

EuroRoadS

– a Pan-European Road Data Solution





Photo: Agencja Europejska



Photo: Lars Palm

Need for European Road Data

A well-functioning digital road infrastructure on a pan-European level is a fundamental basis for further development within the areas of intelligent transport systems, mobility management, traffic management, road maintenance, traffic safety, environmental and society planning and many other areas. Europe lacks a standardised, seamless, updated and quality assured digital road data infrastructure today.

The handling of road data on a pan-European level is today characterised by a high level of fragmentation. The European countries have reached different stages of development when it comes to the establishment of homogenous national road data infrastructure that cover all roads and all kinds of road information.

Considerable resources are spent in Europe to develop more intelligent traffic systems in order to increase road traffic safety, improve the environment and make it easier for travellers. An obstacle to this development is the lack of a pan-European road data infrastructure of high quality. The EuroRoadS-project (Pan-European Road Data Solution) is intended to lay the ground for the creation of such an infrastructure.

Objectives

The main objective for the EuroRoadS-project is to build a platform for a European road data solution through a *specification framework* consisting of a road data structure, description of data content, data exchange mechanisms and *interoperability specifications*. The framework will be built on *identified user requirements* and tested through a *prototype*. A service provider will show that the data set can be used in applications and products. Finally the project will give long-term *recommendations on implementation and exploitation* aiming to support a rapid implementation of a harmonised road data solution and stimulate a widespread use of road data.

EuroRoadS will lay the ground for the creation of a pan-European standardised, seamless, updated and quality assured digital road data infrastructure built on identified user requirements.

User requirements & accesibility

The user requirements of up-to-date and quality-assured road data covering the whole of Europe will form the basis for the project. The introduction and penetration of many new applications are completely dependant on the accessibility of economically viable, up-to-date, and quality-assured road data. As the development of new applications rises, the demands for information increase – initially about coverage, correctness, data structure and quality.

EuroRoadS & INSPIRE

There is a clear link between EuroRoadS and the INSPIRE – Infrastructure for Spatial Information in Europe – initiative, which is a legal initiative of the European Commission that will address technical standards and protocols, organisational and co-ordination issues, data policy issues including data access and exchange of spatial information.

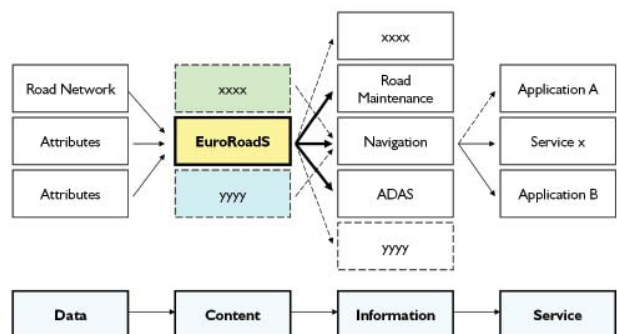
www.ec-gis.org/inspire/

EuroRoadS business and data refinement process

EuroRoadS will develop a specification framework, a quality model and architecture for the handling of core European road data. The handling of road data can be described as a business and data refinement process with four steps: *data, content, information and service*.

The figure describes the business and data refinement process, where the end user of data and services sits to the far right in the figure. Different content providers shall ideally be viewed as keepers of data of a certain domain or possibly also competing providers of data for the same domain.

EuroRoadS will focus on step two – content – but will also cover the other three steps in order to guarantee efficient specifications and technical solutions.



Key activities

The EuroRoadS-project will include the following key activities in order to reach the overall objectives:

1. Identify the business environment and the most common user groups of European road information and analyse their user requirements, as for road data structure, data content, update content and frequency, and needs concerning data access and data exchange.
2. Based on the findings of the first step, and analysis of existing standards and solutions within the area, develop a road data specification framework consisting of:
 - a road network information model,
 - a definition of core European road data,
 - a specification of a road network exchange model and format together with a meta-data catalogue,
 - a terminology catalogue.
3. Develop a prototype and carry out tests to show that the specification framework can be used as a platform for a European road data solution.
4. Develop a model for evaluation and quality control which will cover the entire information chain from provision of existing data through compilation of data according to the European road data specification framework to the establishment of different products and services.
5. Propose an implementing solution by addressing the supporting structures and mechanisms needed for the implementation of a harmonised European road data solution.
6. Develop a plan for exploitation in order to support a wide use of the European road data infrastructure and to facilitate services build on it.

Resources

EuroRoadS is a project funded by the European Commission DG Information Society via the eContent programme, which is a market oriented programme aiming to support the production, use and distribution of European digital content. The project is 50% funded by eContent, with a 3.7 million Euro budget. EuroRoadS started on the first of March 2004 and will be finished within 30 months.

In order to carry out the activities, and thereby making it possible to reach the objectives within the allotted budget and on time, the work has been divided into nine work packages. The work of each work package is led by one of the members of the consortium.

The project has three *reference groups* consisting of:

- CEDR – an organisation representing the national road administrations in Europe,
- EuroGeographics – an association of European National Mapping and Cadastral Agencies, and
- ERTICO – a Europe-wide, non profit, public/private partnership for the implementation of Intelligent Transport Systems and Services (ITS).

Expected results

By the end of the project, as a result of the project's activities, public and private road data key actors in Europe will have:

- exchanged experiences about – and raised awareness of today's problematic situation,
- created networks and build the basis for further co-operation,
- a common view on how to create a harmonised European road data solution,
- agreed on a specification framework built on user requirements (standard),
- tested and verified the framework (technique, process and organisation),
- agreed on an implementation and exploitation plan to be executed after the project has finished.



The European road information solution will be built and maintained taking full advantage of national road data solutions as well as existing standards. It will make national data available to the market in a harmonised and interoperable way.

The EuroRoadS project will contribute significantly by demonstrating how the important public sector road information can be harmonised and accessed on a pan-European level. This will open up information that to a great extent already exists in digital form and make a corner-stone for the production of both commercial and public value-added services. The result of the project will also contribute to the EC policy issues, such as the development of the single market, i.e. the free movement of goods, persons, services and capital. The project supports the fulfilment of EC policies within transportation, with focus on safer and cheaper transports and with less impact on the environment. It is also, not at least, of vital importance for commercial exploitation, such as the development of location-based services and of new IT-based forms for traffic and tourism information.

Partners

The project consortium consists of the following public, private and academic organisations:

- Bundesamt für Eich und Vermessungswesen, the National Authority for Metrology and Surveying, Austria
- ERTICO, Belgium
- EuroGeographics, France
- Government of Bavaria, Germany
- Institut für Anwendungen der Geodäsie im Bauwesen, University of Stuttgart, Germany
- Institut Géographique National, France
- Lantmäteriet, National Land Survey of Sweden
- Ordnance Survey, United Kingdom
- Planung Transport Verkehr AG, Germany
- Vägverket, Swedish Road Administration, Sweden

EuroRoadS Forum

The EuroRoadS project has a strong interest to link and get input from related projects and interested communities. The project welcomes requests and requirements expressed from potential partners outside the consortium.

The EuroRoadS Forum is an opportunity to closely follow the project and give feedback as a potential future user to help the project develop a well-functioning EuroRoadS solution. The EuroRoadS Forum is open to all stakeholders!

EuroRoadS Newsletter

The EuroRoadS Newsletter is a mean of disseminating information on the project progress. The newsletter is distributed approximately four times per year to project partners and other stakeholders.

Subscribe to the EuroRoadS Newsletter on Internet
www.euroroads.org.

Contact

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