



*Info-day INSPIRE ,  
Instituto Geografico Portugues and Instituto do Ambiente,  
16th October 2003, Lisbon Portugal*

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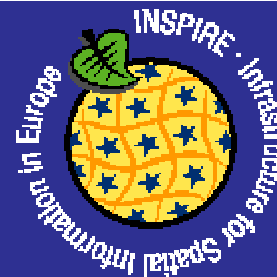
*INSPIRE*  
*IN*frastructure for *SP*atial *InfoR*mation in  
*Europe*

<http://inspire.jrc.it/>

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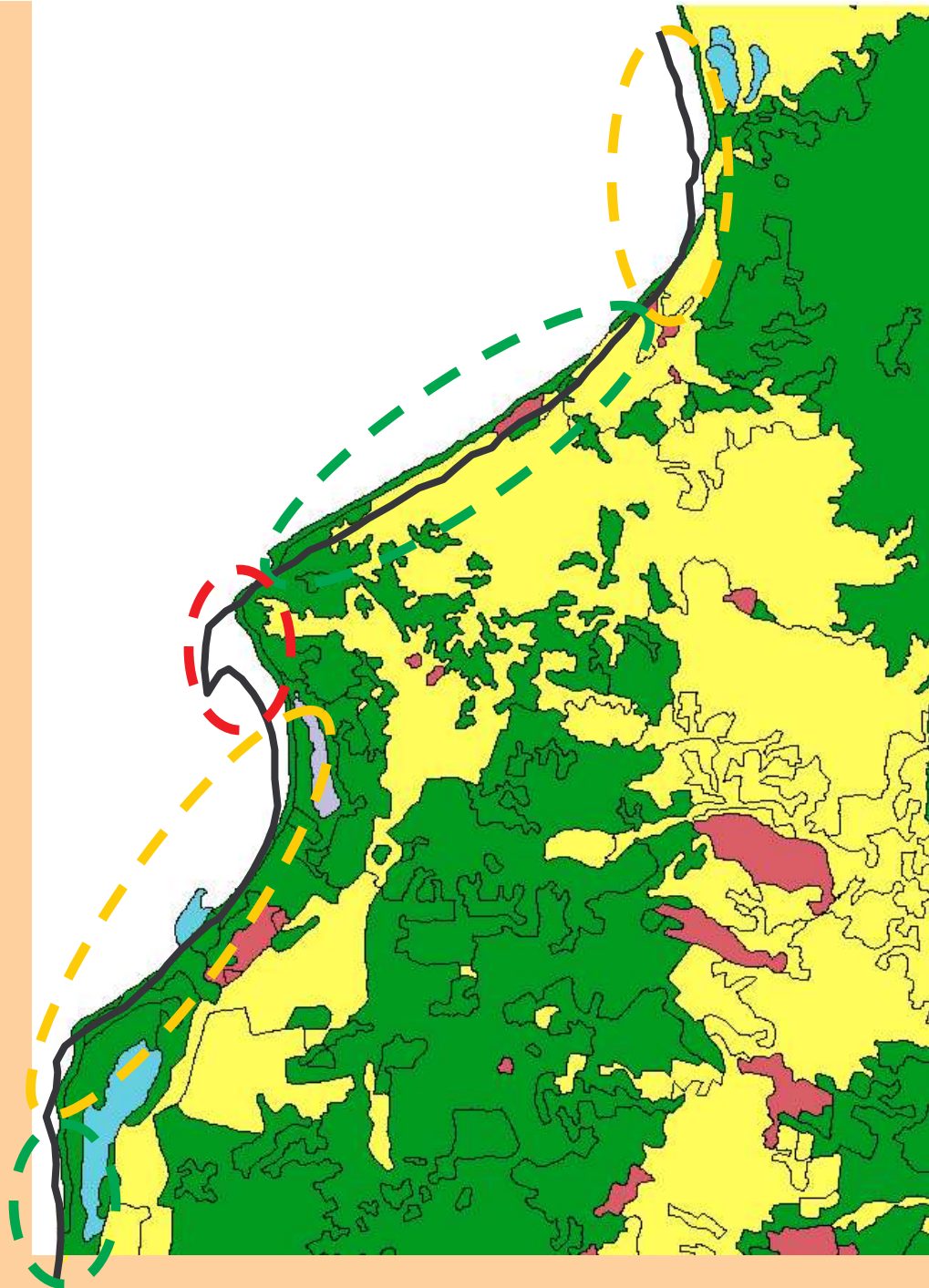


