

EUROpean ADdresses INFrastructure

- EURADIN -

Abstract

INSPIRE Directive lays down general rules for the establishment of an infrastructure for spatial information in Europe, based on Spatial Data Infrastructures created by the Member States and that are made compatible and interoperable. Addresses are part of Annex I of INSPIRE, and will therefore be part of the aforementioned European Spatial Data Infrastructures.

Formally, addresses serve several purposes, and the NEN5825:2002 describes 4 functions for addresses: Location function (e.g. for the delivery of mail), Identification function (e.g. in context of a building registration), Jurisdiction function (e.g. which authorities are responsible for object attached to address) and Sorting and ordering function.

Due to the important functions they are used for, over the last decade it has become commonly acknowledged that good address systems constitute a very important part of a society's infrastructure. A good address system and the availability of high quality address data is for the benefit of:

- **Governance:** Addresses are used to link to many sources of administrative information, which can be related to a location via addresses, so addresses link and overlap with other themes such as buildings, cadastral parcels, transport, administrative units... all of them of very high importance for public administrations (and also for other organizations).
- **Business:** The address is the primary navigation tool and therefore it has a very high potential economic value. Evidence of this is provided by Location Based Services (LBS) which are growing rapidly in importance using addresses as a key geographic information attribute. Marketing, insurance, property, banking, indeed every major sector of the economy, requires high quality addresses to operate fully effectively; the importance of property addresses is increasing exponentially as a means of providing information connectivity on the Web.
- **Citizens:** addresses are every day used as a common language, which gives the human user a simple and clear understanding of the spatial context of the information in question, therefore addresses are an important part of society in the widest concept.

Ideally, an Addresses Infrastructure (with a regional, national, European or global coverage) should allow accessing all the existing addresses via a central access point (this does not imply that all the addresses should be centralized but that the access to all addresses could be done via single central hub), and the addresses data should be adequately actualized and of course geo-referenced.

Given the self-evident importance of an Addresses Infrastructure as a useful tool for public and private services, it is logical to expect the European Union should have an adequate European Address Infrastructure allowing the access in a seamless and interoperable way to all the existing European Addresses for all the potential users. Following the INSPIRE directive philosophy; we believe that this European Addresses Infrastructure should be based on those existing national addresses Infrastructures distributed across Europe.

At this moment, nothing that could be considered as a European Address Infrastructure exists. From a European point of view, the lack of harmonization regarding European addresses definition, registration and access, prevents a European Addresses Infrastructure from being built, which consequently means that addresses cannot be adequately and extensively used, shared and exploited by European public and private sector.

EURADIN (European Addresses Infrastructure) aims at constituting a Best Practice Network to promote the European Addresses harmonization. The emphasis will be put in defining how access to existing address data should be made to ensure the interoperability of existing address data and working out a strategy on how to build up access services to national or regional addresses infrastructures. The project main result will be the proposal for the European addresses Infrastructure and the implementation, testing, and validation of a pilot European Addresses Infrastructure. The results shall be used as a reference for all European Member States to fulfil the INSPIRE recommendations with respect to addresses.

The general objective of EURADIN is to significantly contribute to harmonizing the European Addresses, proposing a solution to achieve their interoperability, and thus facilitating the effective access, reuse and exploitation of that content, which will promote the creation of new added value products and services across Europe.

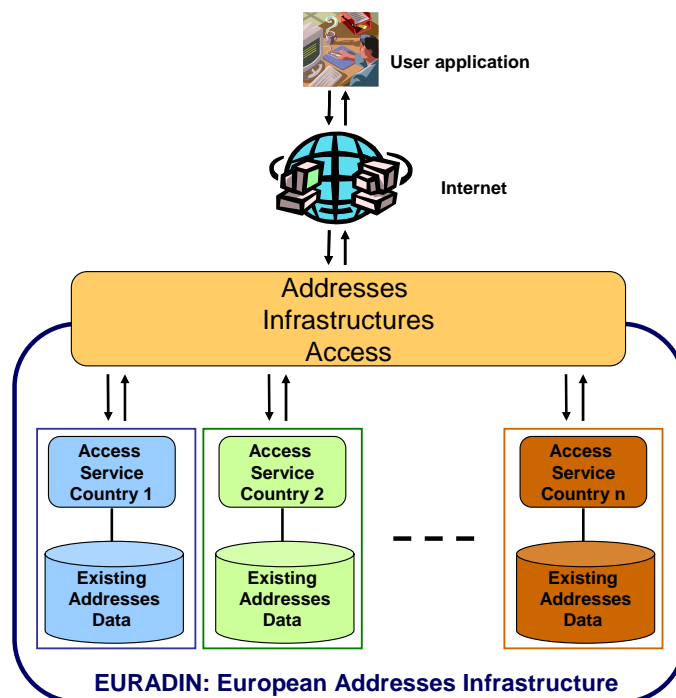


Figure: Proposed European Addresses Infrastructure Model

The project will be divided in 2 main phases: A first “Consensus Building Phase” followed by a “Practical Implementation and Validation” phase.

