

# Looking back on European Foresight



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# European Foresight: the tide keeps rising?

- Continued activity at national level
- Reinforcement of activities at European level
- Key features of European Foresight
- New directions

# EU 15 Foresight

Country	Project	Horizon (years)
<b>Austria</b>	<ul style="list-style-type: none"> <li>• 1998 – Ministry of Science and Transport</li> </ul>	15
<b>Belgium</b>	<ul style="list-style-type: none"> <li>• 2000-2001 – Federal Ministry of Science</li> </ul>	15
<b>Danmark</b>	<ul style="list-style-type: none"> <li>• 2001 – New programme launched – results arriving now</li> </ul>	4
<b>France</b>	<ul style="list-style-type: none"> <li>• 1995 - Technologies clés 2000 – Ministry of Industry</li> <li>• 2000 - Technologies clés 2005 – Ministry of Industry / CM International</li> <li>• 2003 – Research &amp; Innovation Strategy for France in Europe - ANRT</li> </ul>	5 5 10-20
<b>Germany</b>	<ul style="list-style-type: none"> <li>• 1995 &amp; 1998 2 Delphi Exercises - BMBF/ISI Fraunhofer</li> <li>• 1999+ FUTUR1</li> <li>• 2001 Futur – BMBF/IFOK/VDI/Z-Punkt/ISI-Fraunhofer</li> </ul>	30
<b>Greece</b>	<ul style="list-style-type: none"> <li>• 2001 – General Secretariat for Research and Tech/ Logotech</li> </ul>	>15
<b>Ireland</b>	<ul style="list-style-type: none"> <li>• 1998 - Irish Council for Science, Technology and Innovation, Forfas,</li> </ul>	15
<b>Italy</b>	<ul style="list-style-type: none"> <li>• 1994-1996 – National Research Priorities– Fondazione Rosselli-CNR/ENEA</li> <li>• 2000/2001 - 2e rapport in progress- Fondazione Rosselli-Ministry of Research-</li> </ul>	10 10
<b>Netherlands</b>	<ul style="list-style-type: none"> <li>• 1998 - Technology Radar – Ministry of Economic Affairs</li> <li>• 2000 –'AWT (Council on S&amp;T Policy) and NRLO (Agricultural Research.)</li> </ul>	10
<b>Portugal</b>	<ul style="list-style-type: none"> <li>• 2000 Technology Foresight 2000-2020 (“Engineering and Technology 2000”)</li> </ul>	20
<b>Spain</b>	<ul style="list-style-type: none"> <li>• 1999-2001- Industrial Technology Prospective</li> </ul>	15
<b>Sweden</b>	<ul style="list-style-type: none"> <li>• 2000 Technology Foresight – Academy of Engineering Sciences – Nutek</li> </ul>	10-20
<b>United Kingdom</b>	<ul style="list-style-type: none"> <li>• 1995 Technology Foresight ("Partnership for Progress") - Office of Science &amp; Technology</li> <li>• 2000 Foresight - Office of Science &amp; Technology</li> <li>• 2002 Foresight – OST</li> </ul>	10-20 10-20

