodated amongst the other categories, but names of buildings, cultural features and protected areas deserve separate categories. Anomalies are that in France names of geographical regions are not accommodated, and names of transport features are not recognised in Latvia, Hungary and Croatia. Overall, the answers show a large degree of consistency regarding names categories discerned, whether we visualize it in the form of a diagram (see also [figure 6](#)) or in that of a map ([figure 7](#)).

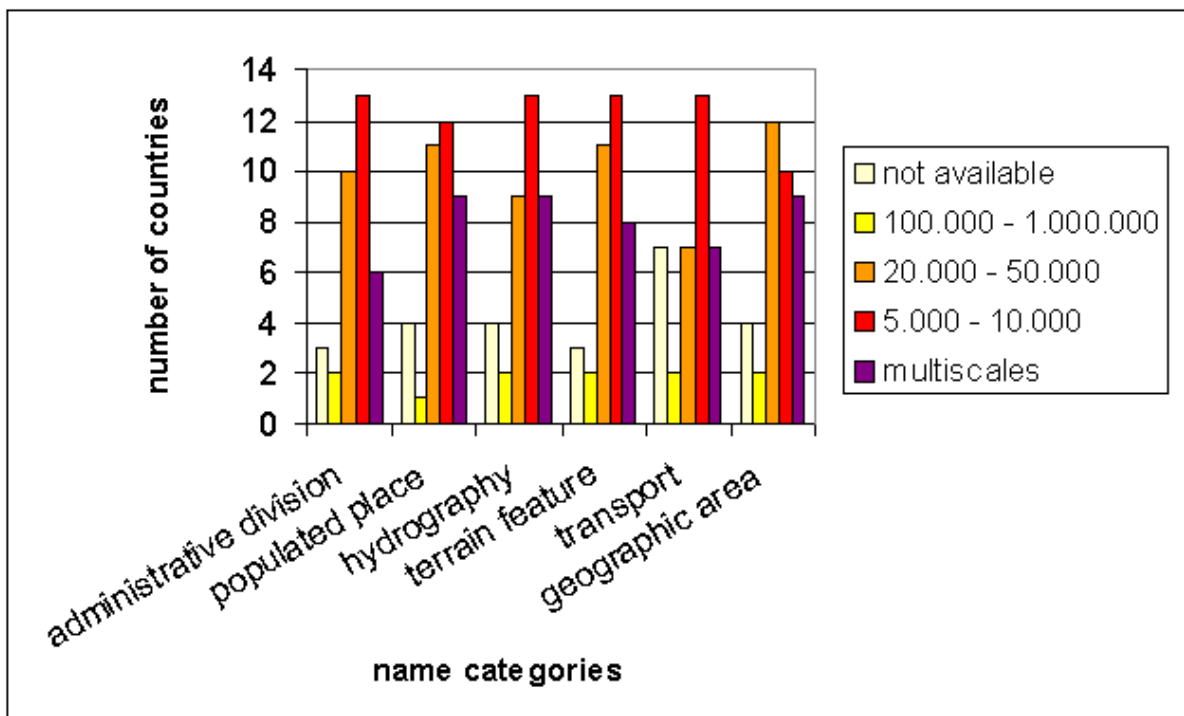


Figure 6: Name categories and scales

This large degree of consistency is at least suggested by the questionnaire results, but we cannot know to what degree the definitions of the various categories would overlap (e.g.: is a populated place in France the same as a populated place in Sweden). As the categories discerned are very broad, however, there seems little danger of such overlaps, perhaps with the exception of the categories of terrain names and names of geographical regions. These names are practically always dealt with in the same way, however.

Almost more important than the various name categories identified is the scale of the source document, or the resolution of the database of objects to which the names are linked. This is what stands out in the map in [figure 7](#). There are 4 countries for which the names are derived from maps at scale larger than 1:10 000: Britain, Norway, Slovenia and Cyprus. The vast majority of the countries has names databases derived from map scales between 1: 10 000 and 1: 25 000: Sweden, Finland, Estonia, Lithuania, Poland, Denmark, Germany, Netherlands, Belgium, Republic of Ireland, Spain, Portugal, Switzerland, Slovakia and Croatia. France derives its names from the map scale 1:25 000 and 1:50 000. Four countries derive their names data from the map scale 1:50 000: Iceland, Latvia, Austria and Hungary. Turkey derives its names data on populated places from the scale 1:25 000, and the other names data from

the scale 1:250 000. So what is important is that all but one of the countries derive their names data from maps or from databases with a resolution comparable to 1:50 000 or larger. This bodes well for the creation of a European infrastructure based on a resolution of 1:50 000, as this would mean that the starting point for a similar geographical names density. However, due to practical and technical reasons, a smaller scale should be foreseen as the starting point for EuroGeoNames.

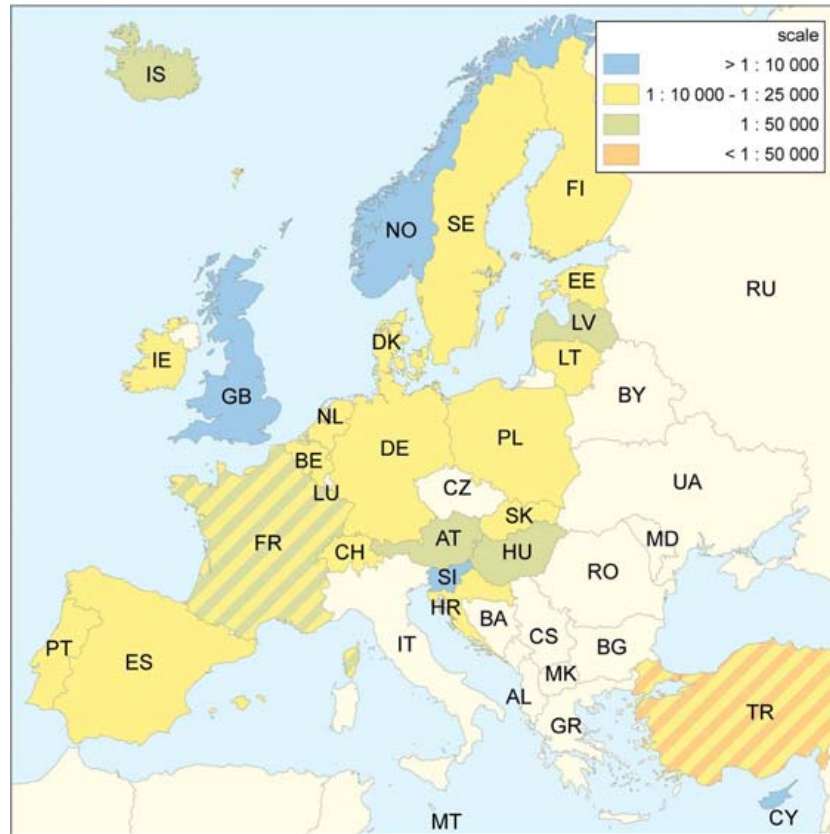


Figure 7: Names categories discerned, and relevant source scales

II.1.3 Availability of gazetteers

Gazetteers are systematic lists of names of geographical objects in a specific country, with their locations and indication of their nature. They can exist in paper form, or digitally, either on a CD or through the Web. In Europe, amongst the countries that answered the questionnaire, only Finland, the Republic of Ireland, Croatia and Albania lacked a gazetteer. But not all countries that have a gazetteer also make it available; the latter is valid for only half the countries. Paper versions only existed in Czech Republic, Cyprus, Netherlands (1:250 000) and Poland. Both paper and CD versions existed in Iceland, Sweden, Germany, Portugal, Switzerland, Slovakia. The following countries only had a digital or CD version: Britain, France, Spain, Norway, Netherlands (1:50 000), Lithuania, Austria, Hungary and Turkey. Both paper and web versions were available for Finland, Latvia, Slovenia and Bulgaria, while Denmark and Estonia only had a web version available. The gazetteer for Belgium was a derived product from a public-private partnership, publishing the topographical map 1:50 000 in book form (see also [figure 8](#)).

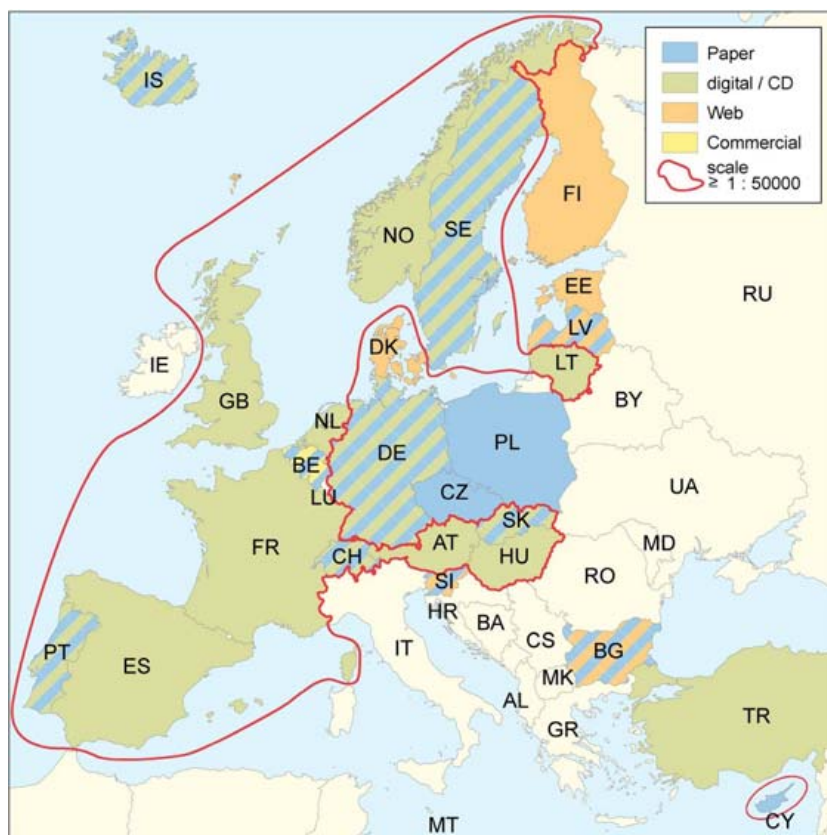


Figure 8: Availability of gazetteers in Europe

When we check which of these countries made available a gazetteer based on maps or databases at the scale or resolution 1:50 000 or larger (these countries are rendered by an additional outline in [figure 8](#)), then it is the western fringe of Europe (Lithuania, Sweden, Norway, Britain, Netherlands, Belgium, France, Portugal and Spain, a wedge into Central Europe (consisting of Switzerland, Austria, Hungary and Slovakia) and Cyprus.

For the other countries the following data are valid:

<u>country:</u>	<u>gazetteer based on maps at the scale:</u>
Iceland:	1:250 000
Denmark:	1:100 000
Estonia:	scale not known
Germany:	1:200 000 or smaller
Czech Republic:	1:500 000
Poland:	1:500 000
Latvia :	1: 1 000 000
Slovenia:	1:1 000 000
Bulgaria:	scale not known
Turkey:	1:250 000

So, although names are collected for almost all categories discerned for maps or databases at scale or resolution of 1:50 000 or larger, a large part of Central and Eastern Europe does not yet produce gazetteers from the maps at those larger scales.

II.1.4 The costs of the gazetteer

Even if a gazetteer exist, the costs may be prohibitive and the gazetteer may thus be inaccessible. That is why under the heading of data availability the price to be paid for the gazetteer in either digital or paper form is asked for as well. By Norway the price for accessing the web version was stated as well; here one can subscribe for € 750 a year to the name server. But there is more behind this price question. Through it, we also tried to gauge the commercial interest or the supposed commercial interest in a gazetteer, especially a digital one.

The model for setting prices is provided by the Ordnance Survey in Britain, which charges according to the type of use and the type of user: individual incidental use vs continuous use over a protracted period by multiple users in an institution. The charges then vary in between € 145 and € 2200. In the same vein, cost of using the Swiss names data base vary from € 700 to € 14 000. In the Netherlands there is a charge of € 70 for the paper gazetteer based on the 1:250 000 map and of € 2500 for the CD based on the 1:50 000. Nominal charges for paper databases exist in Portugal, Slovenia, Poland, Germany, Belgium and Iceland. A CD version costs between € 50 and € 250 in Portugal, Slovakia and Germany. Apart from the UK and Switzerland one has to pay big money in Norway, Sweden, Hungary, and Turkey. Gazetteers are freely downloadable from the web for Denmark, Estonia, Latvia and Slovenia. 20% of the countries now offered the names through the web, but not necessarily all of them for free.

There was no price information from Spain, Cyprus, Bulgaria and Austria. Generally, if both a paper and a digital version are available, the paper one tends to be cheaper, as this would have fewer possibilities for use, but at least in Slovakia, Sweden and Switzerland, both versions are equally expensive.

Country/State	Paper	Price	CD-ROM	Price	Web	Price	No. of records
Germany	1 M	50	250 k	115			B
Sweden	10 k	5500	10 k	5500			D
Estonia							A
Slovak Republic	10 k	170	10 k	n.a.	10 k	n.a.	B
Slovenia	1 M	6			1 M	free	C
Turkey			250 k	25/sheet			A
Czech Republic	500 k	5					C
Bulgaria							n.a.
Poland	500 k	1					C
Belgium							C
Espana			25 k	50			A
Latvia	1 M	5			1 M	free	B
Croatia							B
Finland							E
France							E
Portugal	25 k	33,5	25 k	252			C
Lithuania			50 k	10			A
Cyprus	5 k	n.a.					A
Iceland	250 k	7	500 k	50			A
Albania							n.a.
United Kingdom			50 k	2200			E
Switzerland			25 k	14000			C
Switzerland			500 k	700			C
Austria			50 k	2200			C
The Netherlands	50 k	2500					B
Denmark					100 k	free	C
Hungary			50 k	8000			B
Norway			5 k	3600	5 k	725/y	E

No. of records:	<50 k	A
	50 k-100 k	B
	100 k-250 k	C
	250 k - 1M	D
	>1 M	E

Table 1: Relations between price, medium, surface area and number of records, so as to work out the price per record. The second column shows the scale of the source document in thousands. The table tries to work out some conclusions regarding the price but as the number of records is categorised this can only be vaguely indicative.

A clear price structure is advertised by Britain, Switzerland, Norway and Sweden. These countries apparently are aware of the value of geographical names for the geospatial data infrastructure, have customers for the names data files and are used to dealing with them. Other countries may be aware of the advantages for the geospatial data industry of free availability of data, like in the United States where the industry was able to take off because of the availability of geospatial data at cost price or nominal price.

Is there a link between free accessibility and scale, that is, will names only be freely accessible for databases produced from small-scale maps? As was indicated, Denmark, Estonia, Latvia and Slovenia made their names freely available on the web; their source documents were at scale 1:100 000, ?, 1:1 Million and 1:1 Million, so there seems to be a correlation!

6.3 Data quality aspects (Detailed Questionnaire II.2)

Under this heading the kind of updating, the frequency of the updating and the nature of the quality checks on the names data were worked out. Question II.1.7 asks for the precision of the coordinates added to the names records.

