



EuroSpec “ a work in progress ”

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EuroSpec presentation, Barcelona, 20th October 2003

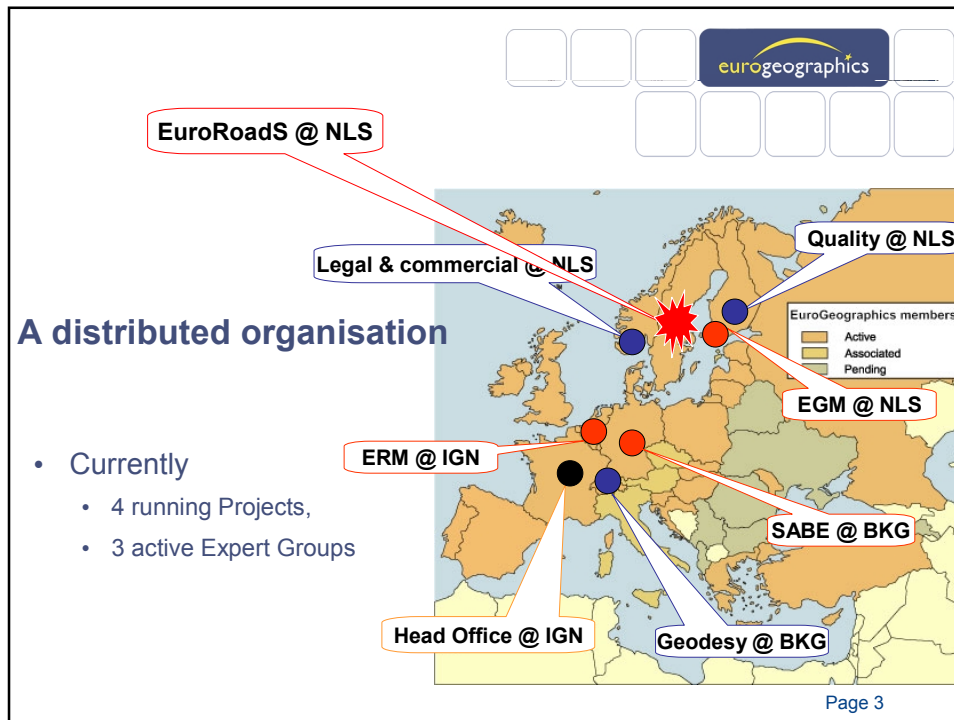


EuroGeographics’ Membership : NMAs + Cadastre

- 45 Members, 33 active
- Management:
 - Management Board,
 - Head Office



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The figure shows the EuroGeographics logo in the top right corner, above a grid of empty boxes. The main content is a list of bullet points under the heading 'The INSPIRE RDM position paper :'. The list includes identifying Common Reference Data as a key component of the ESDI, and recommending the definition of a conceptual model for reference data components, common definitions for objects and their attributes, and the creation of reference data specifications that are commonly understood and account for cultural differences.

The INSPIRE RDM position paper :

- Identified the Common Reference Data as a key component of the ESDI,
- And recommended
 - To define a **conceptual model for the reference data** components
 - To agree of common definitions for objects and their attributes belonging to the components of the reference data
 - That **reference data specifications are created** and described in a way that is commonly understood and which takes into account cultural differences.

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The 12 INSPIRE policy principles (1)

- *The European Spatial Data Infrastructure shall be built upon a network of National Spatial Data Infrastructures;*
- *INSPIRE's technical architecture shall be designed to meet the needs of all stakeholders;*
- **Datasets made available to harmonised data specifications and to common standards;**
- *Data Quality procedures to ensure fitness for purpose and use;*
- *Discovery metadata will be made available at no charge to help users identify and locate INSPIRE datasets;*
- **Reference data will provide the underpinning framework to which all other INSPIRE data will be referenced.**

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The 12 INSPIRE policy principles (2)

- *Thematic data will be made available to common standards;*
- *INSPIRE data shall be made available for access and view without charge and on harmonised terms and conditions throughout the European Union;*
- *Sustainable funding and investment mechanisms shall be put in place and maintained by Member States;*
- **Harmonised licensing framework will optimise sharing and trading of georeferenced thematic information;**
- *Unimpeded flow of data and information at local, regional, national and international;*
- *Management and organisation of INSPIRE shall be based on the principles of subsidiarity and proportionality.*