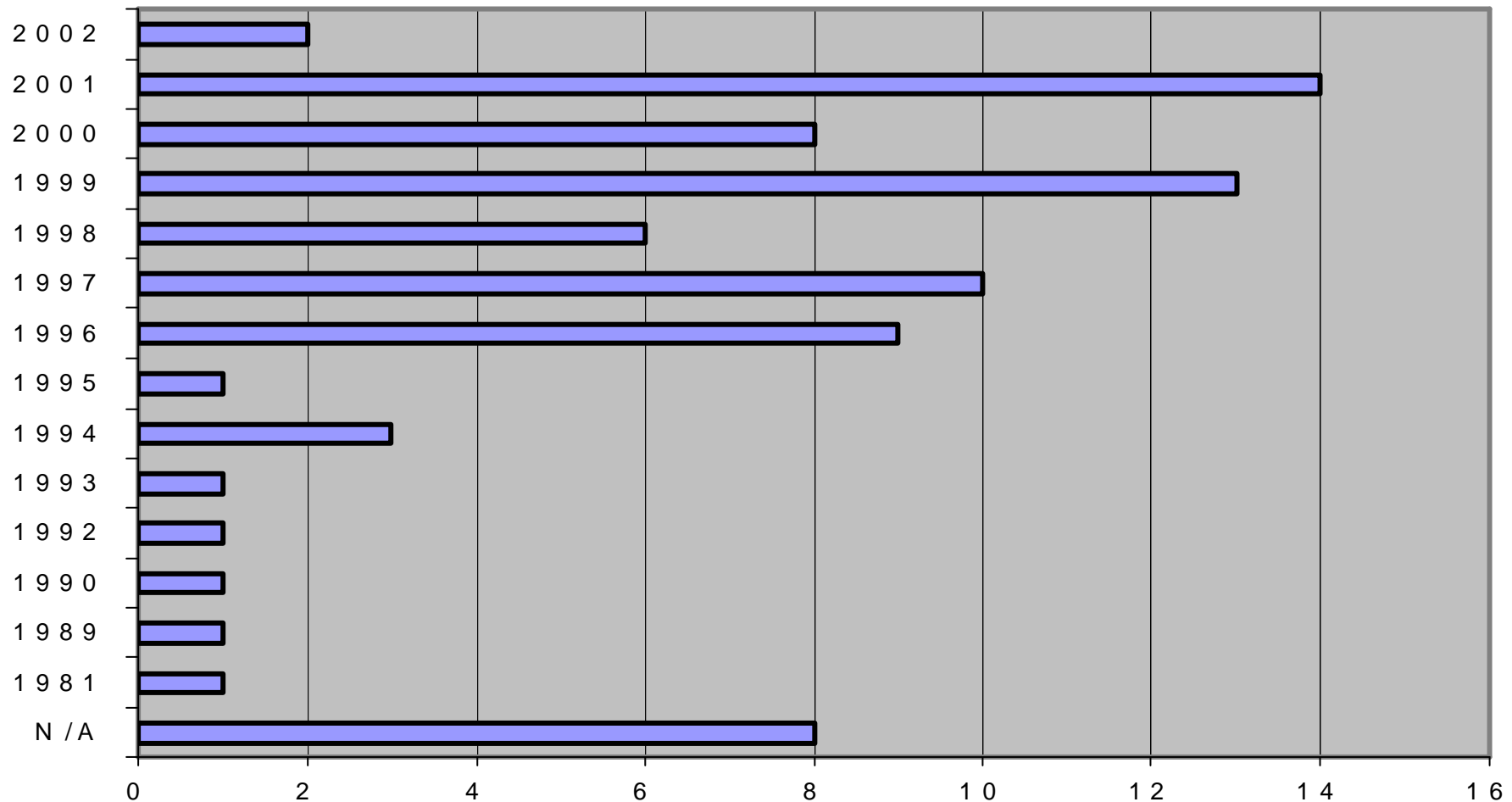
# EU Candidate countries Foresight

Country	Project	Horizon (years)
Cyprus	<ul style="list-style-type: none"> <li>2002 - Agricultural research institute (Participation in EU – ‘eForesee’ Project)</li> </ul>	N/g
Czech Republic	<ul style="list-style-type: none"> <li>2000 - Visions for the Development of the Czech Republic to 2015 - Centre for Social and Economic Strategies Ministry of Education, Youth and Science</li> </ul>	10-15
Estonia	<ul style="list-style-type: none"> <li>1998 - Scenarios of Estonia to 2010, Ministry of Environment/ ETI</li> <li>2000 Estonian technology foresight/ e Foresee Project</li> </ul>	10-15 3-5
Hungary	<ul style="list-style-type: none"> <li>2000 - Hungarian Technology Foresight Programme - Steering Group and National Committee for Technological Development</li> </ul>	>15
Malta	<ul style="list-style-type: none"> <li>2002 - Malta Council for Science and Technology (Participation in eForesee Project)</li> </ul>	20
Slovenia	<ul style="list-style-type: none"> <li>2000 - Ministry of Economic Affairs</li> </ul>	10-15
Turkey	<ul style="list-style-type: none"> <li>2001 - National Technology Foresight Project (Vision 2023) - Tubitak</li> </ul>	more than 15 years
Bulgaria	<ul style="list-style-type: none"> <li>Ministry of regional development</li> </ul>	No data
Latvia	<ul style="list-style-type: none"> <li>Ministry of Economics</li> </ul>	No data
Poland	<ul style="list-style-type: none"> <li>Ministries of: Science; Health; Economy; Finance; Ecology</li> </ul>	No data