II.2.1 Is there a standardization process?

This question was not specific enough, as standardisation was not properly defined in the questionnaire. The procedure under which an institution takes care of names over time, and by doing so codifies them, results in a de facto standard, even if this is not officially sanctioned. In this sense all countries are engaged in a standardization process. The nature of the institutions that are engaged in the standardization process was asked here as well, but as that was repeated in question II.3.1, it will be dealt with there.

II.2.2 and II.2.3: Data quality checks and their nature and frequency

Here an update is regarded as a quality check, and again every country (perhaps Albania excepted) is engaged in such checks regularly. The frequency in these quality checks is different however, as can be seen in **table 2** below:

country	names completeness plus orthography plus attribute completeness*			
	admin.name	populated places	transport names	other names
Albania	-	-	-	-
Austria	1 year	1 year	1 year	1 year
Belgium	continuously	10-15 years	10-15 years	10-15 years
Bulgaria	continuously	continuously	continuously	continuously
Croatia	continuously	continuously	5 years	5 years
Cyprus	continuously	continuously	continuously	1-5 years
Czech Republic	continuously	1 year	1-5 years	1-5 years
Denmark	continuously	continuously	continuously	continuously
Estonia	continuously	continuously	continuously	continuously
Finland	continuously	continuously	continuously	continuously
France	continuously	continuously	continuously	continuously
Germany	1 year	1 year	1 year	1-5 years
Great Britain	1 year	1 year	1 year	1 year
Hungary	continuously	1-5 years	1-5 years	1-5 years
Iceland	1 year	1-5 years	1-5 years	1-5 years
Ireland	continuously	1-5 years	1-5 years	1-5 years
Latvia	continuously	1 year	6-10 years	6-10 years
Lithuania	1 year	1 year	1-5 years	1-5 years
Netherlands	1 year	1-5 years	1-5 years	1-5 years
Norway	continuously	1 year	1 year	1 year
Poland	1 year	continuously	?	continuously
Portugal	continuously	10-15 years	10-15 years	10-15 years
Slovakia	continuously	continuously	continuously	continuously
Slovenia	continuously	1 year	1-5 years	1-5 years
Spain	continuously	continuously	1-5 years	1-5 years
Sweden	continuously	1-5 years	1-5 years	1-5 years
Switzerland	1 year	6-10 years	6-10 years	6-10 years
Turkey	1 year	continuously	10-15 years	10-15 years

Table 2 Frequency of updating the geographical names information

*) completeness was mostly checked by random checks and regular updates, spelling was checked similarly and the completeness of attributes was checked by database constraints and regular updates.

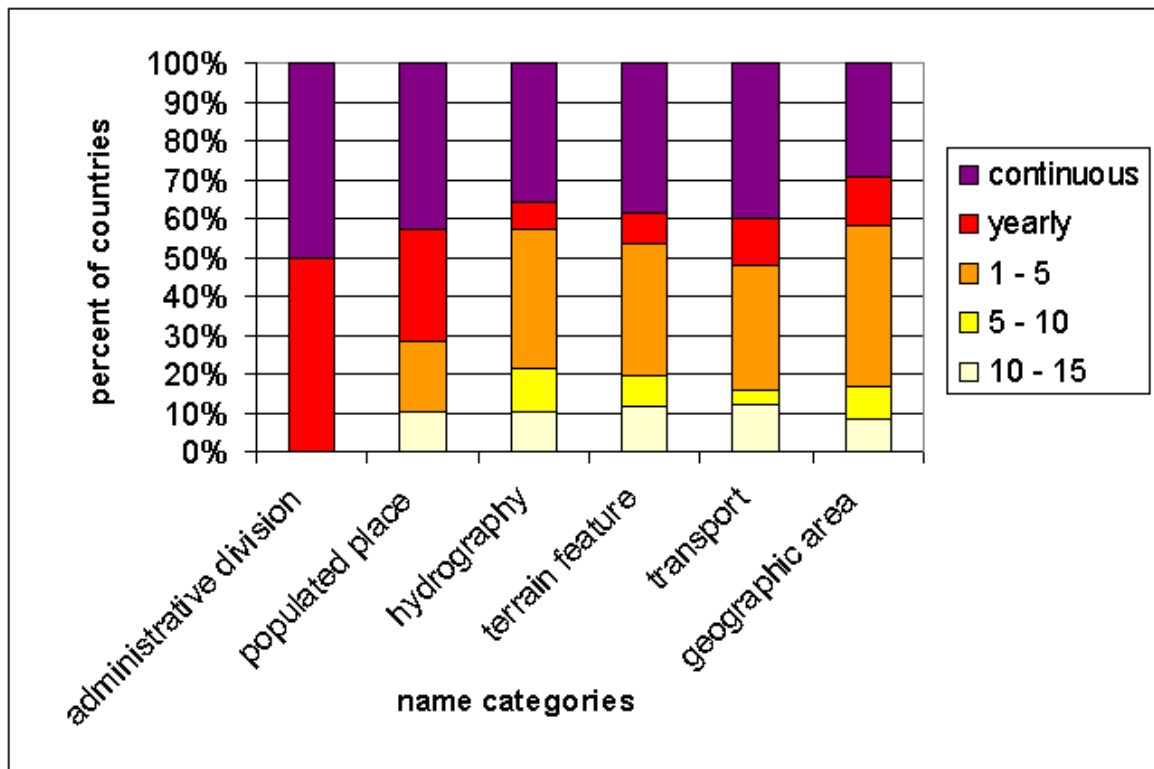


Figure 9: Frequency of updating the various name categories

There clearly is a hierarchy for the various name categories. Administrative names are either updated continuously or every year. Names of populated places are still continuously or yearly updated in more than 2/3 of the cases. For transport names the continuously or yearly updating countries are a minority, and even more so for the other names. So there is some general agreement on the relative importance of the various name categories as well; this will be reflected in the answers to part II.3, where the more important government bodies are responsible for administrative names and names of populated places.

The nature of the checks is varied. There can be cross-checking of the files of the institution primarily responsible (such as the national mapping and cadastral agency) with other institutions responsible for the names (Statistics dept, Names authority) in order to assess the completeness of the names files; there can be cross checking with regional commissions (these exist in Austria, Belgium, Switzerland, Germany, Spain) or with official acts in order to check the orthography, and there can be internal database checks in order to control the completeness of the attribute information in the files. Databases can be checked systematically for completeness, as the system can refuse to enter files that are not complete.

6.4 Names data standardising responsibilities (Detailed Questionnaire II.3)

Names are systematically collected by NMCAs or statistical services, but these not always would have the official authority to standardise them as well. Part of the standardization process is providing information about the standardised data themselves and about their metadata; the latter can be subject to standards as well.

Even if it is the national mapping and cadastral agency that collects the names in most of the cases, they may not have the ultimate say in deciding about the orthography of the geographical names. But even if it does decide about the standard forms, it may still be the organisation that informs the public about names issues and also be the organisation responsible for the provision of metadata according to specific standards or not.

II.3.1 Which organisation is responsible for approving which names?

For this question we asked which organisation was responsible for specific name categories, but we also could have asked about the geographical subdivision of the responsibilities. As indicated already in chapter 6.2, Germany, Belgium, Switzerland, Austria and Spain have such regional subdivisions, as in Spain for instance it is the autonomous communities that decide on the names in their regions in their languages.

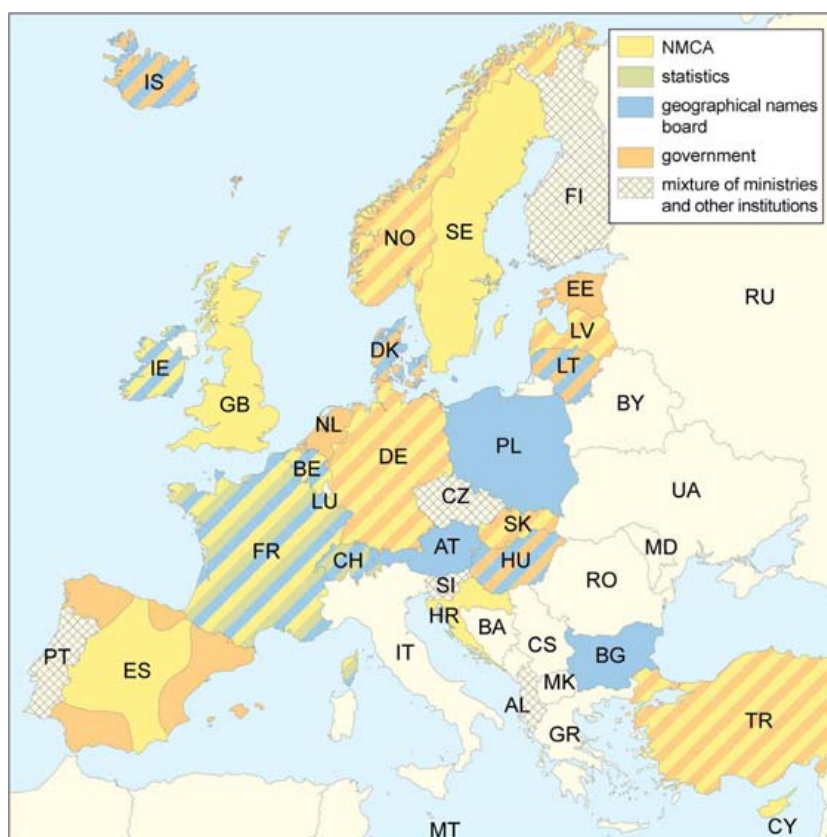


Figure 10: Dominant institutions approving geographical names

Again as starting point the various name categories were given (administrative names, names of populated places, hydrography, orographical or terrain names, names of transport objects and of geographical regions), and it was asked to list the institutions responsible for approving these names. In figure 10 we have generalised this information, and if possible coloured in a country on the basis of the dominant institution regarding names approval. So if in Britain the (local) government is responsible for approving administrative names and the national mapping agency for all other name categories, then the latter is indicated as the dominant institution.

Figure 10 shows 5 options: it can either be the national mapping agency, the national statistics office, the geographical names board, local government or a mixture of ministries and other institutions that decides on the names. If there are two institutions that seem to play an equally important role (it is difficult to gauge nuances from the questionnaire's answers) than a country has been coloured in by alternating colour bands indicating the two institutions.

The national mapping and cadastral agency (NMCA) seems to be pre-eminent in deciding about the geographical names in Britain, Sweden, Croatia and Cyprus. It is responsible together with the statistics department and the geographical names board in France. The NMCA together with (local, regional or national) government is in charge in Belgium, Germany, Norway, Latvia, Slovakia, Spain and Turkey. The NMCA and the place names commissions together hold sway in Ireland. In some countries the geographical names commission is pre-eminent: Poland, Bulgaria and Austria. The government and the place names commission together decide on the names in Iceland, Denmark, Lithuania and Hungary. In the Netherlands and Estonia it is local government which is decisive, and in Switzerland it is the statistics department together with the place name commissions. There is a mixture of ministries and institutions responsible for the names in Portugal, the Czech Republic, Finland, Slovenia and Albania.

For administrative names, it is the government (or parliament) mostly that decides, for names of hydrographic, orographic, transport objects and of geographical regions it is mostly the NMCA; for populated places it is mostly local government, in cases where there is a mixture of responsibilities.

So for this theme "Who approves the names" the result seems a random distribution, depending on the assignment in the past of the task to standardise the names. Luckily for the EuroGeoNames project it is not important who decides on accepting the names, but the fact whether the names have been standardised or not.

II.3.2 The existence of information service

The fact whether an information service regarding geographical names has been set up is also an indication as to whom feels responsible for supervising the names standardization procedure. In the answers provided four options came up: it either was the national mapping agency, the national statistics agency or the place name commission that felt responsible for giving information on names, or there was no institution held responsible. The number of countries that answered this question positively is smaller, as neither Britain, the Netherlands, Estonia, Latvia, the Czech Republic nor Croatia and Albania disposed over such a help service. In many countries (Iceland, Republic of Ireland, Lithuania, Germany, Finland and Slovenia) it were both the place names commissions / scientific institutions and the national mapping agency that were responsible for this answering service. In two countries there seemed to be a joint responsibility from the national mapping agency and the national statistics agency: France and Austria. In the remainder of the cases it was the national mapping agency that provided the resources for the names information service: Portugal, Spain, Switzerland, Belgium, Denmark, Norway, Sweden, Poland, Slovakia, Hungary, Bulgaria, Turkey and Cyprus.

The fact that no names information service existed in Britain contrasts with the extensive regulation of the place names provision to clients; it could be that the regular sales service of the British national mapping agency has also sufficient expertise for handling questions about place names. The answer from Britain was that there are hardly ever questions about names. The image in **figure 11** strengthens the preconception that potential clients would turn to their national mapping agency in the first place when they would want to acquire geographical names data.

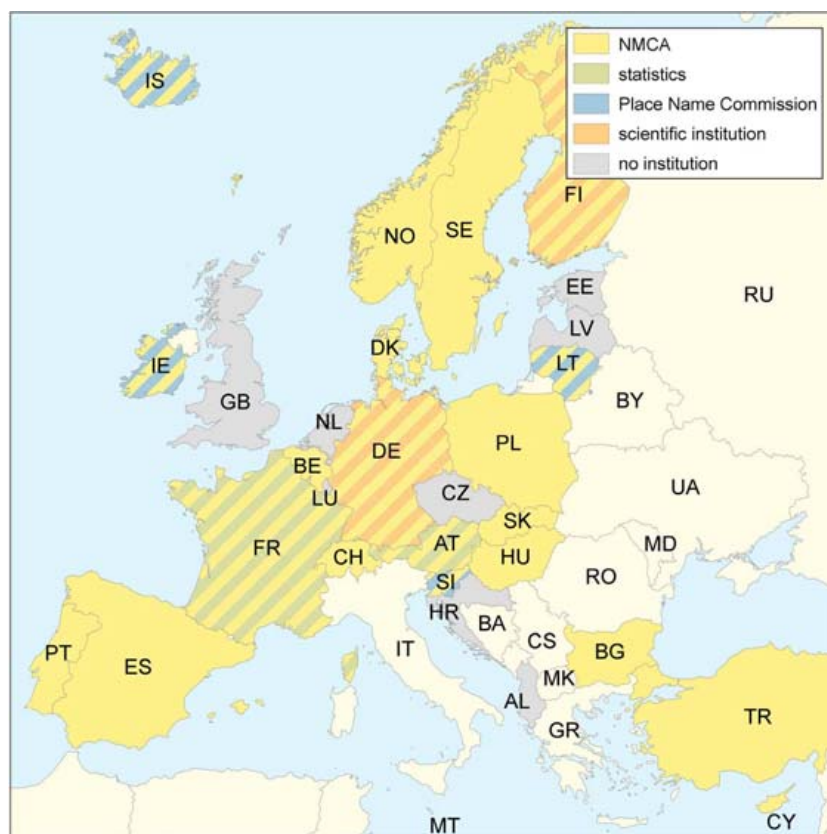


Figure 11: Availability of a names information service

II.3.3 and II.3.4 Provision of metadata and adherence to metadata standards

Finally, there is the aspect whether metadata for the geographical names is being provided by the institution that makes these names available. **Figure 12** shows an image of the distribution of the countries that indeed provide metadata. It is the more easterly located countries that do so (apart from Spain there are Germany, Switzerland, Austria, Slovenia, Hungary, Slovakia, Poland, Lithuania and the Norden countries without Denmark). The question about the standards according to which these metadata were structured was put in order to get an idea of the preferential standard to be proposed for the EuroGeoNames project. 5 countries used the relevant ISO standards, 2 countries used a CEN standard and one the Dublin standard, so this proved to be no clear basis for a joint opinion. 7 countries used local standards. There can also be a more positive interpretation: 14 countries have left the choice for a joint standard open, and could perhaps be induced to opt for the standard that is considered best both for their own objectives and for the EuroGeoNames project.