# Why needed?



The main problems can be summarised as follows:

- Difficulty of finding and accessing existing information;
- Different standards and scales (integration problems);
- Dates of updating and observation are incompatible and rarely available;
- Prohibitive cost of geographical information;
- Lack of standardised data exchange formats;
- Lack of standardisation in the codes used to represent the objects described;
- Varying data quality from one country to another within the same information layer;
- Lack of long term strategies;



**Example:**  
**All the data are  
not interoperable**

**CORINE Land Cover 1990**  
**SABE Coastline**

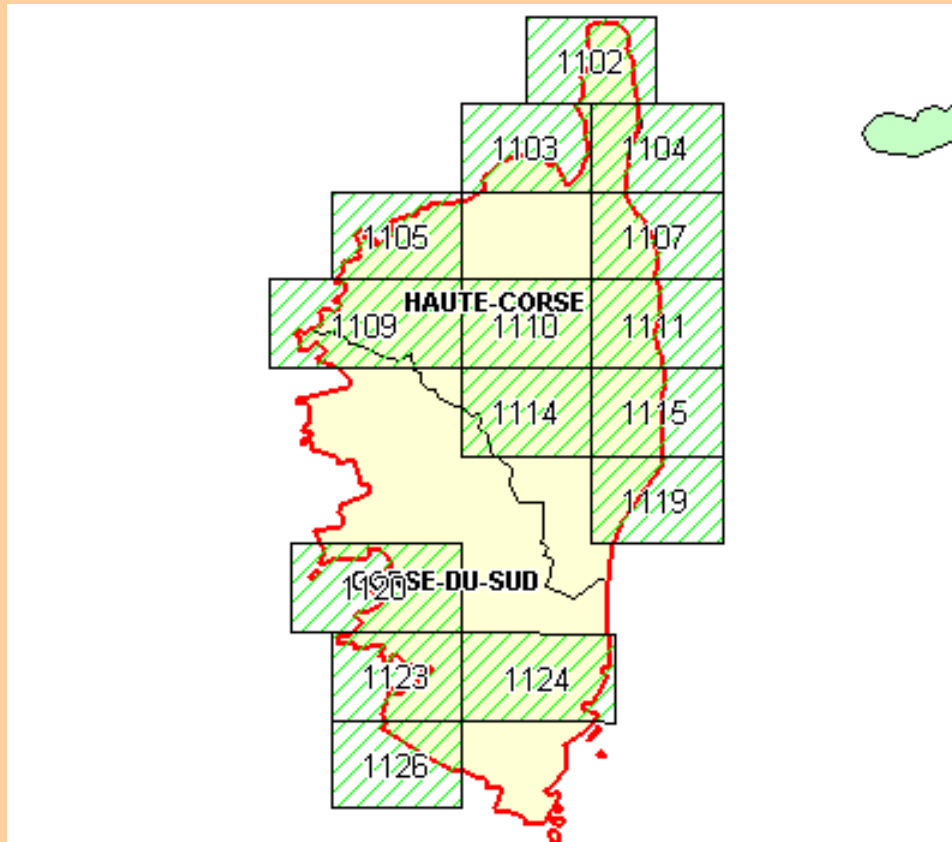
*0 m < Difference < 50 m*

*50 m < Difference < 200 m*

*Difference > 200 m*



## Example: Many geographical gaps still remain

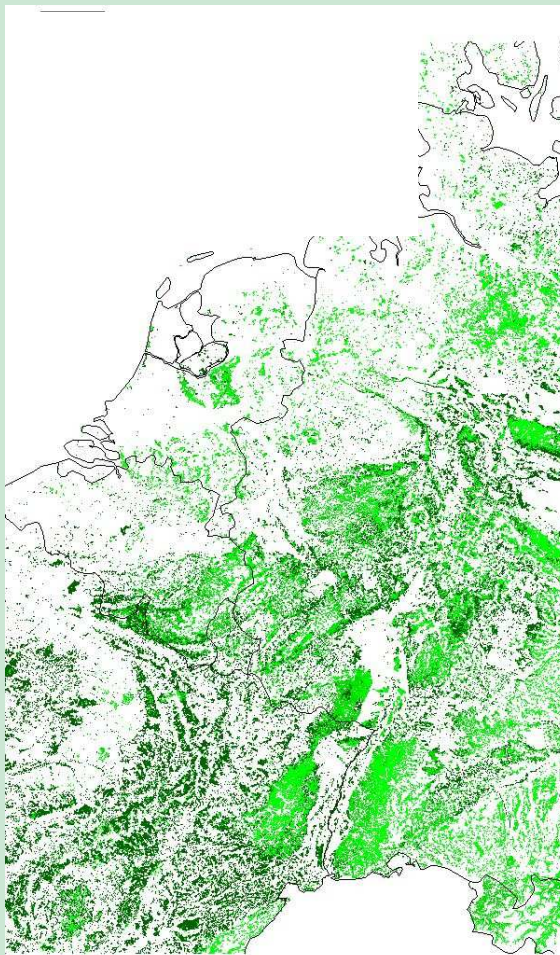


Geological data at scale 1:50,000  
(source: BRGM, France)

Need to identify the gaps and  
make priorities to bridge them



Example: Need for harmonisation  
Land-Use and Land-Cover,  
Various Official Figures



Example of variation in estimation of land cover in Europe - km<sup>2</sup>\*1000

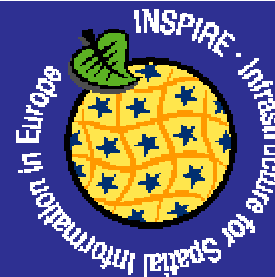
*Land use classification: Forest*

	(1)	(2)	(3)	(4)	(5)
Germany	103.84	103.84	98.56	-	100.46
France	147.84	148.10	140.675	145.81	79.63
Netherlands	3.00	3.30	1.48	3.00	0.78
UK	23.64	24.00	18.96	14.29	10.03

- (1). FAO-Agrostat
- (2). Pan-European Questionnaire by Eurostat
- (3). 10 minutes Pan-European Land Use Database
- (4). Land Use Statistical Database
- (5). Land Use Vector Database



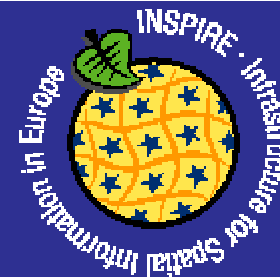
# INSPIRE Principles



- **Data should be collected once and maintained at the level where this can be done most effectively**