# Eurofore

## Preliminary results of mapping of Foresights (n = 84)

Starting date of the exercises



# EuroFore

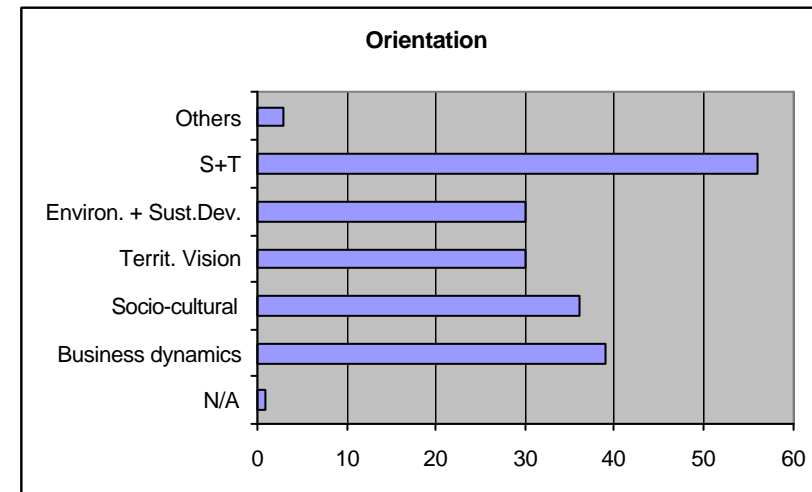
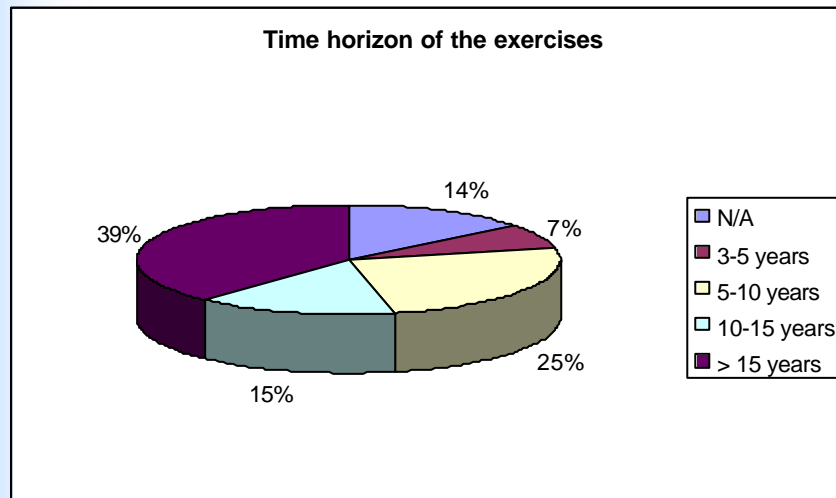
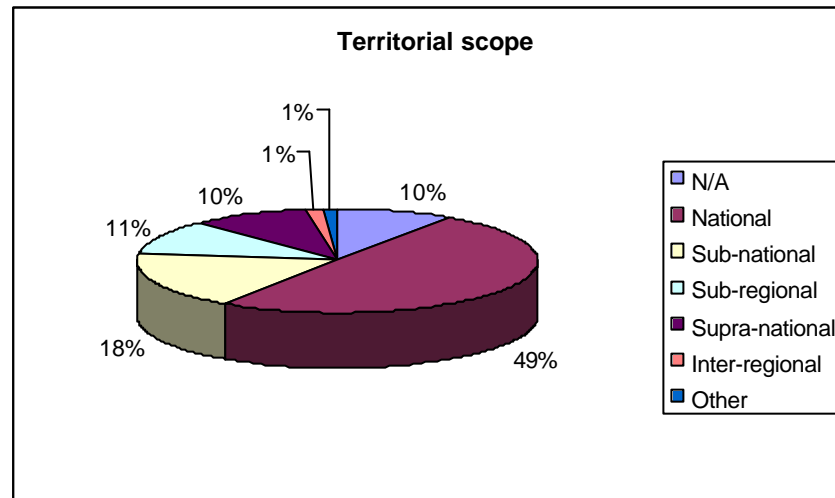
## A Preliminary Mapping of Foresights