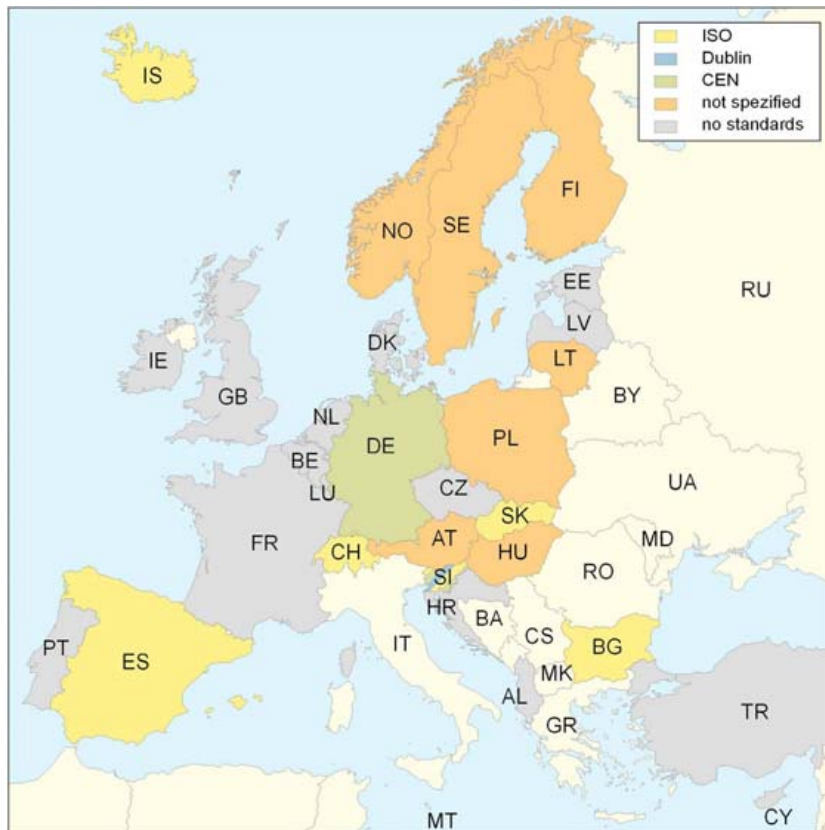


Figure 12: Availability of metadata according to specific standards for the geographical names files.

6.5 (Detailed) Data availability (Detailed Questionnaire III.1)

In this section the characteristics, size and contents of the national geographical names data repositories is ascertained. Particularly important is the attribute information that is collected and linked to the names records.

III.1.1 Current sources for the geographical names data repositories

Question III.1.1 referred to the current sources of the geographical names data repository. It is related to question II.1.2, which asked for the name categories identified and the scale to which they were related. This question III.1.1 was understood as referring to the main source of the names data. The resulting map (figure 13) shows an image which is slightly different from the one in figure 6. France for instance indicated that cadastral maps were one of the sources of the geographical names, and as they have a scale larger than 1:10 000, France ended up in figure 12 in the same category ($\geq 1:10\ 000$) as Great Britain, Ireland, Norway, Slovenia and Cyprus. Some countries answered this question by referring to more than one map scale; in those cases the largest scale mentioned has been used as indicatrix, although not the whole country might be mapped at that scale.

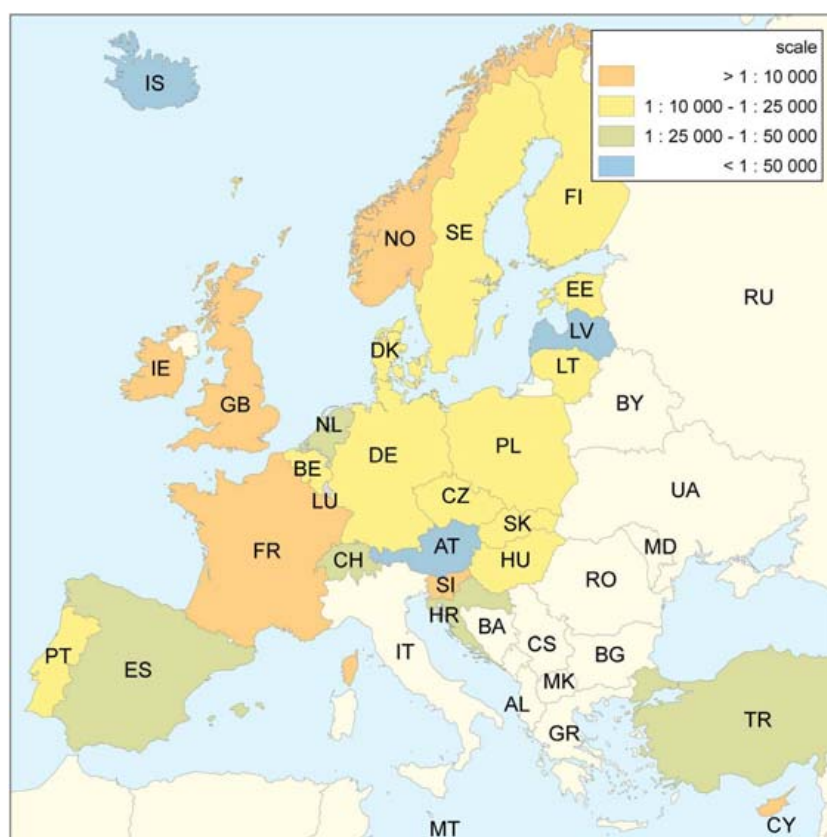


Figure 13: Current sources of geographical names data repositories

As can be seen in figure 13, three countries used the topomap at the scale 1:50 000 as source for the geographical names data repository, that is Iceland, Latvia and Austria. The other countries were in between these three and the first group.

III.1.2 Total number of records

This question was important for EuroGeoNames, as its results would be indicative of the total number of records for the intended European geographical names infrastructure. **Figure 14** visualises the results of this question, as the broad categorization of the number of names contained in the national geographical names data repositories is shown in five classes. The small number of names in Southern Europe is conspicuous in this image, which might be indicative of a late start in building names databases.

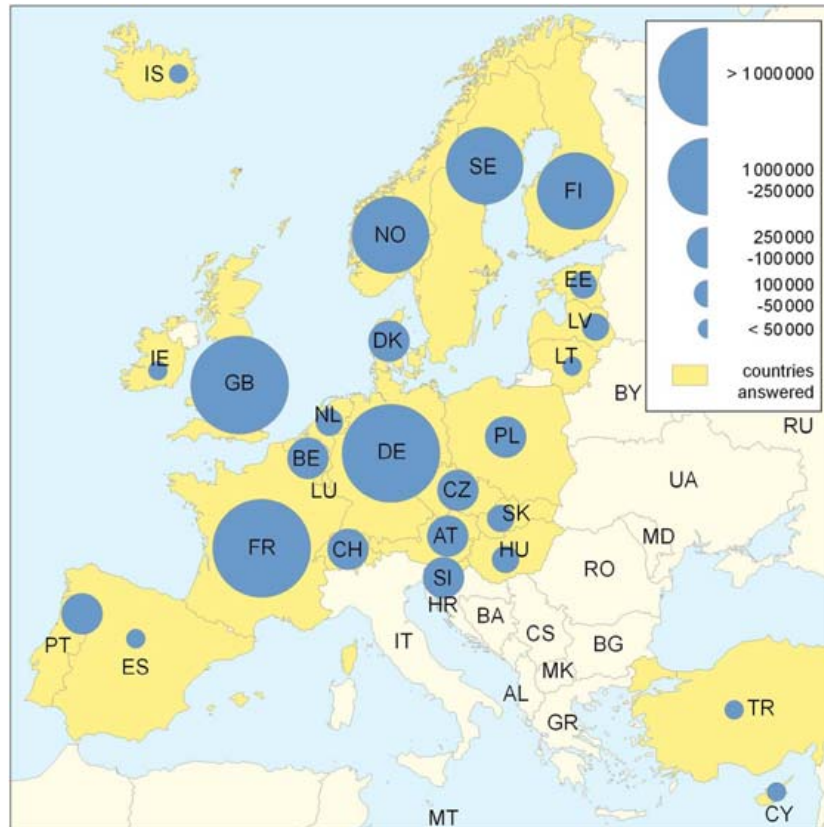


Figure 14 Current (March 2005) total number of names records in the national geographical names databases

III.1.3 Links with stand-alone geographical names database

In question III.1.3 those countries that had a stand-alone geographical names database were asked whether this was linked to topographic/cartographic data. Apart from Scandinavia and Turkey this was only the case for the smaller countries, as both Britain, France, Spain, Germany (AdV) and Poland had no or not yet a link between their names databases and topographic/cartographic data. See [figure 15](#).

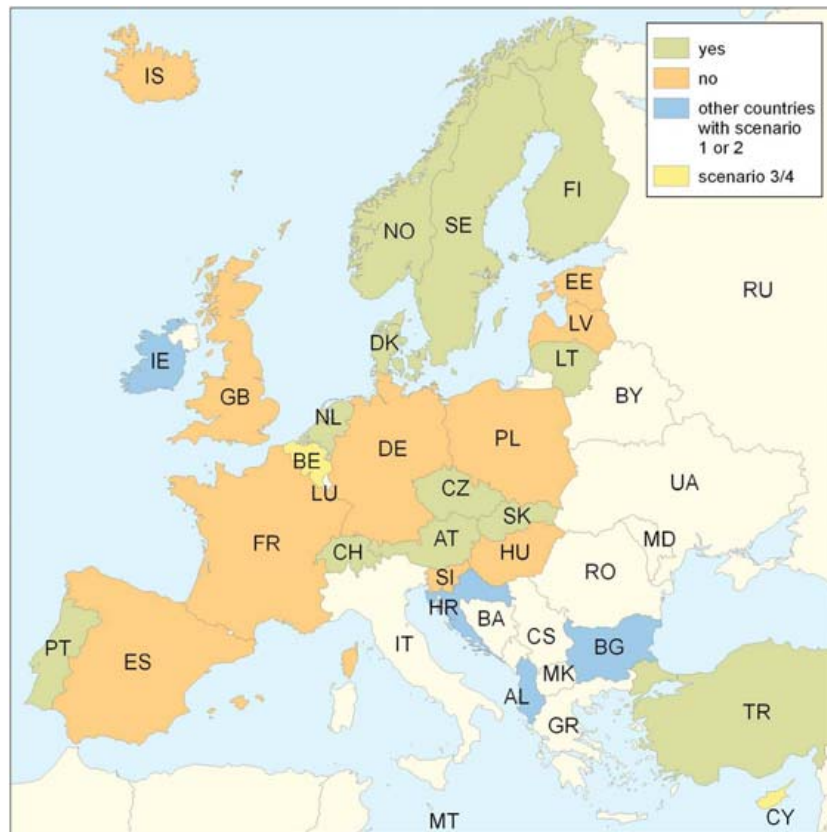


Figure 15: The existence for the countries with scenario 1 or 2, of direct links between the names databases and topographic/cartographic data

III.1.4 Names output possibilities for countries with topographic-cartographic database

A number of Central European countries (Denmark, Finland, Germany (AdV), Poland, Slovakia, Lithuania) and Turkey had the ability to produce sorted extracts from their topographic/cartographic databases, while most Norden countries (Iceland, Norway and Estonia,) and France and Switzerland had the possibility to both derive sorted extracts and complete gazetteers from the topographic-cartographic database. See also [figure 16](#).

If we combine the images in figures 15 and 16, then the only countries not able to produce sorted extracts or complete gazetteers from their files are Great Britain, Ireland, Spain, France, Belgium, Latvia, Slovenia, Croatia, Albania and Bulgaria.

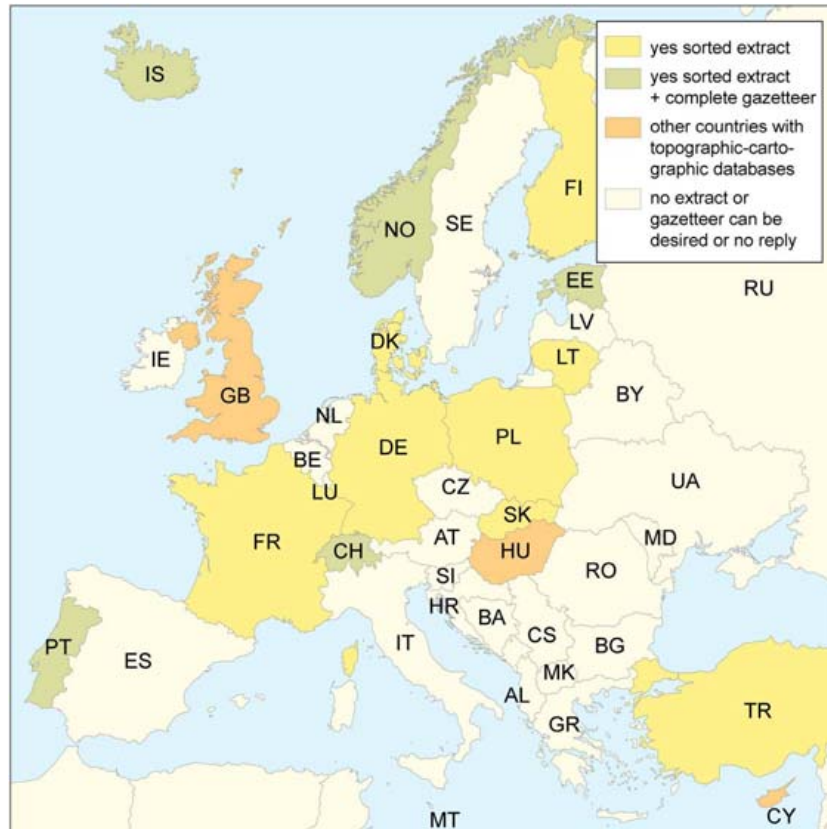


Figure 16 Name output possibilities from topographic/cartographic databases.