- **Combine seamlessly spatial data from different sources across the EU and share it between many users and applications**
- **Spatial data should be collected at one level of government and shared between all levels of government**
- **Spatial data needed for good governance should be available on conditions that are not restricting its extensive use**
- **It should be easy to discover which spatial data is available, to evaluate its fitness for purpose and to know which conditions apply for its use**



## Key Measures



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- Measure 1: Document existing spatial data
  - Measure 2: Make new cross-sector spatial data available = NOT IN INSPIRE FRAMEWORK, = separate initiatives
  - Measure 3: Contribute to data standards and harmonise existing data
  - Measure 4: Establish service network to publish, discover, evaluate, view and access spatial according to common standards
  - Measure 5: Establish licensing framework to share information between public bodies
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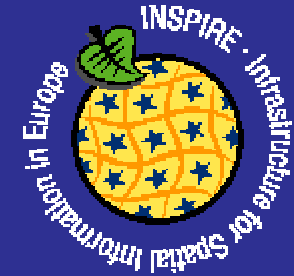
## Scope: 17 Themes

1. Geographical location
2. Administrative units
3. Properties, buildings and addresses
4. Elevation
5. Geo-physical environment
6. Land surface/land cover
7. Transport
8. Utilities and facilities
9. Society and population
10. Spatial planning/ Area regulation
11. Air and climate
12. Water/hydrography
13. Ocean and seas
14. Biota/biodiversity
15. Natural resources
16. Natural and technological risks and natural disasters
17. Areas under anthropogenic stress





# Contribution to Extended impact assessment Quantative Analysis



Investments needed to setup and run INSPIRE (left) and benefits in €m per annum (right)