- European Science and Technology Observatory (ESTO)
  - **UK** - Project Leaders Mike Keenan, Dan Abbott (PREST)
  - **IPTS** - Fabiana Scapolo, Mario Zappacosta

(**Austria** - Matthias Weber (ARCS), **Belgium** - Walther van Aerschot and Sara Verbeiren (VITO), **Czech** - Karel Klusacek (TCP), **Finland** - Annele Eerola (VTT), **France** - Remi Barre and Benjamin Delannoy (Futuribles), **Germany** - Kerstin Cuhls (FhG-ISI), **Germany** - Anette Braun (VDI), **Hungary** - Attila Havas (UNU-INTECH), **Italy** - Claudio Roveda (Fondazione Rosselli), **Netherlands** - Marc van Lieshout (TNO), **Turkey** - Erol Taymaz and Turgut Tumer (TUBITAK))
- **Data collection** - Web search, interviews, and questionnaires on 84 ongoing and completed Foresight exercises.
- Data on organisational and individual competencies.
- **Construction of indicators**
- **Web-based searchable format:** Temporary URL:  
<http://les.man.ac.uk/eurofore>

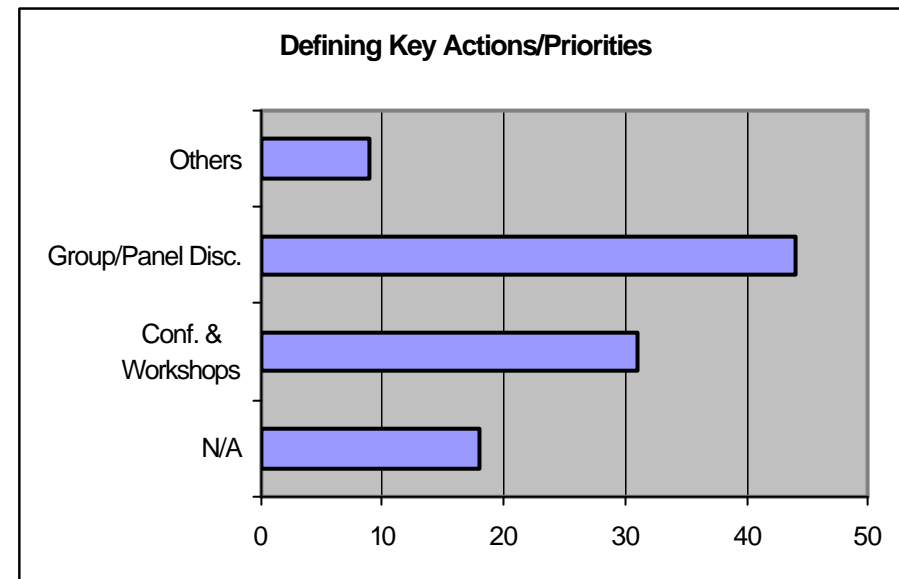
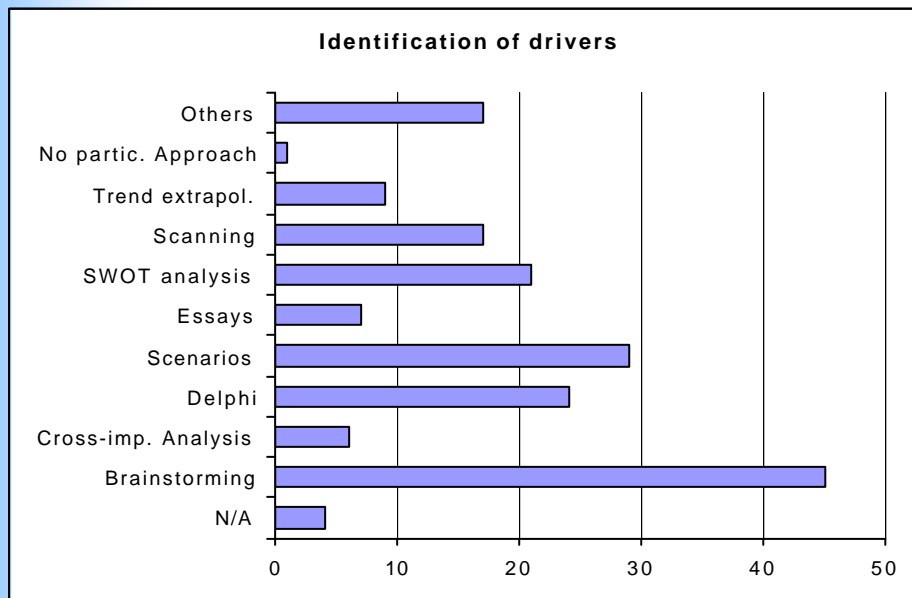
# Eurofore