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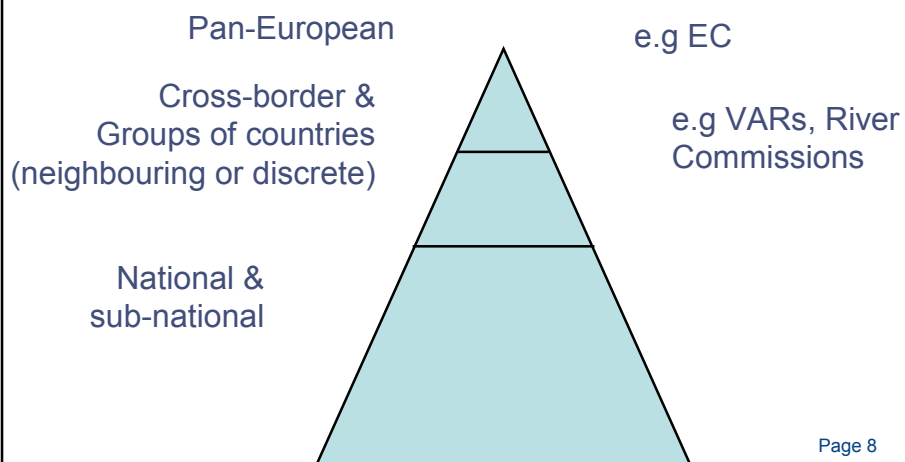
The EuroGeographics vision

“Achieve interoperability of European mapping and other GI within 10 years”

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Why this strategy ? (for customers)



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Why this strategy? (data providers)

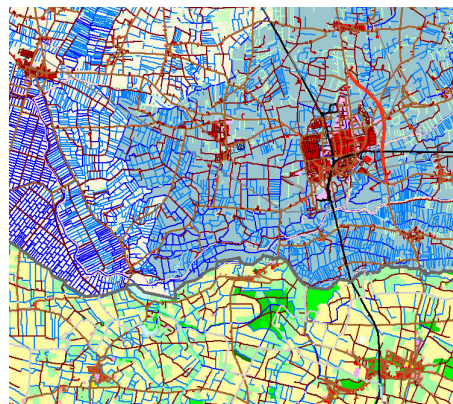
- Relevance, today
 - Re-engineering databases & developing new products/services
 - Increasing public-private partnership
 - Review business policies & processes
- European strategy that complements and supports national and sub-national plans
- Maximising the use and benefit of GI to existing and new customers