III.1.5 Feature categorization

Above (Question II.1.2) we had a categorization of geographical names into administrative names, names of populated places, hydrographical names, orographic and terrain names, transport object names and names of geographical regions. This was no official categorization, and in question III.1.5 we asked whether there was a specific classification system for feature categories that was followed. Although most categorization systems must at least be compatible to that of NATO, only three countries (Netherlands, Slovakia and Turkey) indicated they followed the NATO categorisation. Apart from seven countries that had no categorization system (Czech Republic, Austria, Switzerland, Albania, Bulgaria, Cyprus and Ireland) all other countries followed national feature coding structures. They are listed below.

Specific national feature coding structure:

- ATKIS feature coding (Germany)
- Specification for basic topographic data (Sweden)
- Estonian classification of geographical names database/ Basic Map specification (Estonia)
- Federal coding structure of Geographical Names (Slovenia)
- SWING Exchange Standard of Geodetic Information (Poland)
- I.G.N. feature catalog (Belgium)
- National classification (Spain)
- GENKA - feature code catalog (Denmark)
- National classification (Latvia)
- CROTIS (Croatian Topographic and Cartographic Information System), (Croatia)
- Categories of FNT (Gazetteer of Geographical Names) (Hungary)
- National feature/data model of the NLS Topographic Data System (Finland)
- IGEOE specifications (Portugal)
- InGIS specification (Lithuania)
- SOSI specification (Norway)
- LU coding (Iceland)
- National classification (Great Britain)

III.1.6 Attribute information linked to the geographical name

The **table 3** indicates the kind of attribute information linked to the geographical names (the name might be linked to the attribute information, or in an object-related geodatabase would be part of the attribute information. The question relates anyhow to the other attributes that can be reached via the name.

Attribute information linked to the names in the various national databases	Feature coordinates	Name placement coordinates	Feature category	Feature object ID	Map scale indicators	Statistical classification	Name status	Language	Pronunciation	History	Other	Height	Number of inhabitants	Map sheet number	Language status	Size + style character	Gender	Name sources	Variant names
Albania																			
Austria	X		X	X								X							
Belgium																			
Bulgaria	X	X	X	X	X		X	X	X										
Croatia		X	X	X															
Cyprus	X	X		X								X	X						
Czech Republic		X	X	X			X												
Denmark	X	X	X	X	X	X	X					X							
Estonia	X	X	X	X		X	X	X		X									
Finland	X	X	X	X	X	X		X					X	X	X				
France		X	X		X														
Germany AdV	X		X	X								X	X				X		
Germany BKG	X		X	X		X											X		
Germany StAGN	X		X			X													
Great Britain	X	X		X	X	X	X	X	X	X									
Hungary	X		X	X			X					X	X					X	X
Iceland		X	X	X						X						X			
Ireland		X				X													
Latvia	X		X	X	X	X	X		X			X				X			
Lithuania		X	X	X															
Netherlands	X	X	X				X												
Norway	X		X	X	X	X	X	X										X	
Poland	X		X	X	X	X	X					X							
Portugal		X	X																
Slovakia	X		X	X		X	X					X							
Slovenia		X	X	X	X			X											
Spain	X		X		X	X	X	X											
Sweden		X	X	X		X	X	X											
Switzerland	X		X	X	X														
Turkey	X		X	X	X	X						X	X						

Table 3: Attribute information linked to the names in the various national databases/geographical names repositories

For the 28 countries that answered the questionnaire:

- 20 used feature coordinates
- 16 used name placement coordinates
- 25 had feature categories
- 22 had feature/object ID
- 13 had map scale indicators,
- 13 had a statistical classification
- 13 gave an indication of the name status
- 8 gave an indication of the language (Bulgaria, Estonia, Finland, Norway, Slovenia, Spain, Sweden, Great Britain)

- 3 gave an indication of the pronunciation
- 6 gave an indication of heights
- 7 gave indication of the number of inhabitants
- 1 showed the map sheet number
- 1 showed the language status
- 3 showed the typestyle and font and colour of the name
- 2 showed the gender of the name
- 2 showed the name source,
- 1 showed variant names, 1 showed the area of water bodies
- 1 showed the length of rivers
- 1 showed the location of administrative territories
- 1 showed the condition of the feature (existing, damaged, non-existing)

The fact that out of these 28 countries 22 had feature or object IDs very well fits in the data object model envisaged for EuroGeoNames. Indication of the name status (whether already officially approved or not) would also be important for an official geographical names database in Europe.

III.1.7 Coordinate precision for point features in the attribute information

The coordinate precision very much depends on the way of designating locations (geographical coordinates or map coordinates) or the location code linked to the names records, and the accuracy of the map itself. For named objects to be recognised in the field through their coordinates an accuracy of 50-100m would be sufficient, even for most individually named buildings. **Figure 17** shows the resulting image (optional).

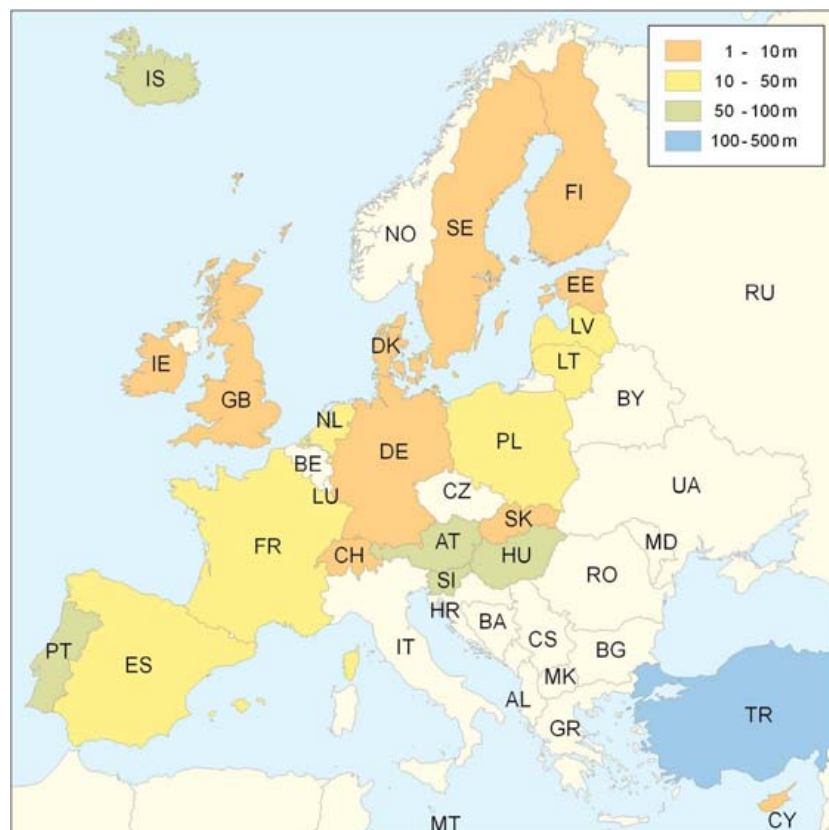


Figure 17: Coordinate precision for point features

6.6 (Detailed) Data accessibility (Detailed Questionnaire III.2)

In this section, questions were asked about the technical access to databases, which is dependent of compatibility with the various operating systems and database packages used, the languages supported and the formats adhered to.

III.2.1 Data access through the Internet

It started with a question (III.2.1) about the general existence of a website for the interviewed institution, through which its data could be accessed. This question might not have been understood by all respondents in the sense that it was not just targeted at websites where geographical names could be accessed. The provision of names through the web was already asked in question II.1.3, and **figure 18** visualises the countries that did so. Question III.2.1 wanted to discover countries where the relevant institutions were already used to data exchange through the web.

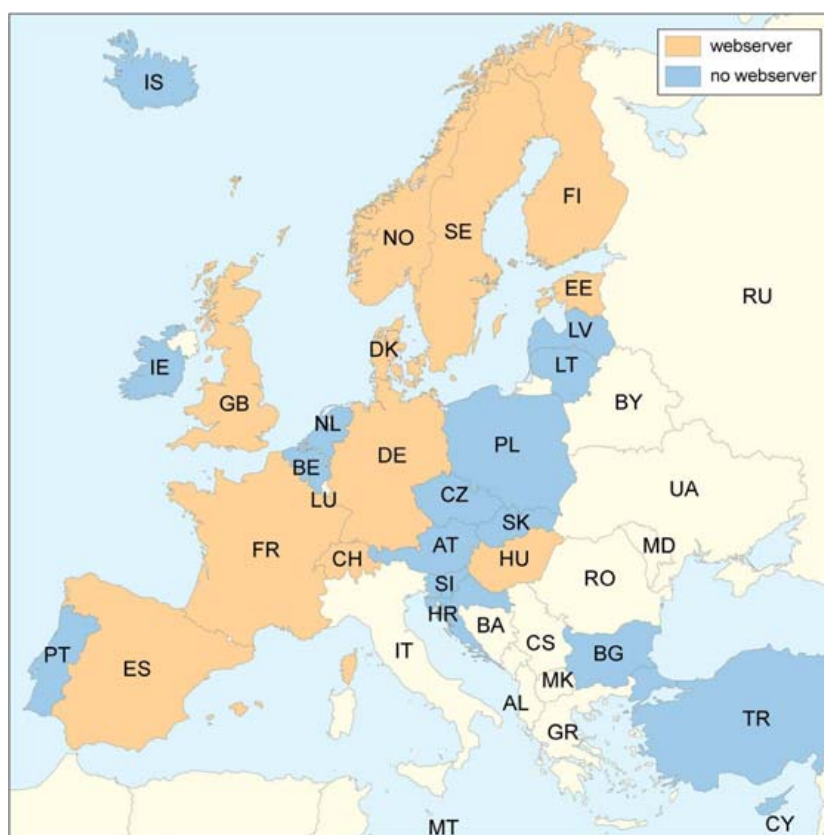


Figure 18: General data provision through the web by institutions concerned

III.2.2 Operating systems in use for software and hardware packages

The question about the kind of operating system in use for the hardware and software packages gave a fairly homogeneous result. In most cases it was a version of MS Windows (18 countries), 2 countries used both MS Windows and UNIX, and two countries used both MS Windows and LINUX.

LINUX was used exclusively in three countries, while together with MS Windows versions in two countries. UNIX was used exclusively in 1 country and together with MS Windows versions in two other countries.

The geographical distribution of the operating system used is shown in **figure 19**.

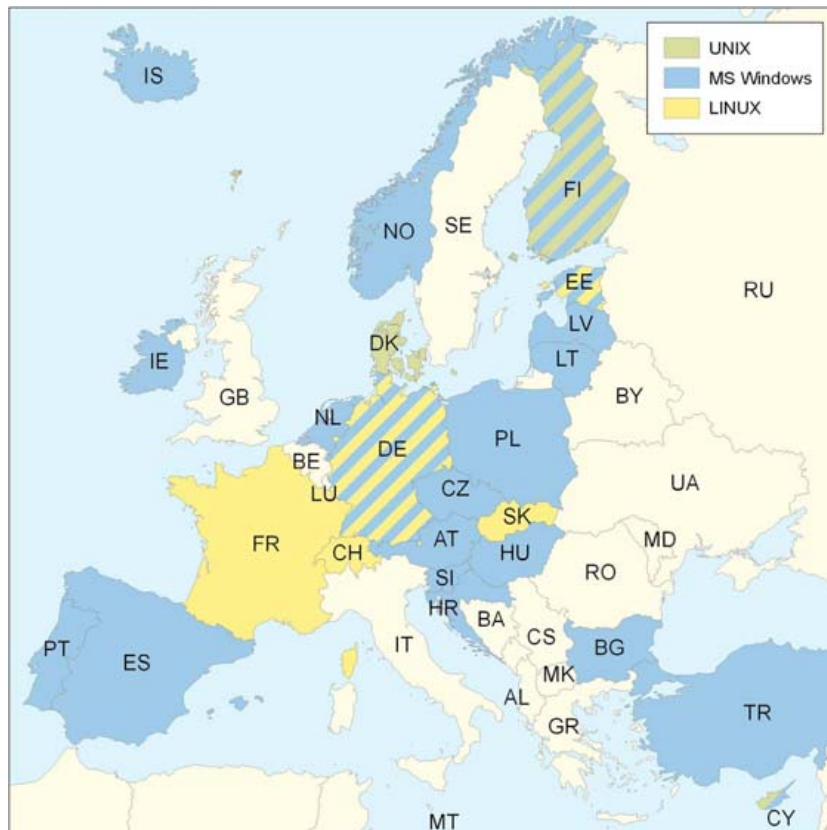


Figure 19: Operating systems in use for the hardware and software packages

III.2.4 Formats in which geographical names are made available

The countries interviewed indicated in the questionnaire in which formats their clients could obtain geographical names data. In [table 4](#) we present a general overview of this information.

Sweden and Belgium indicated they did not have any standard format for geographical names output.

The fact that a specific brand name is used does not guarantee that data could be exchanged with the packages from this brand, as different versions exist. The change that they could be made compatible is good, however. We show the example of ESRI:

Formats in which geographical names are made available	MS Word	MS Excel	ASCII	HTML	DXF	XML	ESRI	IBM	Intergraph	Map Info	Oracle	MS Access	Microstation 95	PDF	DGN	Visual Dbase	CSV flatfile
Albania							X										
Austria	X	X							X		X	X					
Belgium							X										
Bulgaria	X	X															
Croatia																	
Cyprus	X	X	X		X		X			X							
Czech Republic		X											X				
Denmark														X			
Estonia				X											X		
Finland	X	X	X				X			X							
France			X	X							X						
Germany AdV			X						X		X						
Germany BKG			X				X		X	X							
Germany StAGN																	
Great Britain																	X
Hungary	X	X															
Iceland							X										
Ireland		X									X						
Latvia												X					
Lithuania				X	X		X										
Netherlands			X														
Norway		X															
Poland	X	X	X														
Portugal			X														
Slovakia		X					X										
Slovenia		X	X				X										
Spain		X										X				X	
Sweden																	
Switzerland			X				X										
Turkey			X				X										

Table 4: Formats in which geographical names are made available

ESRI formats nominated:

- ArcInfo Coverage – 5 x
- ArcInfo Export – 5 x
- ArcInfo Shape – 6 x + 1 x soon
- ArcInfo GeoDB – 2 x
- Unknown format: 2 x

The following countries have their geographical names accessible in an ESRI format:

Albania, Cyprus, Finland, Germany, Iceland, Lithuania, Slovak Republic, Slovenia, Switzerland, Turkey

III.2.5 Languages supported by the operating system used

With regard to the languages supported by the operating system, the following character sets (codepages) were used:

- ISO 8859-1: Great Britain, Ireland, France, Netherlands, Portugal, Spain, Denmark, Germany, Austria, Iceland
- ISO 8859-2: Czech Republic, Poland, Slovakia, Hungary, Slovenia, Albania,
- ISO 8859-4: Estonia
- ISO 8859-5: Bulgaria
- ISO 8859-7: Cyprus
- ISO 8859-9: Turkey
- ISO 8859-10: Norway (with special characters for 3 Sami languages), Sweden, Finland (plus Skolt Saami letters), Lithuania

The following Microsoft windows codepages were used:

- cp 1250 (EE): Ireland, Slovenia, Croatia, Albania, Poland, Estonia,
- cp 1252: Portugal, Spain, Germany, Hungary, Turkey
- cp 1253: Cyprus
- cp 1257: Latvia, Lithuania

The following MS-DOS codepages were used:

- cp 850: Ireland, Germany, Latvia, Albania, Turkey
- cp 852: Hungary, Slovenia
- cp 860: Portugal
- cp 869: Cyprus

The following countries also used ISO/IEC 10646 Unicode:

Spain, Slovakia

III.2.6 Use of webserver standards

The countries that had a general webserver were asked to indicate what standard they were using. This standard did not necessarily have to be used as well for geographical names provision. Only Norway differentiated between the webserver standards used for names and for other data.