## Preliminary results of mapping of foresights Start dates (n = 84)



# EuroFore - preliminary results

## Methods used





# I. Analysis of national trends.../...

- **On-going national level activities**
  - Germany (social, visions)
  - Greece (social, socio-economic)
  - Denmark (techno-thematic)
  - UK (techno-thematic)
  - Belgium (techno-thematic)
  - France (industrial performance)
  - Italy (industrial research priorities)

# I. Analysis of national trends

.../...

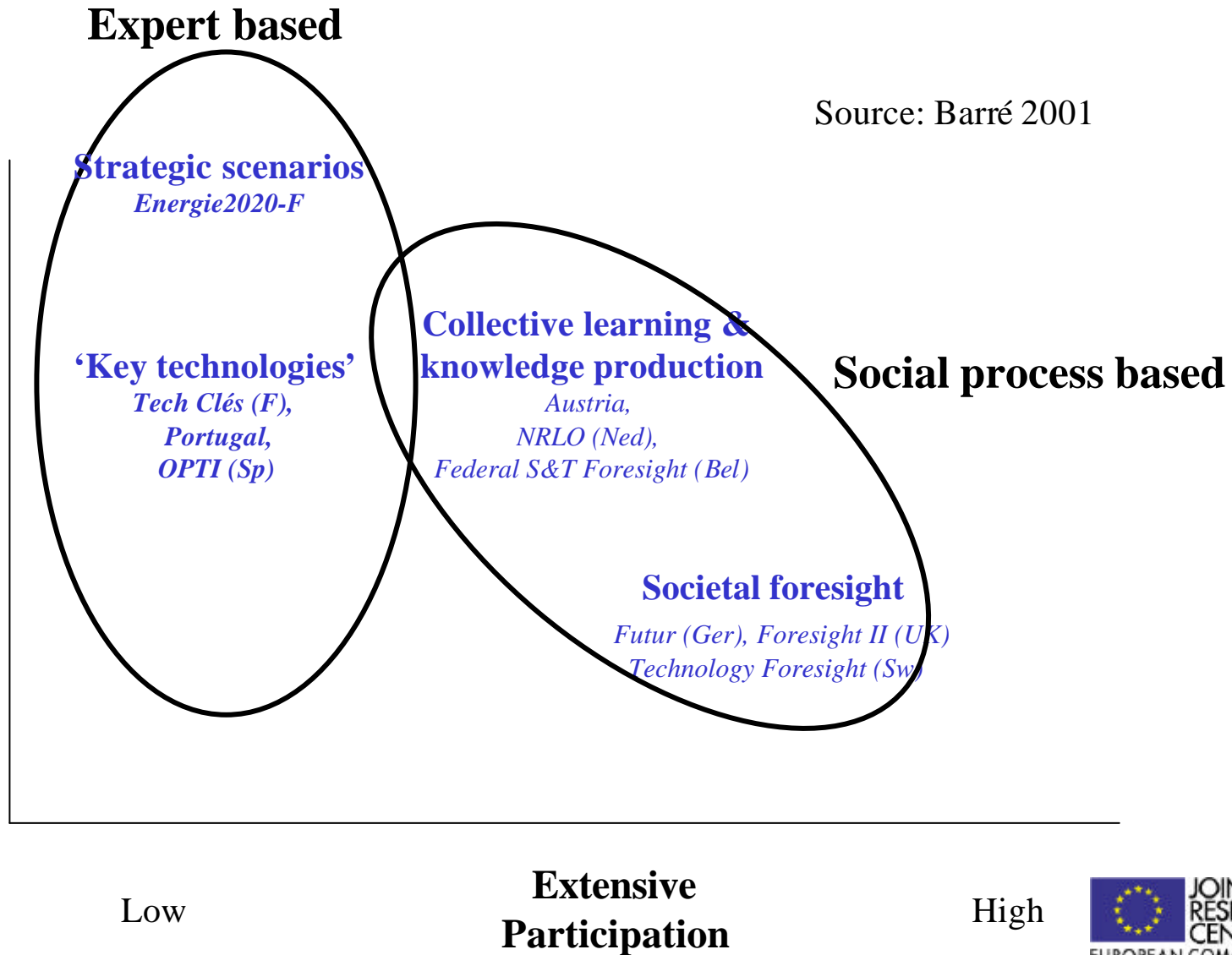
- International co-operation
  - eForesee - Malta, Cyprus, Estonia (focus on *Knowledge Management / strategic conversations*)
  - FORTECH - Rumania, Bulgaria
  - IOFCO - France, Spain, Portugal, Italy
  - IPTS Enlargement Futures / EU Candidate Countries