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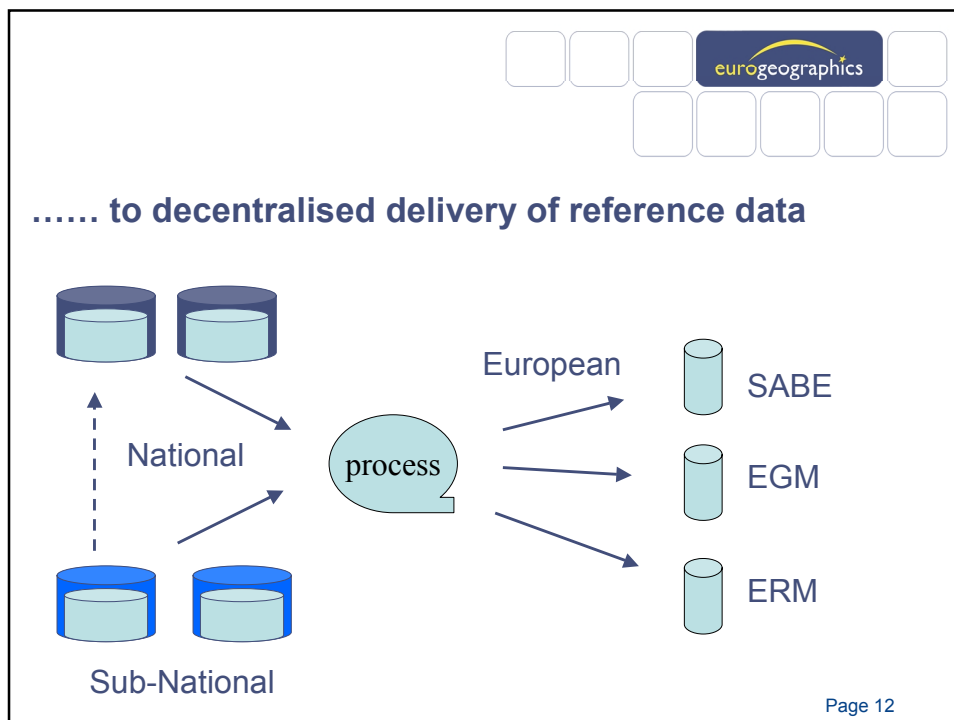
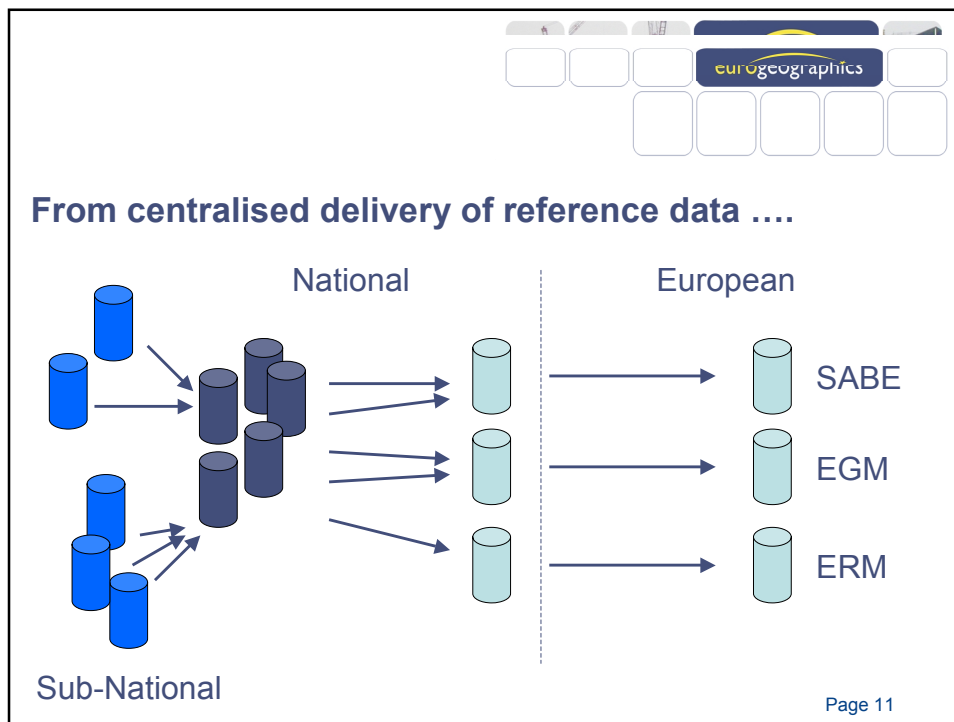


Data 'interoperability'

- Creation of 'hybrid mapping'
 - possible today
- The future is about 'intelligent' reference data (information)
- Semantic interoperability
- Cross border edge-matching
- Data of known quality