- OGC WMS was used in Norway (for other than names data), Finland, Denmark, Germany, Estonia and Slovakia
- OGC WFS was used in Norway (for other than names data)
- XML/SOAP was used in Norway (for names data), Finland, Estonia, Germany
- HTML was used in Great Britain, France and Hungary
- SVG was used in Estonia
- Gaz was used in Spain

III.2.7 Search options available for the webserver

This question was answered affirmative by 11 countries, though not all of them (Finland and Germany) had previously indicated that they offered a webservice, and one that offered a webservice did not answer it (Switzerland).

The functionality of the webserver consisted of the following options. Searching by

- Complete names: 9 out of 11
- Letter combinations (partial names or wildcards): 7 out of 11
- Coordinates/bounding boxes: 5 out of 11
- Specific name categories: 5 out of 11
- Combinations of criteria: 5 out of 11

III.2.8 Evaluation of exonym search option

Countries were asked if they thought it helpful if the search for a foreign geographical name was started up by entering its exonym. 23 of the 28 countries agreed with this suggestion, 2 did not know, 3 opposed it.

III.2.9 Availability of lists of exonyms

Making available an option such as suggested in the previous section presupposes the existence of a standardised list of exonyms in one's own language. Surprisingly many countries already have available a list of names of foreign geographical objects in their own language (exonyms). Their distribution is visualised in [figure 21](#).

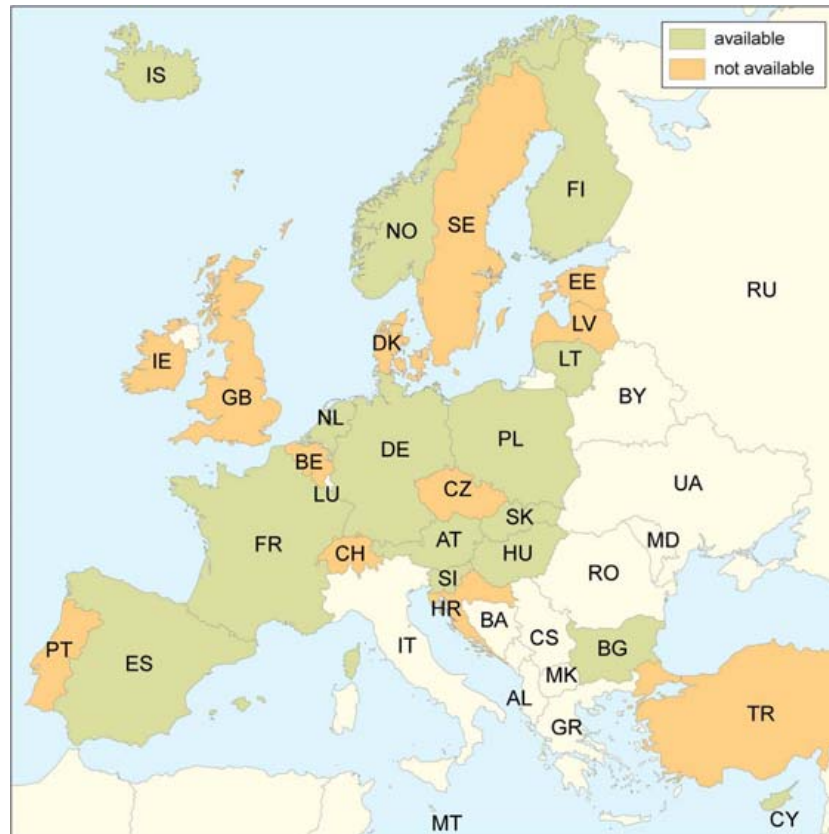


Figure 21 Distribution of countries that have lists of exonyms

6.7 Aspects related to the future EuroGeoNames project (Detailed Questionnaire IV)

Part IV of the detailed questionnaire aimed at elaborating the countries' attitude towards the future multi-lingual European geographical names data infrastructure. The vision for EuroGeoNames (EGN), that is to increase the availability and the usability of official national geographical names as well as their value-adding and profit-making by commercial enterprises was aimed to be conveyed.

As a general result of the evaluation and assessment it can be stated that the community, and interests, of geographical names are very wide, and often go beyond those traditionally attributed to the geographic information sector.

IV.1 Possible target users

Table 5 shows the results with regard to the possible target users of geographical names data:

Question IV.1 Which of the following categories (commercial or government) do you consider to be likely potential users of European geographical names data/such a geographical names data network? (<i>multiple ticks are possible</i>)	
	Replies by NMCAs (28)
• emergency services; health and safety	27
• border crossing routing; transport and delivery service networks	27
• hotel reservation services; tourism	28
• private sector map and atlas producers	28
• educational establishments, libraries	28
• mass media (broadcast, TV)	28
• location based services (LBS)	26
• other	11 Geographers, 9 Interpr/translators, 9 Linguists, 8 Historians, 3 Cartographers, 3 Publishers, 2 Science, 2 Defense, 2 Private search, 1 Embassies, 1 Planners, 1 Environm. utilities, 1 Insurance

Table 5 – Compilation of NMCAs' replies with regard to Question IV.1

The replies of the NMCAs to the survey/inventory do underpin the presumption, that correctly spelled geographical names are indispensable, amongst others, for routing, transport and delivery service networks, for hotel reservation services and tourism, for educational establishments and libraries and for the mass media. Additionally, geoportals and Location Based Services (LBS) do not only need multi-lingual geographical names as the first access to the item inquired, but also for enhancing the attractiveness of their services in general. It is worth noting that cartographic map producers, atlas and dictionary publishers would benefit from the EuroGeoNames project, too.

IV.2 Is an improvement of the geographical names data necessary?

With regard to Question IV.2, all 28 NMCAs think that an improvement of the current set-up of their geographical names data repository and its accessibility is necessary to satisfy the potential target user categories mentioned in Question IV.1.

IV.3 Are there any plans for changing the data?

According to Question IV.3, in 21 countries/NMCAs there are plans for changing the data (structure), the functionality of the data access or the current way of maintaining the data. The following three changing plans can be stated explicitly:

- Integrating better/complete integration of all geographical names according to the feature categories mentioned in Question II.1.2 (does apply for France, Germany, Sweden, Slovakia, Slovenia, Turkey, Hungary, the Netherlands)
- Facilitating better accessibility via Internet services (does apply for Germany, Czech Republic, Poland, Latvia, Norway, Slovenia),
- Migrating data to a new data model/updating the data model (does apply for Spain, Denmark, Island)
- Other (does apply for United Kingdom, Ireland, Switzerland, Lithuania, Estonia, Bulgaria, Belgium)

IV.4, IV.5 and IV.6 on the EGN concept

The positive feedback on the EGN concept in general can be demonstrated by displaying the specific questions IV.4, IV.5 and IV.6 and the respective answers to the detailed questionnaire (the questions are listed in a shortened version):

Question IV.4	Does the idea of such a Europe-wide geographical names data network appeal to your organization?		
	YES	Don't know yet	NO
	25	2	1

Question IV.5	Would you allow to use extracts of your database during a <u>test phase</u> ?		
	YES	Don't know yet	NO
	25	2	1

Question IV.6	In principle, would your organization <u>cooperate</u> to EGN?		
	YES	Don't know yet	NO
	25	2	1

This is a very positive result with regard to the contribution to the survey/inventory and it shows the NMCA's interest to exploit geographical names data. Furthermore it is a good motivation for continuing the efforts to establish a European geographical names infrastructure.

Turning to the terms of money and finance one specific question was asked:

Question IV.7	State some conditions concerning the accessibility of data			
	(a) For individual searches could access be free of charge?			
	YES	Don't know yet	NO	No reply
	21	2	2	3
	(b) For downloading multiple data sets, which appears most appropriate from your perspective? (<i>multiple ticks are possible</i>)			
	Free of charge	Nominal charge	Reasonable profit	
	2	17	24	

As a very positive result it can be stated here, that individual searches for geographical names data through the planned Internet service could be free of charge for 21 countries. Undoubtedly, the download of multiple data sets (e.g. gazetteers or parts of it – all named mountains of Europe, all named rivers, all named rivers for a specific minority language area or region, etc.) should be provided at nominal charge or with reasonable profit. Here, multiple ticks were possible. However, it has to be clarified what “nominal charge” and “reasonable profit” means.

The definition of a business and licensing model will be a very complex task within the future EGN project, while considering various European business and licensing models for reference data. Without any agreement signed by all data providers, the EGN project could focus on the Internet service implementation only, without deriving any suitable products (e.g. gazetteers or selected lists).

6.8 Market potential estimation

(interpretation and evaluation of the interviews for value-added resellers, distributors and customers of GI products as well as with other GI stakeholders held in March 2005)

In order to gauge commercial interest with the help of EuroGeographics a number of commercial companies (ESRI Germany GmbH; TeleAtlas Germany; NavTech Germany; GeoTask AG – ProDV Group Germany; Geodan Holding, The Netherlands; Ed Hölzel Publishing House, Austria; De Agostini Publishing House Italy; EDINA/Data Library Services for University of Edinburgh, United Kingdom) were approached and asked after their opinions regarding the market potential of geographical names. The appropriate interview form is added as **Appendix 3**.

II.1 and II.2 Contact details and interest

Five organisations reacted by completing the interview form (CartoTravel Germany, ESRI Germany GmbH, GeoTask AG – ProDV Group Germany, Geodan Holding The Netherlands, Ed.Hölzel Publishing House Austria and TeleAtlas Germany) and to all of them the idea of a Europe-wide geographical names data network appealed. They considered it as a basis for Europe-wide geoinformation infrastructure.

EDINA/Data Library Services for University of Edinburgh expressed its interest via email in cooperating by setting up the EuroGeoNames project via email. Furthermore, ESRI Germany and Ed Hölzel Publishing House Austria prepared a statement / commitment on the EuroGeoNames project. Both are added as **Appendix 4**.

II.3 Potential governmental or commercial users of EuroGeoNames:

The following groups were considered potential users of EuroGeoNames by the five respondents:

potential user groups identified	score (out of 5)
emergency services	■ ■ ■ ■ ■
border crossing routing	■ ■ ■ ■ ■
cross border market analysis	■ ■ ■ ■ ■
hotel reservation services	■ ■ ■ ■
map and atlas production	■ ■
education	■ ■
mass media	■ ■
location based services	■ ■ ■ ■ ■
basic GIS infrastructure	■
homeland security	■
Military services	■

red: categories added by respondents

II.4 and II.5 Market potential

Three of the five respondents had been approached before for delivering name data.

Potential business cases described by the respondents related to all cases where searches via geographical names are important: amongst them are gazetteer services within processes and applications. Examples included: individuals looking for their birthplaces in countries where names had changed within the last century, publishers of directories and encyclopedias that need background information for names, map publishers that need attribute information on names, such as coordinates and feature types. As compared to the current situation it was experienced as an advantage that a more formal names database could be used in search engines.

II.6 Additional attribute data required

Apart from official name, coordinates of named object, unique object ID, object class and resolution or scale, the following attributes are considered mandatory by the respondents (only three of the four respondents answered this question):

attributes considered mandatory	score (out of 4)
unabbreviated names	■ ■ ■ ■
exonyms	■ ■ ■
pronunciation	■
gender	
language/script	■ ■
synonyms	■ ■ ■ ■
historical names	■ ■ ■
postcodes	■
administrative codes	■ ■
Quantitative data (population numbers, heights)	■

red attribute categories added by respondents

It was interesting to note that in this age of speak recognition, there was no interest for pronunciation as yet.

II.7 Linking geographical names data to other spatially related information

The usefulness of linking geographical names data to other spatially related information through Semantic Network Service (SNS) was accepted by two of the four respondents. One saw it in the context of meta-information systems (Geo thesauri), the other stressed the need to use it in combination with other sources and systems.

II.8 and II.9 Support for a EuroGeoNames Internet portal and interest in cooperation

Of the four respondents two supported a EuroGeoNames Internet portal, although one with reserves. This was remarkable, because three of the four were interested in cooperation with a joint Europe-wide geographical names data network. Perhaps the respondents wrongly understood the question in II.8, and thought monetary support was indicated.

forms of cooperation	score (out of 3)
assessing market potential	■ ■ ■
project proposal design	■ ■
providing technical expertise	■ ■
operating internet service	■ ■
providing financial support	■ software license
marketing and promotion of the product	■
Testing the usefulness of the data for digital atlas cartography	■

II.10 Accessibility conditions advocated

The respondents advocated the following conditions for accessibility of the geographical names data in Euro GeoNames:

- For individual searches, 3 of the 4 respondents advocate free internet access
- For downloading multiple name data sets all three scenario's (free of charge provision of data, provision at nominal charge and provision with reasonable profit margin) were advocated.

II.11 Suggestions by the respondents

The respondent have indicated that there are competitors, that provide geographical names and even addresses. Apparently it was insufficiently indicated that those other commercial names or address databases are derived products, while the envisaged EGN project provides a primary one, kept up to date by the primary data collectors.

Another respondents stressed that in the business cases solicited, focus should not be primarily on EGN, but EGN should be regarded as an auxiliary service; it should not be necessarily delivered to the end user but might be used in the form of a 'semi-manufactured' product.

Another comment was that the project should not be restricted to the European Union, and that for instance the NIMA names data should be included too, as well as the names data bases held by commercial European publishers.

7. Conclusion of the survey/inventory

Based on the findings of both the investigation of official geographical names data sources (NMCAs) and the initial assessment of the market needs the following requests for setting up EuroGeoNames can be determined:

- Request for officially approved national names data (endonyms),
- Request for minority language names,
- Request for relating exonyms with official endonyms, and vice versa,
- Request for avoiding storage and maintenance of secondary data sets,
- Request for continuous and authoritative updating of geographical names data by the countries themselves,
- Request for integrating names data into National Spatial Data Infrastructures (NSDI) and ESDI.
- Mandatory geographical names attributes as assessed necessary for the EGN service:
 - (Official) geographical name,
 - Coordinates of the object,
 - Unique Name ID,
 - Feature category,
 - Resolution, scale of map/data set in which the name shall appear,
 - Exonyms,
 - Language/script.
- Optional additional toponymic attributes:
 - Gender,
 - Pronunciation,
 - Synonyms and/or non-official names form,
 - Historical name forms.