## European level .../...

- European co-operation
  - European Research Area - FP VI (2002 - 2006)
    - DG Research & IPTS
    - Knowledge Sharing Platform
  - European Foundation for Improvement of Living and Working Conditions
    - Knowledge Society Foresight (Pilot studies: Finland, Germany, Greece)

# Analysis: Classifying Foresights: One typology

Source: Barré 2001



# Issues in National exercises

- Demand for increased participation and greater thematic concentration.

Germany - very open and participative (1.500 people) but narrowing to a few 'lead visions' for action

UK - open consultation on selection of a few themes (e.g. 2002 coastal defences, cognitive systems)

Denmark - a few themes at a time (e.g. 2001 - pervasive computing, green technology, health technologies)

- Increased demand of links to practical implementation
- Increased demand for more systematisation:

Guide to Regional Foresight & Knowledge Society Foresight Handbook

# Approach adopted

- Depends on context ...
  - Learning effect - the first experience is usually different from later exercises
  - Specific strategic socio-economic challenges
  - Level of sophistication of priority setting in Innovation System

# Future directions

- Increased emphasis on participatory processes
- Greater emphasis on targeted themes
- Manifest at different levels foresight (EU, regional, sectoral)
- Increased emphasis on methodological rigour
- Growing call for demonstration of results (implementation plans, impact evaluation)
- Closer interaction between Technology Foresight and Technology Forecasting and Technology Assessment

# Conclusions

- Emphasis on participatory aspects
- Targeting on Techno-thematic
- Foresight emergent at new levels
- Emphasis on quality, learning, impact
- Embedding of foresight?



# Decision makers

Demand for:

Relevant information, understandable & on time

- Rigorously intelligent & optimistic
- Clear Options well argued

## Practitioners

- Develop capacity
- Improve methods

**Positive tensions for  
prospective?**

## Policy

## Advisors

- Embedding of strategic intelligence (*mainstreaming*)
- Balancing different sources

Source: Gavigan (2002)