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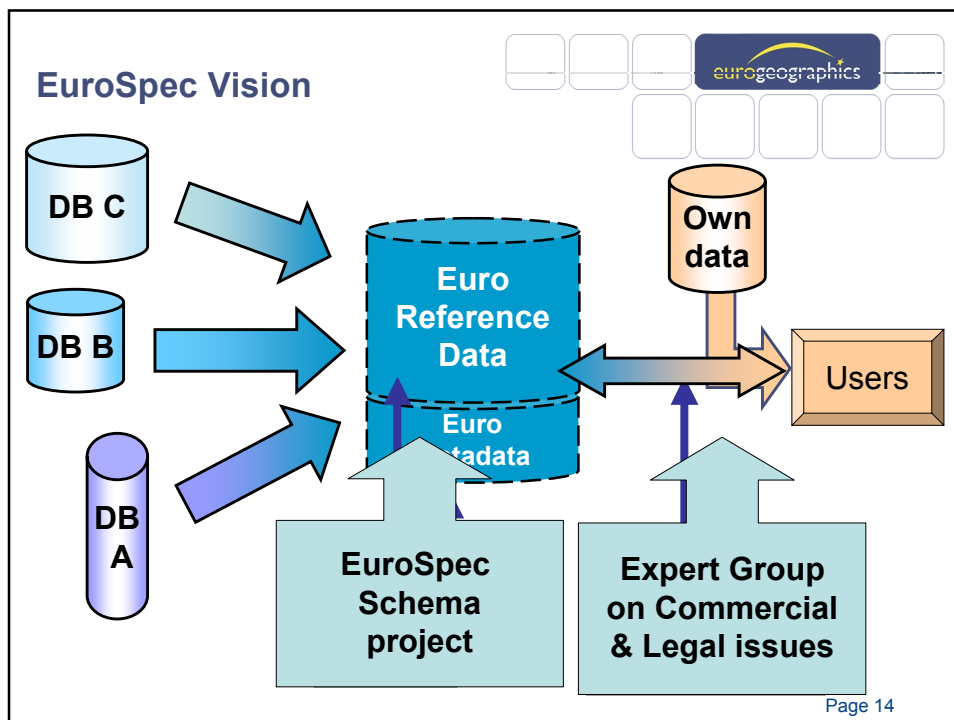




Business 'interoperability'

- Increasing harmonisation of national pricing and licensing policies
 - Doesn't mean the same prices for data in all countries
 - It does mean greater agreement on pricing models, licensing arrangements and service delivery (by members and value added resellers)
 - 'speaking the same language'
- Partnerships
 - Agree and recognise 'interdependence' amongst key players

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EuroSpec

At the core
of the EuroGeographics strategy
are the specifications
of the Common Reference Data

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Vision shaping and Community buy-in

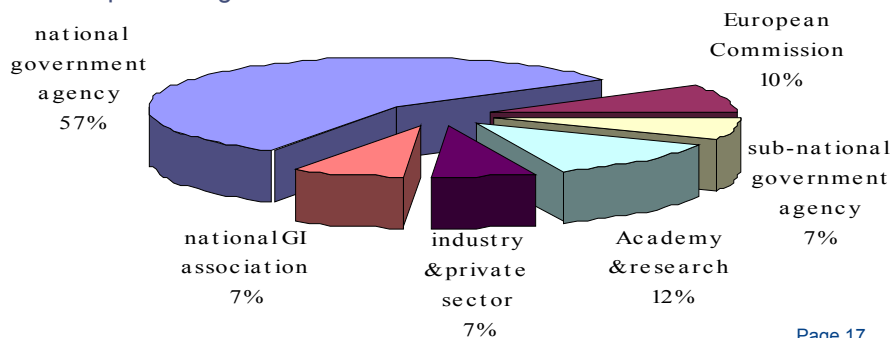
- 2001 & 2002 EuroGeographics General Assemblies
 - Invited speakers from the EC and the Industry
 - Expressed their requirements in terms of common reference data
- EuroSpec initiative
 - Proposed by EuroGeographics
 - Initiated with a "core team"
 - Started with a series of workshops
 - EuroSpec WS-1 (April 2003);
 - EuroSpec WS-2 (July 2003)

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Workshop 2 :

- Co-organised with the EC (JRC)
- 42 participants, from 16 countries (EU-15, EFTA, new MS)
- Representing main stakeholders



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WS-2 conclusions

- EuroSpec an indispensable and timely initiative
- A process, with short- and long-term objectives
- Necessity to relate to and link with real life use-cases and existing relevant initiatives and projects
- Build on existing legacy from major actors
- ►► EuroGeographics as the natural leader

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The approach to Common Reference Data

- Interoperability requirements
 - Minimum shared geometry and attributes
 - Inter-dependant and connected topology

- Best candidates

1. Units of administration
2. Units of property rights
 - parcels, buildings.
3. Selected topographic themes
 - hydrography, transport, heights.