8. The vision of the EuroGeoNames project

A continent-wide geographical name service is envisaged, on the basis of national distributed databases, which will allow all European citizens access in their own language, in order to look for geographical names, the objects they refer to, as well as their attributes. Europe has many different linguistic communities and all of them will want to access this names data network in their own language, and may have specific requirements for the results of queries, like specific alphabetisation. They do have different letters, or rather diacritics which have to be accommodated.

Europe even has different scripts, like the Cyrillic in use in Serbia, Montenegro, Bulgaria, Belarus, Ukraine and Russia, the Greek alphabet in Greece and Cyprus, and the special Georgian and Armenian scripts. Ultimately, through automatic conversion, this should be possible because the transliteration systems with the Roman alphabet have been accepted by United Nations.

Hence, a customizable/adaptable and interoperable Internet service compliant to open standards (e.g. ISO, OGC1) also incorporating the Unicode2 standard, is to be developed for the future project. The service shall help to publish, find, deliver and use geographical names data through the Internet across Europe and it shall significantly increase the re-use of existing data (in general based on authoritative national geographical names sources).

There will be no transfer of authority or responsibility for the national databases. Each country is responsible for the quality control and updating of its own database. The scope of EuroGeoNames is to integrate them, and to increase their accessibility by providing access in the various European languages. This means some superstructure must be built to make them amenable to be accessed in the same way by the user.

On the basis of a first survey the present common denominator of national names databases has been worked out, and this will be the starting point for their integration. On the other hand an ideal situation, from the point of view of user requirements, has been elaborated, which will be used as a goal to work towards whenever the national set/up is due for updating or restructuring.

This means that EuroGeoNames is a project with different velocities- some countries with object-oriented databases will have more detailed names sets, collected from larger-scale databases, superior query possibilities and frequent updates. Other countries will have more restricted name sets, updated at larger time intervals. There will be a large discrepancy in the nature of the attribute information available initially, we expect that most nations will move to object-oriented databases for their national mapping files to have more similar attributes collected and stored.

The envisaged final integrated geographical names data within the EuroGeoNames infrastructure intends to be more than just a name service. Also because of this expected convergence of attribute information it also intends to be a toponymical or onomastical tool, for research purposes and analytical work. All the names of objects located above a specific

¹ Open Geospatial Consortium

² Fundamentally, computers just deal with numbers. They store letters and other characters by assigning a number for each one. Before Unicode was invented, there were hundreds of different encoding systems for assigning these numbers. No single encoding could contain enough characters: for example, the European Union alone requires several different encodings to cover all its languages. Even for a single language like English no single encoding was adequate for all the letters, punctuation, and technical symbols in common use.

These encoding systems also conflict with one another. That is, two encodings can use the same number for two *different* characters, or use different numbers for the *same* character. Any given computer (especially servers) needs to support many different encodings; yet whenever data is passed between different encodings or platforms, that data always runs the risk of corruption. Unicode, however, provides a unique number for every character, no matter what the platform, no matter what the program, no matter what the language.

height, of settlements with population numbers above a specific threshold value or names with additions like -Baden can be retrieved.

The so-called additional toponymic attributes to geographical names, e.g. exonyms, the pronunciation, the language or script of geographical names, are currently hardly available. But, in the European context these attributes to the geographical names become attractive while helping to promote the cultural diversity and the multilingualism as well as the cultural heritage of countries and regions. The provision of exonyms within EGN is an extra dimension in which it differs for instance from a names service for the United States or Russia.

As they all do have topographic maps at similar scales with geographical names, it is expected that in the future all countries will have similar, comparable databases, as whenever a change is due, they will be trying to get as close to the ideal form as possible. As such this project will probably contribute to and accelerate some form of standardisation.

The EuroGeoNames infrastructure is not only meant for reference and research. It is also meant to serve industry, to provide added value. It should be possible at some stage to define a rectangle on a map of Europe and ask for all names in their official spelling within that rectangle answering criteria like belonging to distinct categories or from a database at a specific scale. Such queries would be made by cartographic enterprises, navigation technology firms, route planners, etc. Updates of names spelling (in the Netherlands for instance since 1945 there have been 3 orthographic reforms that impacted geographical names, especially the composite ones; not many foreign cartographical firms did process these changes, as they were unaware of them.) can be traced easily in this way.

9. Road Map for EuroGeoNames (Proposal)

In chapter 4 the goals of the SI-EGN project are shown as well as the spiral engineering process necessary to setup the future EuroGeoNames infrastructure (figure X).

According to this spiral model, the table below summarizes EuroGeoNames (EGN) milestones based on the acceptance of the project proposal within the eContentplus funding programme of the EC.

Timetable	Milestone	Description
2005-07-26	EGN Info meeting Frankfurt am Main, BKG	<ul style="list-style-type: none"> - Information of potential Consortium members on the current status of the EGN project including some first results of the survey/inventory - Discussion of the tasks of the tabled Work packages (WPs, version 26-07-2005).
2005-08-30	EGN Consortium	<ul style="list-style-type: none"> - Establishment of the EuroGeoNames Consortium
2005-09-30	Early Meeting on the preliminary business model for EGN Frankfurt am Main, BKG <i>(Ad-hoc group on business model, i.e. Consortium members foreseen for the business model development)</i>	<ul style="list-style-type: none"> - Assessment of the market potential and evaluation of a preliminary business model and potential applications on the basis of the interview results with VARs, distributors, customers for GI-products and other GI stakeholders - Decision of the strategy on the architecture of hosting and operating the EGN service
2005-10-04	Kick-off meeting EGN Consortium Paris, EuroGeographics Head Office	<ul style="list-style-type: none"> - Report of the meeting of the Ad-hoc group on Business models - Discussion of draft proposal and on WPs - Consortium Agreement on the organization and assignment of the work.
2005-10-30	EGN Reference Group	<ul style="list-style-type: none"> - Establishment of the EGN Reference Group (5 to 10 countries). - The EGN Reference Group will make accessible its geographical names data (at 1:250 000 scale or larger) to the EGN project. - Signature of the 'Declaration of Participation'
2005-10-30	EGN Group of Interest	<ul style="list-style-type: none"> - Establishment of the EGN Group of Interest. Members shall be GI stakeholders, in particular, product providers who offer software and related systems, and service providers who offer system development for geoportals and GIS, database development operations support, and consulting services or organisations. - This group will join, comment and shape the project activities from the beginning. - Signature of the 'Declaration of Interest'
2005-11-11 (expected)	Deadline for Call for Proposals	<ul style="list-style-type: none"> - The deadline for receipt of proposals by the Commission
2005-12-30 (expected)	Acceptance of the EGN proposal	<ul style="list-style-type: none"> - Start of negotiations with the EC

X	Start of funding	<ul style="list-style-type: none"> - Contract Project Co-ordinator and the EC - Start of the actions proposed in the project proposal
X + 1 month	Risk analysis	<ul style="list-style-type: none"> - Elaboration of criteria and critical success factors to be used for the assessment and evaluation of the project
X + 3 months	First Joint Meeting Consortium & Reference Group	<ul style="list-style-type: none"> - Exchange of knowledge, requirements for the data, etc. - Further meetings have to be organized due to the requirements/needs within the project
X + 5 months	Early stage Workshop Consortium & Group of Interest	<ul style="list-style-type: none"> - Exchange of knowledge - Definition of user requirements
X + 5 months	Data selection	<ul style="list-style-type: none"> - Start actions for defining criteria for the data selection - Contacting the Reference Group members for clarifications
X + 7 months	Draft Business model/marketing concept	<ul style="list-style-type: none"> - Definition of a draft business model/marketing concept for EGN based on user requirements, which have to be determined within the project
X + 15 months	Prototype for EGN service	<ul style="list-style-type: none"> - Creation of the prototype for EGN service, including the development of test interfaces
X + 15 months	Test environment Implementation	<ul style="list-style-type: none"> - Implementation and test of the EGN service prototype and interfaces
X + 15 months	Business model/marketing concept for	<ul style="list-style-type: none"> - Determination of the business model/marketing concept for EGN
X + 20 months	Web GIS Application	<ul style="list-style-type: none"> - Design of the graphic user interface/Web GIS Application
X + 30 months	EGN Service Implementation	<ul style="list-style-type: none"> - Assisting the 5 to 10 countries in implementing the EGN service
X + Y months	Integration of remaining data	<ul style="list-style-type: none"> - Stimulation of further countries, not being part in the Reference Group, to connect their geographical names data to the EGN infrastructure

Appendix 1 – Short questionnaire

SI-EGN – Survey Inventory on European Geographical Names

Short questionnaire – You and your organization (Sections A and B)

Please, complete the attached **short questionnaire** and return it **until 20 October 2004** (by surface mail, e-mail or telefax) to:

Claude Luzet
EuroGeographics Head Office
6-8, Avenue Blaise Pascal
Cité Descartes, Champs-sur-Marne
F - 77455 Marne-la-Vallée Cedex 2, France
Facsimile: +33 (0)1 64 15 32 19
E-mail: claude.luzet@eurogeographics.org

(Please, complete the short questionnaire without using tabulators or unnecessary blanks!)

You (Section A)		
1	Please give your personal details (e.g. "Mr", "Ms", other title, e.g. "Dr"):	
2	Name:	
3	Surname:	
4	Telephone number:	
5	Fax number:	
6	E-mail address:	
7	Please indicate your current job title/position:	
Your organization (Section B)		
8	Name of Organization:	
9	Acronym of Organization:	
10	Address (street, number):	
11	Town/City:	
12	Postcode (or similar):	
13	State/Country (or similar):	
14	Your organization's e-mail address (if available):	
15	Web address: http://...	
16	In which area does your organization operate? (please fill in <u>any</u> which applies, e.g "cartography", "statistics", "hydrography", "geography", "transport", "regional planning", other (to be named))	
17	If the NMCA is <u>not</u> in charge of the keeping and maintaining of geographical names data or if these efforts are made together with other institutions/organizations, please name the respective ones. (The named institutions/organizations shall then also fill out a short questionnaire and return it to the address given above)	

Thank you very much for your input and consideration!

Appendix 2 – Detailed questionnaire

SI-EGN – Survey Inventory on European Geographical Names

Detailed questionnaire

Please, complete the attached **detailed questionnaire** and return it **before 15 March 2005** (by surface mail, e-mail or telefax) to:

Pier-Giorgio Zaccheddu
 Bundesamt für Kartographie und Geodäsie
 Richard-Strauss-Allee 11
 D – 60598 Frankfurt am Main, Germany
 Telephone: +49 (0)69 6333 305
 Facsimile: +49 (0)69 631490546 or 6333441
 E-mail: stagn@bkg.bund.de or pier.zaccheddu@bkg.bund.de

In case that we have not made our questions sufficiently clear, please do not hesitate to contact Mr Pier-Giorgio Zaccheddu in Frankfurt am Main.

Part I – Contact details		
(Please fill out, complete or confirm your personal details)		
I.1	You	
I.1.1	Please give your personal details (e.g. "Mr", "Ms", other title, e.g. "Dr"):	personal details
I.1.2	Given name:	
I.1.3	Surname:	
I.1.4	Telephone number:	
I.1.5	Fax number:	
I.1.6	E-mail address:	
I.1.7	Please indicate your current job title/position:	
I.2	Your organization	
I.2.1	Name of Organization:	
I.2.2	Acronym of Organization:	
I.2.3	Administrative hierarchy (e.g. national or regional or ...)	
I.2.4	Address (street, number):	
I.2.5	Town/City:	
I.2.6	Postcode (or similar):	
I.2.7	State/Country (or similar):	
I.2.8	Your organization's e-mail address (if available):	
I.2.9	Web address: http://...	

Part II – General overview		
II.1	Data availability	
II.1.1	Which scenario(s) in figure 1 are closest to the <u>current</u> situation in your <u>country</u> ? (Please, tick below the correct scenario)	
	<ul style="list-style-type: none"> In <u>one</u> digital <u>stand-alone</u> repository (register, gazetteer or database) e.g. as a Geographical Names Database – GNDB (case 1 in figure 1)? (possibly, one stand-alone database can be fed from other databases) 	<input type="checkbox"/>
	<ul style="list-style-type: none"> In <u>distributed</u> repositories (databases), e.g., some containing administrative units, others hydrographic features or other geographic features (case 2 in fig. 1)? 	<input type="checkbox"/>
	<ul style="list-style-type: none"> In <u>integrated</u> repositories (databases) in a geographic information systems, featuring different scales, which can be linked with other topographical data (case 3 in fig. 3)? 	<input type="checkbox"/>
	<ul style="list-style-type: none"> In an <u>analogue</u> repository (register/gazetteer in paper format) containing all/some feature categories (administrative units, populated places, hydrography, geographic areas/regions/landscapes, etc.)? (case not shown in figure 1) 	<input type="checkbox"/>
II.1.2	Which named feature categories are identified by your <u>organization</u> ? And to which scale are they related?	
	<ul style="list-style-type: none"> administrative division if so, at scale 1: 	
	<ul style="list-style-type: none"> populated place if so, at scale 1: 	
	<ul style="list-style-type: none"> hydrography if so, at scale 1: 	
	<ul style="list-style-type: none"> terrain feature/orography if so, at scale 1: (e.g. mountain(s)) 	
	<ul style="list-style-type: none"> transport (e.g. roads or waterways) if so, at scale 1: 	
	<ul style="list-style-type: none"> geographic area/region (e.g. forest) if so, at scale 1: 	
	<ul style="list-style-type: none"> other (specify, e.g. sea feature) 	
II.1.3	Is a <u>gazetteer</u> of all names available? In which format? (If YES, please indicate the scale to which content it is related)	
	<ul style="list-style-type: none"> Paper form if so, at scale 1: 	
	<ul style="list-style-type: none"> CD-ROM/DVD if so, at scale 1: 	
	<ul style="list-style-type: none"> On the web (by internet download) if so, at scale 1: 	
II.1.4	Is the whole gazetteer accessible for free? If not, at what costs is it accessible? (If it is accessible for free, please fill in 0 €)	
	<ul style="list-style-type: none"> Paper form 	€
	<ul style="list-style-type: none"> CD-ROM/DVD 	€
	<ul style="list-style-type: none"> On the web (by internet download) 	€
II.2	Quality	

II.2.1	If there is a standardization process for geographical names in your country, which institutions are involved in it? (Please, state the name(s))	
II.2.2	Have any (random or systematic) data quality checks been made? (Please describe briefly the nature of these checks for the named feature categories your organization is responsible for)	
	• on the completeness of the named features	
	• on the orthography	
	• on the completeness of the attribute information	
II.2.3	What is the frequency of <u>updating</u> geographical names information in the various feature categories? (e.g. continuously, monthly, yearly, other (to be named))	
	• administrative division	indicate the frequency of updating
	• populated place	indicate the frequency of updating
	• hydrography	indicate the frequency of updating
	• terrain feature/orography	indicate the frequency of updating
	• transport	indicate the frequency of updating
	• geographic area/region	indicate the frequency of updating
	• other (specify)	
II.3	Responsibility	
II.3.1	Which organisations <u>approve</u> the various geographical names in your country? Does this depend on the feature category? (e.g. a national names bureau, the national cadastral and mapping agencies, an academy of sciences, regional organizations (to be named), or another organization (to be named))	
	• administrative division (name the respective organization)	
	• populated place (name the respective organization)	
	• hydrography (name the respective organization)	
	• terrain feature/orography (name the respective organization)	
	• transport (name the respective organization)	
	• geographic area/region (name the respective organization)	
	• other (specify)	

