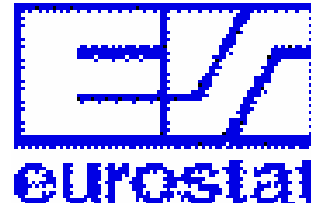


# Task Force Extended Impact Assessment

INSPIRE expert group meeting

05 march 2004

**Commission Européenne - DG ESTAT**



# Approach used

- Existing XIA as a basis, focussing on option 3:

*"a coherent set of measures which are consistent with measures taken elsewhere in the world where infrastructures for spatial information have been set up and which address some of the key obstacles to the use of spatial data in Europe"*



# Approach used (2/2)

- List of key questions:
  - Are the basic assumptions still valid?
  - How does the scope in terms of the geographic layers that are brought outside the scope of INSPIRE affect the investment costs and benefits?
  - How does the differentiation of requirements between the different geographic layers (Annex I and II) affect the investment costs and the benefits?
  - Should the benefits of a revised INSPIRE be reduced proportionally with the reduction of investment in INSPIRE?



# Revised basic assumptions (1/2)

- Labour costs:

100.000 € per FTE per year (including overhead) in initial study



New info from GINIE, Italian case study



75.000 € acceptable as a more realistic estimate



# Revised basic assumptions (2/2)

- Costs already incurred

Activities already ongoing not sufficiently taken into account



Need to reduce estimates of additional costs of INSPIRE to obtain true estimates



- at national level, on average, 20% of the coordination and implementation capacity is already in place
- at regional level 10% of the capacity could easily be already in place

- Caution !!! considerable differences possible between individual Member States



# Effect of basic assumptions on costs

## Original investment costs on full scope

Blocks of INSPIRE policy measures	EU-level	National Organisations	Regional/local
Harmonisation	2,7	1,8	1
Metadata	0,7	3,5-4	68-70
Data Policy Framework		0,5	
Coordination and implementation including outreach	3	20	100-170
<b>Total investment per annum over 10 years (€m) (rounded)</b>	<b>6,4</b>	<b>26-27</b>	<b>170-240</b>

## Effect of revised basic assumptions

Blocks of INSPIRE policy measures	EU-level	National Organisations	Regional/local
Harmonisation	2,7	1,9	0,8
Metadata	0,2	2,7-3,0	46
Data Policy Framework		0,4	
Coordination and implementation including outreach	2,2	12	57-115
<b>Total investment per annum over 10 years (€m) (rounded)</b>	<b>5,1</b>	<b>17-17,3</b>	<b>104-161</b>



# Revised scope of INSPIRE (1/2)

- Changes in the scope of the datasets
  - Fixed costs: roughly 25% irrespective the number of datasets
  - Variable costs: 75% to be divided as follows:
    - 29% Annex I data  $\Rightarrow$  22%
    - 36% Annex II data  $\Rightarrow$  27%
    - 35% Annex III data  $\Rightarrow$  26%



# Revised scope of INSPIRE (2/2)

- Changes in harmonisation for Annex II data
  - originally 17 themes, grouped in 6 main themes
  - 6 iterations of definition, prototyping, testing and reviewing, from a very generic definition of common spatial objects towards more detailed ones
  - new scope: 2 themes 6 rounds and 4 themes 3 rounds
  - 750 k€ per round per theme unchanged
  - Remark: preparatory work done through 6th research framework programme and GMES
- Deployment of harmonisation
  - Assumption of 20% reduction of costs



# Effects of changed scope

Blocks of INSPIRE policy measures	EU-level	National Organisations	Regional/local
Harmonisation	0,6	1,2	0,5
Metadata	0,2	1,9-2,2	33
Data Policy Framework		0,4	
Coordination and implementation including outreach	1,1	9,6	44-88
<b>Total investment per annum over 10 years (€m) (rounded)</b>	<b>1,9</b>	<b>13</b>	<b>77-122</b>

- Calculation on top of effect of revised basic assumptions
- Total rounded up to 98-133 m€ per annum for the EU 25 over 10 year period
- 3,6-5,4 m€ per annum per EU Member State
- 45-70 k€ per region of 250 000–350 000 inhabitants based upon 1700 entities



# Benefits of INSPIRE

- Ratio of benefits between Annex I, II and III
  - Annex I data: no more than 20% of the benefits, but: indispensable for any further benefit to be obtained
  - Adding benefits of Annex II could roughly yield 75% of initial benefits
- Reduction of benefits with reduced measures on Annex II data
  - Difficult to estimate
  - Hence proportionate reduction as reduction in costs of harmonisation: 20%



# Effects on benefits of INSPIRE

## Original estimate of benefits

Type of benefit	Quantitative estimates
More efficient EIA's and SEA's	100-200
More efficient environmental monitoring and assessment	100
More cost-effective expenditure on environmental protection	300
More cost-effective implementation of the environmental acquis	50
More effective implementation of EC projects	5-15
More effective expenditure on TEN's	140
Reduced duplication of spatial data collection	25-250
Improved delivery of risk prevention policies	120-400
Improved delivery of health and environment policies	350
<b>Total</b> (in m€ per annum)	<b>1 190-1 800</b>

## Effects of revised scope on benefits

Type of benefit	Quantitative estimates
More efficient EIA's and SEA's	60-121
More efficient environmental monitoring and assessment	64
More cost-effective expenditure on environmental protection	192
More cost-effective implementation of the environmental acquis	32
More effective implementation of EC projects	3-8
More effective expenditure on Trans European Networks	90
Reduced duplication of spatial data collection	25-160
Improved delivery of risk prevention policies	77-256
Improved delivery of health and environment policies	224
<b>Total</b> (in m€ per annum)	<b>770-1150</b>



# Conclusion

- Revision yields a reduction from a range of 200-300 m€ down to 93-138 m€ per year for 10 years in 2 steps:
  - revision of basic assumptions
  - reduction of scope
- Annual net benefits fall from original range of 1190-1800 m€ per year down to 770-1150 m€ per year



**Benefits still outweigh the investment requirements by a considerable amount**



# Final remarks

- Confirmation by Italian Case study
  - Costs on national level: 1,1 m€/year (ref. 3,6-5,4 m€)
  - Costs on regional level: 260 k€/year/region of 4 million inh. (ref. 45-70 k€/region of 250.000 inh.)