The other components

1. Geodesy
2. Addresses
3. Orthoimages
4. Gazetteer

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State of the art

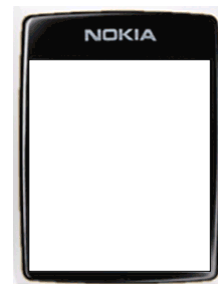
- Based on a questionnaire survey (February 2003)
(Antti Jakobsson and ExG-Q)
 - Topographic and Cadastre DBs in 21 countries
 - Common Reference Data 100% available (except 70% for parcels, buildings, addresses)
 - Very few implementations of international standards
 - Structure : object based (9/11), moving towards (6/5)
- *Final report to be published end 2003*

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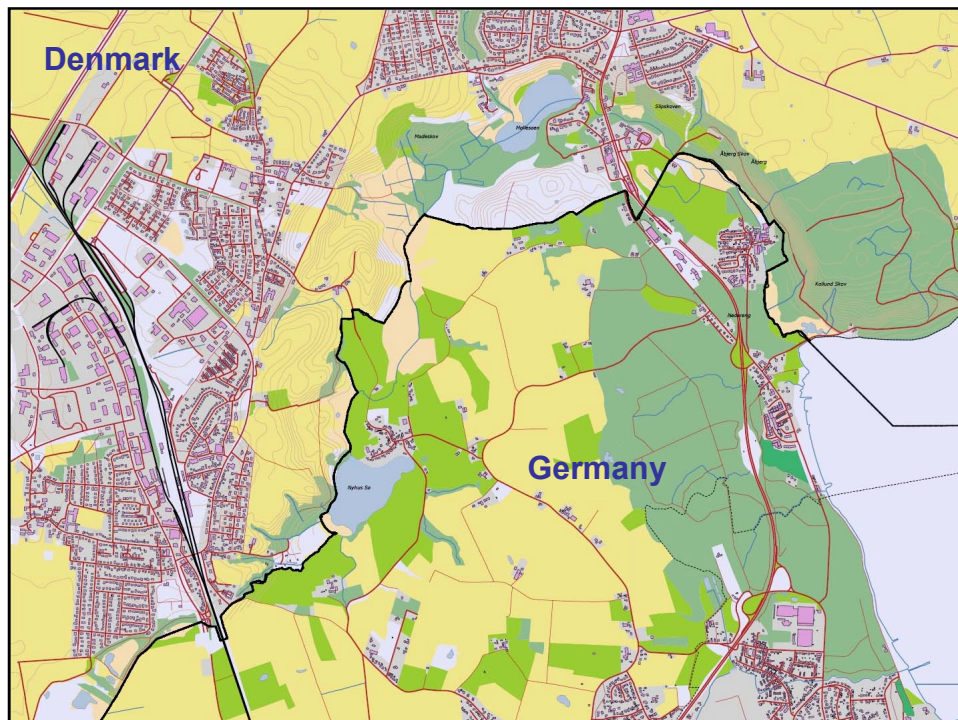


GiMoDig : pre-EuroSpec

- 4 countries : Finland, Sweden, Denmark, Germany
- Geospatial info-mobility service by real-time data-integration and generalisation
- Lessons for EuroSpec:
 - “global schema” : light version of specifications of the core reference data (EuroSpec Schema v.0)
 - technology distributed solution : prototype
 - differences between and gaps/weaknesses in national DBs