During the first phase (consensus building) the project will accurately study and assess the situation of all the European countries regarding addresses, making also the selection and synthesis of the best practices detected in order to take advantage of them. This project contains the most important European stakeholders regarding addresses, including the most advanced countries and regions with regards to addresses, which ensures the success in this phase. Based on the conclusions obtained in this study, and

also in the study of the user requirements (both public sector and private sector users) and the INSPIRE requirements and recommendations, **it will deliver the necessary specifications to achieve the harmonization of the European Addresses** (always focused on the access to the data). These specifications will cover:

- Data and Metadata
- Data Flow and other procedures.
- The business model (social and economical benefits)

After the consensus building phase, the “Implementation phase” of the project will validate the results obtained from the first phase by the implementation of a concrete application, a European Gazetteer Service, implemented by some of the partners participating in the project. A gazetteer is an application profile of the web feature service offering georeferences of places or names by using standard web operations (a gazetteer is a geocoder for objects like house addresses). The Gazetteer Service (GazS) will operate in a cascade including the centralized or decentralized databases of the participants.

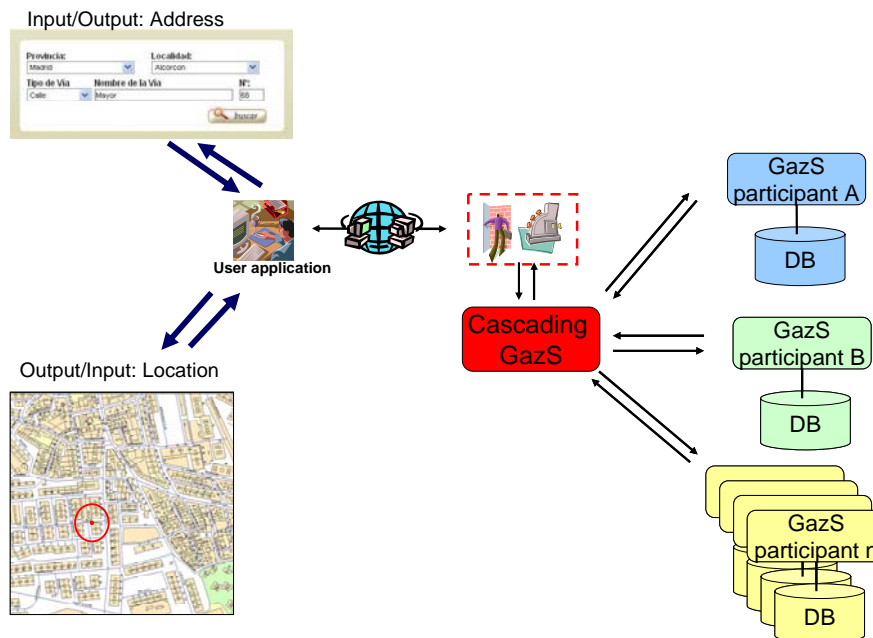


Figure: Proposed European Gazetteer service to be developed

This European Gazetteer service will provide access to European addresses spread across Europe and coming from different European addresses systems. Several nodes will be built by different partners giving access to their addresses infrastructures, therefore providing the gazetteer service over their regional or national addresses systems, so the proposed European Gazetteer service will serve as the European Addresses Infrastructure.

The project partnership gathers 30 partners from 16 different European countries which mean that the 59% of the European Union members are directly represented in the consortium. The partners involved in the project are the main European stakeholders and experts in the addresses topic, being the core of EURADIN consortium several public organizations (regional governments, national mapping agencies, national cadastral offices...etc) of those European countries that have already developed some work (at least at a regional or national level) in order to achieve the harmonization of their regional or national addresses and address systems. The complementarity of the

partnership has been achieved not only from the point of view of the European coverage but also from the point of view of the expertise.