II.3.2	Does an information service exist for helping those who access the geographical names data repository and for answering queries about it? (Please, state the name of the organization or department)	
II.3.3	Does your organization provide any data documentation (metadata), making it possible to find back possibly valuable information on the availability, accessibility, quality or responsibility for your geographical names data?	Please, indicate YES or NO
II.3.4	If you provide metadata, is it conform to one of the following standard: (Only in case you provide metadata, please indicate YES or NO!)	
	• ISO 19115	Please, indicate YES or NO
	• Dublin Core Metadata Initiative (DCMI)	Please, indicate YES or NO
	• Other (specify)	
Part III – Detailed questions		
III.1	Data availability	
III.1.1	What are the current <u>sources</u> of your geographical names data repository? (e.g. paper topographical map series at a specific scale, or a topographical database featuring different scales)	
	• topographic maps/files/databases, if so, at scale 1:	
	• hydrographic charts/files/databases, if so, at scale 1:	
	• files/databases of administrative units (indicate the type of the source)	
	• other (e.g. geological maps) (indicate the type of the source and its scale)	
III.1.2	What is the current <u>total</u> number of records contained in your geographical names data repository? • less than 50 000 • 50 001 - 100 000 • 100 001 - 250 000 • 250 001 - 1 million • >1 million	Please state the relevant number of records
III.1.3	If you have a <u>stand-alone</u> geographical names database, is that directly/physically linked with the topographic-cartographic data? (case 1 or 2 in figure 1) (Only in case you have a stand-alone database, please indicate YES or NO!)	Please indicate YES or NO
III.1.4	If a (official) topographic-cartographic database does exist in your country (case 3 in figure 1), can the geographical names data be derived from it	

	<p>as:</p> <p>(Only in case you have a topographic-cartographic database/repository, please indicate YES or NO!)</p> <ul style="list-style-type: none"> • a sorted extract (e.g. only hydrographic features)? • a complete gazetteer? 	<p>Please indicate YES or NO</p> <p>Please indicate YES or NO</p>
III.1.5	<p>Does your organization follow a specific classification for the feature categories?</p> <ul style="list-style-type: none"> • NATO classification (DIGEST FACC feature coding structure) • Another specific national feature coding structure (e.g. the ATKIS specification in Germany) <p>(Please enter the name of the document in which the feature categories your organization discerns are defined)</p>	<p>Please indicate YES or NO</p>
III.1.6	<p>Which <u>attribute information</u> is linked to the geographical name?</p> <p>(Please tick relevant box)</p> <ul style="list-style-type: none"> • Coordinates of the feature itself <input type="checkbox"/> • Coordinates for the name placement <input type="checkbox"/> • Feature/object category <input type="checkbox"/> • Feature/object ID <input type="checkbox"/> • Indicators for the map scales at which the feature is rendered <input type="checkbox"/> • Statistical classification (e.g. national and/or Eurostat NUTS levels of administrative divisions) (Please, state the name, if available) • Status of the name (e.g. official or non-official) <input type="checkbox"/> • Language of the name (referred to multi-lingual or minority language areas) <input type="checkbox"/> • Pronunciation (name phonetic notation, e.g. IPA or language specific notation) <input type="checkbox"/> • History of the name's development <input type="checkbox"/> • other (e.g. gender of the name and/or number of inhabitants of populated places, height of point objects) (Please, name the attribute information) 	
III.1.7	<p>What is the precision of the coordinates (geographical coordinates) for point features in the attribute information?</p> <ul style="list-style-type: none"> • degrees • minutes • 500 – 1000 m • 100 – 500 m • 50 – 100 m • 10 – 50 m • 5 – 10 m • 1 – 5 m • better than 1 m 	<p>Please state the precision</p>
III.2	Accessibility	

III.2.1	<p>Does your organization already offer a <u>WebService</u> for accessing your data via the Internet?</p> <p>(In case of having a WebService, please skip questions III.2.2 and III.2.3)</p>	Please indicate YES or NO
III.2.2	<p>What kind of <u>operating system</u> is in use for your hardware and software packages?</p> <p>(state the name <u>and</u> its version)</p> <ul style="list-style-type: none"> • MS Windows • UNIX • IBM • LINUX • Other (specify) 	
III.2.3	<p>If you are keeping a repository/database what type of <u>database package</u> is used for storing the data?</p> <p>(state the name <u>and</u> its version, e.g. <i>ORACLE 10g</i>)</p> <ul style="list-style-type: none"> • ORACLE • MS Access (Microsoft) • INFORMIX • SQL-Server (Microsoft) • Other (specify) 	
III.2.4	<p>In which standard <u>format</u> is the geographical names data accessible?</p> <p>(Please, state the name <u>and</u> its version)</p> <ul style="list-style-type: none"> • MS Word • MS Excel • ASCII • HTML • DXF (layers) • XML • ESRI formats (e.g ArcInfo-Coverage, ArcInfo-Shape, ArcInfo-Export) • IBM formats (e.g. IBM DB Spatial) • Intergraph formats (e.g Intergraph GeoMediaAccess, Intergraph FRAMME SEF) • MapInfo formats (e.g. MapInfo TAB) • ORACLE formats (e.g. Oracle Spatial Objects, Oracle Spatial Tables) • other format (Please, state the name(s) and <u>versions</u>) 	
III.2.5	<p>Which are the <u>languages</u> supported or what codepage is used by your operating system? Is it possible to get to all the names in a specific <u>character set</u> (font)?</p> <p>(Please indicate the codepage/character set and its version where applicable)</p> <ul style="list-style-type: none"> • National character set(s) (font) <p>(Please, state the name(s))</p>	

	<ul style="list-style-type: none"> • ISO 8859 – series <p>ISO 8859-1 Latin alphabet No.1 (Western European - Danish, Dutch, English, Faeroes, Finnish, French, German, Icelandic, Irish, Italian, Norwegian, Portuguese, Spanish and Swedish)</p> <p>ISO 8859-2 Latin alphabet No.2 (Eastern European - Albanian, Czech, English, German, Hungarian, Polish, Rumanian, Serbo-Croatian, Slovak and Slovene)</p> <p>ISO 88591-3 Latin alphabet No.3 (Southeastern European - Afrikaans, Catalan, Dutch, English, Esperanto, German, Italian, Maltese, Spanish and Turkish)</p> <p>ISO 88591-4 Latin alphabet No.4 (Danish, English, Estonian, Finnish, German, Greenlandic, Lappish, Latvian, Lithuanian, Norwegian and Swedish)</p> <p>ISO 88591-5 Latin/Cyrillic alphabet (English and Cyrillic-Based - Bulgarian, Byelorussian, English, Macedonian, Russian, Serbo-Croatian and Ukrainian)</p> <p>ISO 88591-6 Latin/Arabic alphabet (English and Arabic)</p> <p>ISO 88591-7 Latin/Greek alphabet (English and Greek)</p> <p>ISO 88591-8 Latin/Hebrew alphabet (English and Hebrew)</p> <p>ISO 88591-9 Latin alphabet No.5 (Western European and Turkish)</p> <p>ISO 88591-10 Latin alphabet No.6 (Danish, English, Estonian, Faeroes, Finnish, German, Greenlandic, Lappish, Latvian, Lithuanian, Norwegian and Swedish)</p> <p>ISO 88591-13 Latin alphabet No.7</p> <p>ISO 88591-14 Latin alphabet No.8</p> <p>ISO 88591-15 Latin alphabet No.9</p> <p>(Please, state the name(s))</p>	<p>Please, state the name</p>
	<ul style="list-style-type: none"> • Adobe series <p>Adobe ISOLatin1Encoding, Adobe Standard Encoding</p> <p>(Please, state the name(s))</p>	<p>Please, state the name</p>
	<ul style="list-style-type: none"> • Microsoft Windows Codepage(s) 1250 - 1257 <p>1250 (EE), 1251 (Cyril), 1252 (ANSI), 1253 (Greek), 1254 (Turk), 1255 (Hebr), 1257 (BaltRim)</p> <p>(Please, state the name(s))</p>	<p>Please, state the name</p>
	<ul style="list-style-type: none"> • MS-DOS Codepage(s) <p>cp737 (Greek IBM PC defacto Standard), cp775 (BaltRim), cp850 (Multilingual Latin1), cp852 (Multilingual Latin 2), cp853 (Multilingual Latin 3), cp857 (Multilingual Latin5), cp860 (Portugal), cp861 (Iceland), cp862 (Israel), cp865 (Norway), cp866 (Russia), cp869 (Greece)</p> <p>(Please, state the name(s))</p>	<p>Please, state the name</p>
	<ul style="list-style-type: none"> • ISO/IEC 10646 – Unicode (implementation of ISO/IEC 10646) <p>The Unicode Standard has been adopted by such industry leaders as Apple, HP, IBM, JustSystem, Microsoft, Oracle, SAP, Sun, Sybase, Unisys and many others. Unicode is required by modern standards such as XML, Java, ECMAScript (JavaScript), LDAP, CORBA 3.0, WML, etc., and is the official way to implement ISO/IEC 10646. It is supported in many operating systems, all modern browsers, and many other products. The emergence of the Unicode Standard, and the availability of tools supporting it, are among the most significant recent global software technology trends.</p> <p>E.g., if you have Microsoft Office 2000, you can get the <i>Arial Unicode MS</i> font, which currently is the most complete.</p> <p>Although the Unicode Standard has been adopted by several industry leaders there are still display problems for some of the translations, particularly with complex scripts such as Arabic or Russian, depending on the level of Unicode support in the Internet browser which is used and whether or not the necessary fonts have been installed.</p>	<p>Please indicate YES or NO</p>
	<ul style="list-style-type: none"> • other (e.g. for Apple/MacIntosh) (Please, state the name(s)) 	
<p>III.2.6</p>	<p>If your organization already has a <u>WebService</u>, what kind of standards/pre-standards etc. are being used for the data provision (client/server communication)? (Please tick relevant box)</p> <ul style="list-style-type: none"> • Z39.50 <input type="checkbox"/> • OGC WMS <input type="checkbox"/> • OGC WFS <input type="checkbox"/> • XML/SOAP <input type="checkbox"/> • CS-W 2.0 (new OGC Catalogue Service) <input type="checkbox"/> • other (Please, state the name) 	

III.2.7	<p>Does your Webservice already offer <u>search options</u>?</p> <p>Is it possible to search by: (Please tick relevant box)</p> <ul style="list-style-type: none"> • complete names <input type="checkbox"/> • letter combinations (e.g. partial names or wildcards) <input type="checkbox"/> • coordinates/bounding box <input type="checkbox"/> • name categories (e.g. all names of hydrographic features) <input type="checkbox"/> • combinations (e.g. all water names for objects above 200m) <input type="checkbox"/> • other (Please, state the name(s)) 	
III.2.8	<p>Do you think that it would be helpful to start your search for a foreign geographical feature by entering its name in the language of your country?</p> <p>Example: a German could prefer to start his search by entering the German name "Prag" (German exonym) instead of the Czech name "Praha" (endonym)</p>	Please indicate YES or NO
III.2.9	<p>Is there a names list of selected foreign geographical features in the language of your country available (list of exonyms)?</p>	Please indicate YES or NO
IV – Questions related to the the future EuroGeoNames project		
IV.1	<p>Which of the following categories (commercial or government) do you consider to be likely potential users of European geographical names data?</p> <p>(Please, tick the relevant boxes)</p> <ul style="list-style-type: none"> • emergency services; health and safety <input type="checkbox"/> • border crossing routing; transport and delivery service networks <input type="checkbox"/> • hotel reservation services; tourism <input type="checkbox"/> • private sector map and atlas producers <input type="checkbox"/> • educational establishments, libraries <input type="checkbox"/> • mass media (broadcast, TV) <input type="checkbox"/> • location based services (LBS) <input type="checkbox"/> <p>Many people are familiar with wireless Internet, but many don't realize the value and potential to make information services highly personalized. One of the best ways to personalize information services is to enable them to be location based. An example would be someone using their mobilephone to search for a restaurant. The LBS application would interact with other location technology components to determine the user's location and provide a list of restaurants within a certain proximity to the mobile user.</p> • other (Please, specify the category)	
IV.2	<p>Do you think that an improvement of the current set-up of your geographical names data repository and its accessibility is necessary to satisfy the potential user categories mentioned?</p>	

	(indicate YES or NO; if NO please explain them briefly)	
IV.3	<p>Are there any plans for changing the data (structure), the functionality of the data access, the current way/the responsibility of maintaining the data?</p> <p>(indicate YES or NO; if YES please explain briefly)</p>	
IV.4	<p>Does the idea of such a Europe-wide geographical names data network appeal to your organization?</p> <p>(indicate YES or NO; if NO please explain your choice briefly)</p>	
IV.5	<p>Would you allow EuroGeoNames (EGN) to use extracts of your repository/database during a test phase?</p> <p>(indicate YES or NO; if NO please explain your choice briefly)</p>	
IV.6	<p>In principle, would your organization cooperate and link its repository to such a joint Europe-wide geographical names data network via a single access point (EU Internet portal) and thus be part of a pan-European names database? (This portal would still refer to you as data provider for the data delivery)</p> <p>(indicate YES or NO; if NO please explain your choice briefly)</p>	
IV.7	<p>If your organization is to cooperate in the EuroGeoNames project, you might need to state some conditions concerning the accessibility of your geographical names data.</p>	
	<ul style="list-style-type: none"> • For individual name searches could access be free of charge? <p>(indicate YES or NO; if NO please explain your choice briefly)</p>	
	<ul style="list-style-type: none"> • For downloading multiple name data sets, which appears most appropriate from your perspective? 	
	<ul style="list-style-type: none"> - Free of charge 	<input type="checkbox"/>
	<ul style="list-style-type: none"> - At nominal charge 	<input type="checkbox"/>
	<ul style="list-style-type: none"> - With a reasonable profit margin 	<input type="checkbox"/>
<ul style="list-style-type: none"> - Other (please explain) 		

IV.8	At this time, what other concerns do you have about your geographical names data also being part of the EuroGeoNames network?	
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Thank you very much for your input and consideration!

Appendix 3 – Interview form for value added resellers, distributors and customers .