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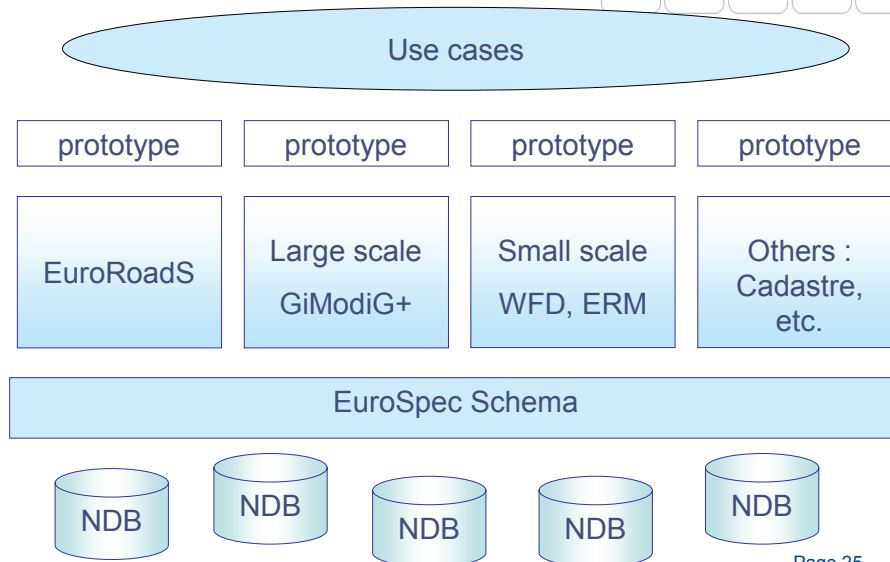


GiMoDig to EuroSpec Schema

- Pan-European extension
- Topology
- Harmonisation
- Edge matching
- Metadata, Data quality
- Updating and unique identifiers
- Richer feature and attribute catalogue

The EuroSpec programme

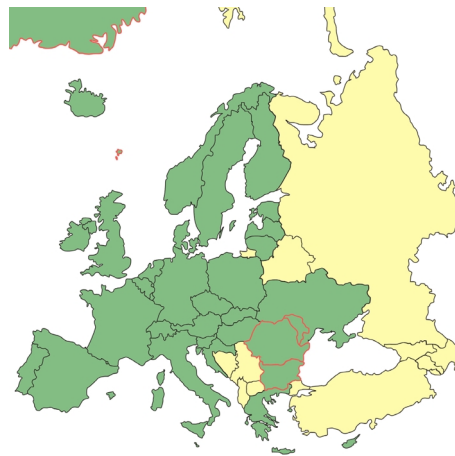
eurogeographics




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SABE : seamless administrative boundaries

- 10 years on the market
- Main versions: 1991, 1995, 1997, 2001
- New coming update:
 - SABE2001 + SIRE codes (2004?)
- Now 36 countries still expanding
- Plans for harmonisation with other EG products - e.g. EuroGlobalMap and EuroRegionalMap

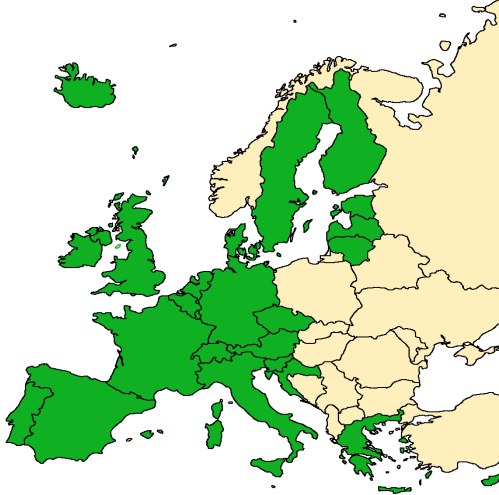


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EuroGlobalMap

- Global (500k-1M) scale
- All topographic components
- First release :
 - 30 countries
 - Autumn 2003 : evaluation
 - January 2004 : commercial
- Plans for upgrade and extension




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EuroRegionalMap

- Regional/national scale (1:100k ~1:250k) covering 7 countries
- Availability :
 - Autumn 2003 : evaluation
 - January 2004 : commercial
- Prototype for whole Europe (EU 25+ planned for 2006)



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EuroSpec implementation, iteration 1 : small scale

- Objectives :
 - Convergence of SABLE, EGM to ERM
 - Water Framework Directive requirements
- Aim
 - A coverage of the EU-29 , by end 2006
 - “Distributed” data management solution
 - Change-only data deliveries for users
 - Synchronised national and EuroRegionalMap updates

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EuroRoadS

Pan-European Road Data Solution

- An IST eContent III project,
- Budget : 3,2 million euros
- EC funding 1,9 million
- Timeframe : 30 months
- Starts 1st November 2003
- Project Manager : Sweden



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Why EuroRoadS?