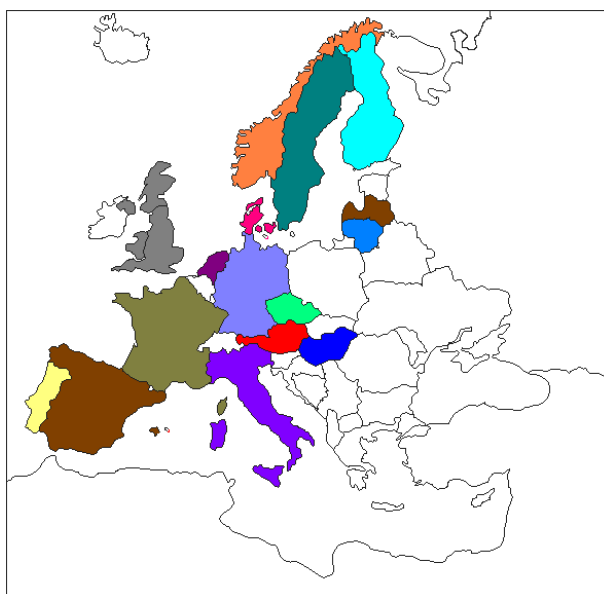


Figure: European coverage of partnership

The project will be considered successfully if the results achieved would be used as a reference for all European Member States to fulfil the INSPIRE recommendations with respect to addresses.

LIST OF PARTNERS

Partic. No	Participant Legal name and short name	Country	Role in the project
1	Gobierno de Navarra (GN)	ES	Content provider + Public sector user
2	Trabajos Catastrales S.A. (TRACASA)	ES	User + Technology provider
3	Centro Nacional de Información Geográfica/- National Geographic Information Centre (CNIG/IGN)	ES	Content provider + Public sector user
4	Institut Cartogràfic Valencia (ICV)	ES	Content provider + Public sector user
5	Bezirksregierung Köln, Abteilung 7 GEObasis.nrw (BR Köln- GEObasis)	DE	Content provider + Public sector user + Technology provider
6	Danish Enterprise and Construction Authority (DECA)	DK	Content provider + Public sector user
7	Gontmij Carl Bro (GMCG)	DK	Private sector User + Technology provider
8	Regione Piemonte (RP)	IT	Content provider + Public sector user
9	Regione Lombardia (RLB)	IT	Content provider + Public sector user
10	Statens Kartverk (NorMCA)	NO	Content provider + Public sector user + Technology provider
11	Lantmäteriverket(NLS)	SE	Content provider + Public sector user
12	Population Register Centre Finland (PRC)	FI	Content provider + Public sector user

13	Výzkumný ústav geodetický, topografický a kartografický, v.v.i. (VÚGTK)	CZ	Content provider + Public sector user + Technology provider
14	Instituto Geográfico Português (IGP)	PT	Content provider + Public sector user
15	Dienst voor het kadaster en de Openbare Registers (KADASTER Netherlands)	NL	Content provider + Public sector user
16	Bundesamt fuer Eich- und Vermessungswesen (BEV)	AT	Content provider + Public sector user
17	Intelligent Addressing (IA)	UK	Content provider + Public sector user + Technology provider
18	Institut Géographique National - France(IGNF)	FR	Content provider + Public sector user
19	State Land Service of the republic of Latvia (SLS)	LV	Content provider + Public sector user
20	Stichting EUROGI (EUROGI)	NL	Networking and dissemination facilitator
21	NAVTEQ B.V. (NAVTEQ)	NL	Content provider + Private sector User
22	INTERGRAPH España S.A (INTERGRAPH)	IT	Private sector user + Technology provider
23	TELEFONICA soluciones de Comunicación e Informática S.A.U. (TELEFONICA)	ES	Private sector user + Technology provider
24	CSI Piemonte (CSI)	IT	Technology Provider
25	State Enterprise Centre of Registers (SECR)	LT	Content provider + Public sector user
26	Institute of Geodesy, Cartography and Remote Sensing (FÖMI)	HU	Content provider + Public sector user
27	GeoX Térinformatikai Kft. (GEOX)	HU	Private sector user + Technology provider
28	Faculdade de Ciências e Tecnologia/ Universidade Nova de Lisboa (FCT/UNL)	PT	Technical advisor for Portuguese partnership
29	Dirección General del Catastro - Spanish Directorate General for Cadastre (SDGC)	ES	Content provider + Public sector user
30	Regione Toscana (Toscana)	IT	Content provider + Public sector user

Some figures about EUROpean ADresses INFrastructure

Acronym: EURADIN

Starting Date: 1st June 2008

Finishing Date: 31st May 2010

N. Partners: 30

N. Countries: 16

Maximum EC Funding: 3.200.000 €

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