	EU	National	Regional/ local
Harmonisation	2.7	1.8	1
Metadata	0.6	3.5-4	68-70
Data Policy Framework		0.5	
Coordination and implementation	3.6	20	100-170

Total investment per year (10 years):  
Per MS: 8-12 m€  
Per region: 120 000 - 175 000 €  
Per citizen: 0.4 – 0.6 €

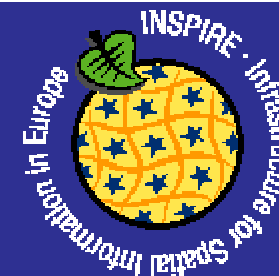
Type of benefit	Quant. estimates
More efficient EIAs and SEAs	100-200
More efficient environmental monitoring	100
More cost-effective expenditure on environmental protection	300
More cost-effective implementation of the environmental <i>acquis</i>	50
More effective implementation of EC projects	5-15
More effective expenditure on TENs	140
Reducing duplication of Data collection	25-250
Improved delivery of risk prevention policies	120-400
Improved delivery of health and env. policies	350
<b>Total</b>	<b>1190-1800</b>



# Extended impact assessment

## Qualitative Benefits (some examples)

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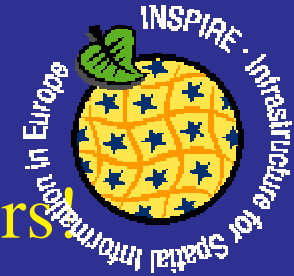


- Support of a wide range of activities: such as environmental reporting, impact assessments, monitoring;
  - easier participation by NGO's and of the public in public debates and decision making;
  - support for more integrated policy approaches;
  - better integration of environmental protection objectives into other policies;
  - planning and management of transport and logistics;
  - management of public utilities;
  - better and more accurate analysis of different European markets by commercial data users.
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# Internet Consultation

## INSPIRE endorsed by stakeholders

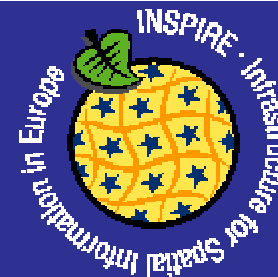


- 185 respondents representing views of over 2000 organisations
- Respondents with varying profile, from various sectors
  - 97% agree with INSPIRE five principles
  - 97% consider that five main obstacles prevent the widespread use of spatial data;
  - 81% indicate that INSPIRE should address all these obstacles
  - 79 % are in favour of public funding of SDI's



# Internet Consultation

## Feedback on proposed measures

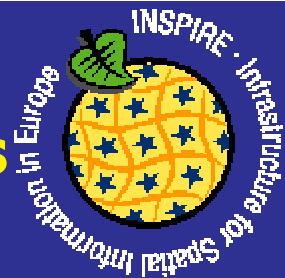


- 95% confirm importance of standardisation, calls for involvement of private sector and for remaining at a generic level
- 77% agree with proposed data themes, but also call for prioritisation and step by step approach;
- 94% agree with need for SDI services to common standards, to be implemented in an open and decentralised way
- 85% agree with the need of a data policy framework for sharing between public bodies, 82% call for a more general data policy framework
- 95%: data should be « viewable »
- 81%: viewing data should be free of charge



## Current status and future steps

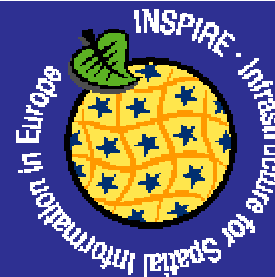
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- **DG ENV is considering its position: need for reflection on:**
  - to which extent are costs of INSPIRE really additional?
  - to which extent do benefits compensate costs of public bodies, in particular at the local/regional level
  - interrelationship with other initiatives
- **Future steps and timing remain to be decided**



# INSPIRE in Portugal ?



## State of play of the Spatial data infrastructure:

- Portugal has a national Infrastructure for Geographical information operational called SNIG;
- SNIG provides on-line services for data of 117 agencies;
- includes an access point for citizens;

## But also:

- no co-ordinated data policy
- metadata not complete
- limited access services
- very limited efforts towards standardisation of data
- Language mainly Portuguese