- Europe lacks a sustainable harmonised road data solution
 - mapping agencies
 - road administrations
 - private companies
- Platform for further development within ITS, traffic management, road maintenance etc.
- Not enough with national solutions. Customers ask for global solutions.

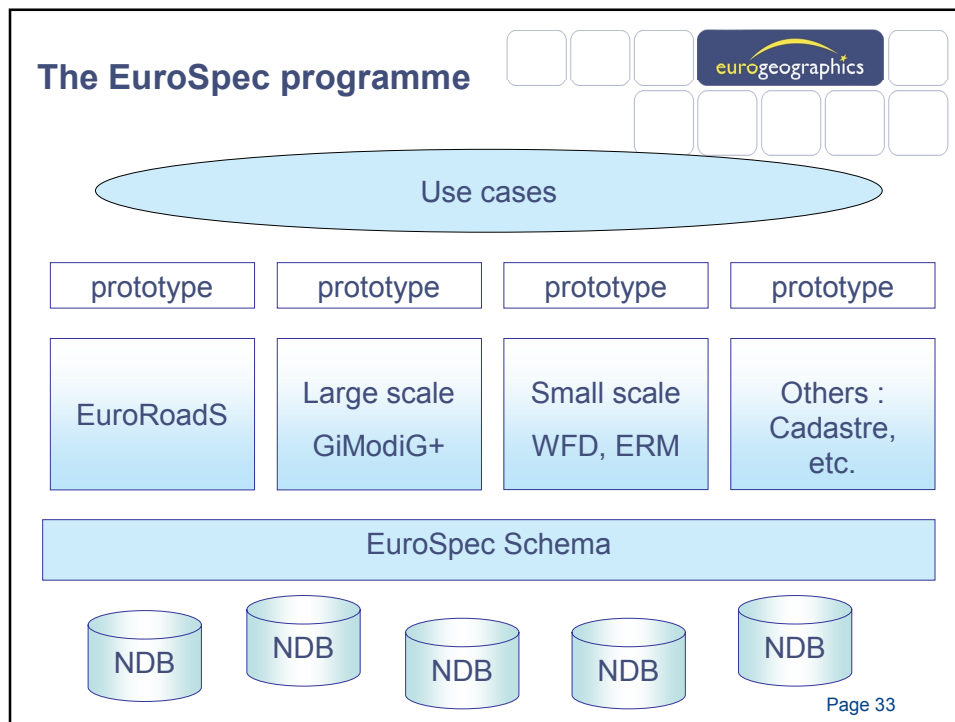
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EuroSpec implementation, iteration 2 & 3

- EuroRoadS implementation plan :
 - Recommendations to support a rapid creation of an infrastructure for European (large scale) road data.
 - Address structures, mechanisms and arrangements needed
- Cadastre
 - New EuroGeographics statutes, voted 8th October 2003 opens membership to Cadastre and Land Administration
 - Follow-up of EULIS = Interoperability in land information systems
 - Integration of Cadastre and topography

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EuroSpec and participating organisations

- **Benefits**
 - Builds on experience, and shares best practice on DB evolution
 - Facilitates convergence between data models, interoperability
 - Provides common specifications for those not yet on the move
- **Strategic**
 - Consider integration of the EuroSpec results within own strategy
- **Operational**
 - Support the programme by facilitating links, synergies, etc.
 - Support the specification work by providing the necessary experts

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EuroSpec and the ESDI

- A concrete step towards data interoperability
- An incremental process
 - Starting small and thinking big
 - Focusing in what is achievable in the short term, and urgent requirements
 - Maximising the use of reference data and other geolocated information
- A platform
 - Providing a forum for sharing knowledge
 - Convergence through building links and synergies

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Some open issues

- Technical
 - Standards (ISO > CEN) implementations, and Industry (OGC) requirements
 - Research (eg. multilingual semantics and ontologies)
- Financial
 - Today only “self-funding” : will delay the expected outcome
 - INSPIRE-like dedicated budget would be necessary for quick results
- Strategic
 - Prioritisation : for governance (eg. WFD, risk management) and market (eg. transport sector)
 - Impact on national DBs and their evolution
 - Pricing and licensing policies

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