SI-EGN – Survey Inventory on European Geographical Names

Interview form for Value Added Resellers (VARs) and distributors

Please, complete the attached **interview form** and return it (by surface mail, e-mail or telefax) to:

Pier-Giorgio Zaccheddu
 Bundesamt für Kartographie und Geodäsie
 Richard-Strauss-Allee 11
 D – 60598 Frankfurt am Main, Germany
 Telephone: +49 (0)69 6333 305
 Facsimile: +49 (0)69 631490546 or 6333441
 E-mail: pier.zaccheddu@bkg.bund.de

In case that we have not made our questions sufficiently clear, please do not hesitate to contact Mr Pier-Giorgio Zaccheddu in Frankfurt am Main.

Part I – Contact details		
(Please fill out, complete or confirm your personal details)		
I.1	You	
I.1.1	Please give your personal details (e.g. "Mr", "Ms", other title, e.g. "Dr"):	personal details
I.1.2	Given name:	
I.1.3	Surname:	
I.1.4	Telephone number:	
I.1.5	Fax number:	
I.1.6	E-mail address:	
I.1.7	Please indicate your current job title/position:	
I.2	Your organization	
I.2.1	Name of Organization:	
I.2.2	Address (street, number):	
I.2.3	Town/City:	
I.2.4	Postcode (or similar):	
I.2.5	State/Country (or similar):	
I.2.6	Your organization's e-mail address (if available):	
I.2.7	Web address: http://...	
Part II – Questions related to the future EuroGeoNames project		
II.1	Does the idea of such a Europe-wide geographical names data network appeal to your organization? (indicate YES or NO; if NO please explain your choice briefly)	

II.2	<p>Do you consider such comprehensive European geographical names data to be likely useful for <u>your products</u>?</p> <p>(indicate YES or NO; if YES please explain briefly)</p>	
II.3	<p>In general, which of the following categories (commercial or government) do you consider to be likely <u>potential users</u> of such a European geographical names data network?</p> <p>(Please, tick the relevant boxes)</p> <ul style="list-style-type: none"> • emergency services; health and safety <input type="checkbox"/> • border crossing routing; transport and delivery service networks <input type="checkbox"/> • cross border market analysis & asset management <input type="checkbox"/> • hotel reservation services; tourism <input type="checkbox"/> • private sector map and atlas producers <input type="checkbox"/> • educational establishments, libraries <input type="checkbox"/> • mass media (broadcast, TV) <input type="checkbox"/> • location based services (LBS) <input type="checkbox"/> <p><small>Many people are familiar with wireless Internet, but many don't realize the value and potential to make information services highly personalized. One of the best ways to personalize information services is to enable them to be location based. An example would be someone using its mobilephone to search for a restaurant. The LBS application would interact with other location technology components to determine the user's location and provide a list of restaurants within a certain proximity to the mobile user.</small></p> <ul style="list-style-type: none"> • other (Please, specify the category) <input type="checkbox"/> 	
II.4	<p>Have there been any <u>requests</u> for geographical names data addressed to your organization from potential users mentioned (or others), aimed at a wider use?</p> <p>(indicate YES or NO; if YES please describe them briefly)</p>	
II.5	<p>If you should evaluate and assess the market potential for such a European geographical names data network, what kind of <u>business cases</u> could you describe?</p> <p>(Please describe them briefly)</p>	
II.6	<p>Generally, geographical names information is available in various feature/object categories like <i>administrative division, populated place, hydrography, terrain feature/orography, transport or geographic area/region</i>.</p> <p>However, the current set-up of these data in Europe is incomplete, i.e. the respective databases have not yet been populated with all geographic features mentioned.</p> <p>Regardless the incompleteness, the following</p>	

	<p>geographical names data components shall be provided <u>mandatory</u> for the envisaged EGN service by the countries, based on their existing data collections:</p> <ul style="list-style-type: none"> - official geographical name, - coordinates of the object, - unique object ID, - object class, - resolution, scale. <p>Accordingly, which of the following toponymic attributes do you consider to be <u>additionally</u> attractive for the envisaged EGN service and/or for your products?</p> <p style="text-align: right;">(Please, tick the relevant boxes)</p>	
	<ul style="list-style-type: none"> • full title of geographical name (i.e. without abbreviations) 	<input type="checkbox"/>
	<ul style="list-style-type: none"> • exonyms 	<input type="checkbox"/>
	<ul style="list-style-type: none"> • pronunciation 	<input type="checkbox"/>
	<ul style="list-style-type: none"> • gender 	<input type="checkbox"/>
	<ul style="list-style-type: none"> • language/script 	<input type="checkbox"/>
	<ul style="list-style-type: none"> • synonyms and/or non-official names forms 	<input type="checkbox"/>
	<ul style="list-style-type: none"> • historical names 	<input type="checkbox"/>
	<ul style="list-style-type: none"> • other (specify) 	
II.7	<p>Do you consider it useful to link the geographical names data mentioned in question II.6 (mandatory and additional data) via a so-called Semantic Network Service (SNS, access of web services to a shared ontology and automated indexing) to further spatially related information, as e.g.:</p> <ul style="list-style-type: none"> - general geographic information (e.g. by geo-thesauri or description narrative), - weather information, - printed news, - tourist information - etc. <p style="text-align: right;">(indicate YES or NO and please describe your choice briefly)</p>	
II.8	<p>In principle, would your organization support/advocate such a Europe-wide geographical names data network via an Internet portal?</p> <p>(This portal shall still refer to the national data providers for the data delivery!)</p> <p style="text-align: right;">(indicate YES or NO; if NO please explain your choice briefly)</p>	
II.9	<p>Would your organization like to cooperate to such a joint Europe-wide geographical names data network?</p> <p style="text-align: right;">(indicate YES or NO; if YES please describe your conditions under which you would cooperate)</p>	

	<ul style="list-style-type: none"> • By contributing to the evaluation and assessment of the market potential for EuroGeoNames, e.g by developing a business model? 	
	<ul style="list-style-type: none"> • By contributing to the design of the project proposal to the EC, e.g. by co-operating in the development of guidelines/specifications? (project proposal to the EC is to be submitted 2005/2006) 	
	<ul style="list-style-type: none"> • By giving expertise to the technical set-up of EuroGeoNames, e.g. by co-operating in the creation of a prototype for the EGN service? 	
	<ul style="list-style-type: none"> • By operating and maintaining the Internet service (including the licensing of the data) 	
	<ul style="list-style-type: none"> • By giving even financial support to the set-up of EuroGeoNames? 	
	<ul style="list-style-type: none"> • other (specify) 	
II.10	<p>What kind of conditions concerning the accessibility of the geographical names data would you likely advocate?</p>	
	<ul style="list-style-type: none"> • For individual name searches should access be free of charge? (indicate YES or NO; if NO please explain your choice briefly) 	
	<ul style="list-style-type: none"> • For downloading multiple name data sets, which appears most appropriate from your perspective? 	
	- free of charge	<input type="checkbox"/>
	- at nominal charge	<input type="checkbox"/>
	- with a reasonable profit margin	<input type="checkbox"/>
	- other (please explain)	
II.11	<p>At this time, what other ideas, suggestions or even concerns do you have about the EuroGeoNames project?</p>	

Thank you very much for your input and consideration!

Appendix 4 – Awareness and dissemination

One objective for the survey/inventory was to increase awareness and raise interest in the future EuroGeoNames project. This has been done by the use of several media:

- (1) Planning and preparing presentations (e.g. Power Point presentations) of the project at national and international conferences
- (2) Creating and maintaining a website for keeping informed the EU countries/European NMCAAs about the survey/inventory
- (3) Dissemination and publication of information to Geographic information stakeholders in order to obtain positive commitments/statements with regard to the future EGN projects

With regard to (1)

Presentations on the planned EuroGeoNames project were given at the following events:

- 22nd session of the United Nations Group of Experts on Geographical Names (UNGEGN), held at the UN Headquarters in New York, USA, April 20 – 29 2004
- EuroSpec Programme Management Team (EPMT) 8 and interproject meetings, Paris, France, February 15 – 17 2005
- GeoNames 2005: Conference on Minority names/indigenous names and multilingual areas, Ljouwert/Leeuwarden, Frisia, the Netherlands, April 15 –16 2005
- United Nations Group of Experts on Geographical Names, Meeting of the Working Group on Exonyms, Ljubljana, Slovenia, May 19 – 21 2005
- 11th EC GI & GIS Workshop – ESDI: Setting the Framework, Alghero, Italy, June 29 – July 1 2005
- XXII International Cartographic Conference (ICC2005), A Coruña, Spain, July 11 – 16 2005
- Twenty-second Congress of Onomastic Sciences (ICOS XXII), Pisa, Italy, August 28 – September 4 2005

With regard to (2)

Further information about the status of the survey/inventory as well as of the vision of the aspired EuroGeoNames project can be obtained from the EuroGeoNames website, which was created as part of the EuroGeographics website:

EuroGeoNames

EuroGeoNames (EGN) is a vision of a distributed multi-lingual geographical names data network for Europe.

It will ultimately be a multi-lingual Internet service linking official geographical names sources across Europe. Access will be provided equally for all official European languages including the officially recognized minority languages.

BKG together with other National Mapping and Cadastral Agencies (NMCAs), **Eurogeographics** Head Office (EGHO) and **ESRI** Germany submitted a proposal to the current eContent Programme aiming at a Survey/ Inventory on European Geographical Names data (SI-EGN). It shall investigate the availability, quality, accessibility and responsibility for national official geographical names databases and similar public data sources.

SI-EGN is the prerequisite for setting up the EuroGeoNames project (EGN).

Status
At the end of March, a questionnaire/interview has been sent to all the value added resellers and customers of EuroGeographics, aiming at getting a clear understanding of the needs and requirements for the multi-lingual Internet service of geographical names in Europe.
VARs and customers are encouraged to work together with the existing project partners to prepare a strong business case for this service, a prerequisite to get funding from the eContent programme of the European Commission.

Projects Overview
The EuroSpec Programme
EuroRoadS
RISE
EuroGeoNames
Overview
Workplan
Downloads
Contacts
EuroBoundaries
Pricing & Licensing
EuroMapFinder - Metadata
EuroRegionalMap
EuroGlobalMap
SABE
Archived projects

Search our site:

EuroGeographics website: http://www.eurogeographics.org/eng/03_projects_EuroGeoNames.asp

With regard to (3)

Statement by ESRI Geoinformatik GmbH (Head Office), Germany, on the commercial utilization of the future EGN data network

Value-adding chain

A European wide, multilingual and seamless dataset will provide an excellent Database for an enormous market. Especially the multilingual aspect will be a unique one in Europe and worldwide. EGN will allow spatial searches via exonyms, toponyms. Therefore EGN will be part of almost all National European Geo-Portals as a central entry point to geocoded information via exonyms.

Such a network is hardly a product itself; it will be a value adding part for great many different processes and application such as:

- Surveying Processes (Traditional use of Name Databases)
- Map Production (Traditional use of Name Databases)
- Geo-Portals (Entry Point via Exonym)
- Tourist Industry (POI: Points of Interests; ROI: Region of Interests)
- LBS (Location Based Services)
- Gazetteer Services
- Car Navigation (POI: Points of Interests; ROI: Region of Interests)
- And many more...

(ESRI Geoinformatik GmbH, Head Office, Germany)

Statement by Ed. Hoelzel Ltd., a cartographic publishing house, Austria, on the commercial utilization of the future EGN data network

Ed. Hoelzel Ltd. is a map publishing house whose main focus of activities has until now been the educational sector. Having recently placed on the market the new products of the euromap series (atlases, road maps, street plans/city maps) our company now also serves the needs of the European tourism business and travel industries.

Ed. Hoelzel Ltd. have their own data base containing ca 2 million entries of world-wide geographical names data collected from different sources. This database is also used editorially for our cartographic products and in our New Media product range as well as in cooperation with encyclopaedia editors.

Therefore, we recognize in the possibility of getting access to upgraded or officially approved names data files also a considerable economic potential as well as an improved competitiveness for the benefit of the European suppliers, as compared with the market supply of similar products mainly of American origin.

(Ed. Hoelzel Ltd., Austria)

UN Press Release on the Twenty-second session of the United Nations Group of Experts on Geographical Names (UNGEGN) – UN Headquarters, New York, 20 – 29 April 2004

The following UN Press Release of April 29, on the 22nd session of the UNGEGN, was published on the UN web page (<http://www.un.org/apps/news/>):

The screenshot shows the UN News Centre website interface. At the top, there are navigation links for 'UN HOMEPAGE', 'UN System Links | Main UN Bodies | Secretary-General', and the 'UN News service' logo. The main content area features a headline: 'Experts on standardizing place names wrap up meeting at UN'. Below the headline is a date '29 April 2004' and a short summary: 'A United Nations expert group on standardizing the way place names are spelt and pronounced, both locally and by the world at-large, wrapped up its latest session today at UN Headquarters in New York.' A larger paragraph follows: 'With harmonized place names becoming an essential element of international communication, nearly 200 experts met for the past eight days during the 22nd session of the UN Group of Experts on Geographical Names (UNGEGN). One initiative to emerge from this year's session was the formation by African countries of a Task Team, headed by representatives from Ghana, Algeria and South Africa, to rally support for the establishment of domestic names committees and accelerate the standardization of geographical names on the continent.' A red rectangular box highlights the following paragraph: 'A German proposal seeking to combine national data stocks of officially approved geographical names from each of the European Union member countries into a European geographical names network, to be called EuroGeoNames, was also announced.' Below this, another paragraph states: 'UNGEGN first convened in 1960 to encourage the consistent use of place names through international collaboration, the wider use of nationally authorized names and the development of guidelines, digital place name databases and training programmes. Its next session is scheduled to take place in 2006 in Vienna.'

UN web page:<http://www.un.org/apps/news/> , press releases under item "Culture and Education"

Res VIII/6 Integration of Geographical Names Data into National and Regional Spatial Data Infrastructures

The Conference,

Emphasizing that standardized geographical names information is a crucial component for an efficient development of national economies in all countries;

Recalling that the 15th UN Regional Cartographic Conference of Asia & the Pacific (2000) recognized the promotion of national and regional geographical names standardization programmes;

Recalling further that the 7th UN Regional Cartographic Conference of the Americas (2001) recognized the importance of standardized and consistent geographical names as a fundamental data set of national and regional spatial data infrastructures;

Noting that geographical names serve as a common access to geoinformation and spatial data infrastructures;

Recommends that standardized geographical names data should be considered in the establishment of national and regional spatial data infrastructures and included in their constructions.

(Eighth United Nations Conference on the Standardization of Geographical Names, Berlin 2002)

Appendix 5 – List of acronyms

BKG	Federal Agency for Cartography and Geodesy (Frankfurt, Germany)
EGHO	EuroGeographics Head Office (IGN, Marne la Vallée, France)
SI-EGN	Survey/Inventory of European Geographical Names
EGM	EuroGlobalMap
EGN	EuroGeoNames project
ERM	EuroRegionalMap
ESDI	European Spatial Data Infrastructure
INSPIRE	Infrastructure for Spatial Information in Europe
NMCA	National Mapping and Cadastral Agencies
SABE	Seamless Administrative Boundaries of Europe
UNGEGN	United Nations Group of Experts on Geographical Names
UU	Utrecht University