

# Strategic Planning and Management of Research and Innovation in Germany

Expert Seminar, Prague, 30 May, 2011

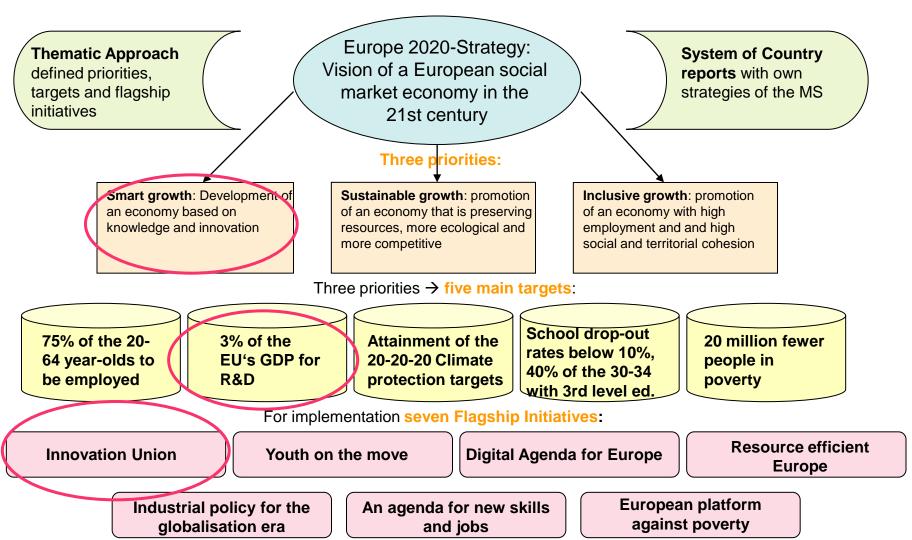
Part II: The European Perspective

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RESEARCH Igniting ideas!



# **Europe 2020 Strategy**





#### Structure of the Innovation Union

#### INNOVATION UNION



- Focused on Innovations with regard to societal challenges
- Broad concept of innovation (incl. also: business models, design, services)
- Involvement of all actors
- Addressing unfavourable framework conditions
- Prevention of fragmentation

#### **Targets:**

- Development of knowledge basis and reduction of fragmentation
- Bringing good ideas to the market
- Maximising territorial and social cohesion

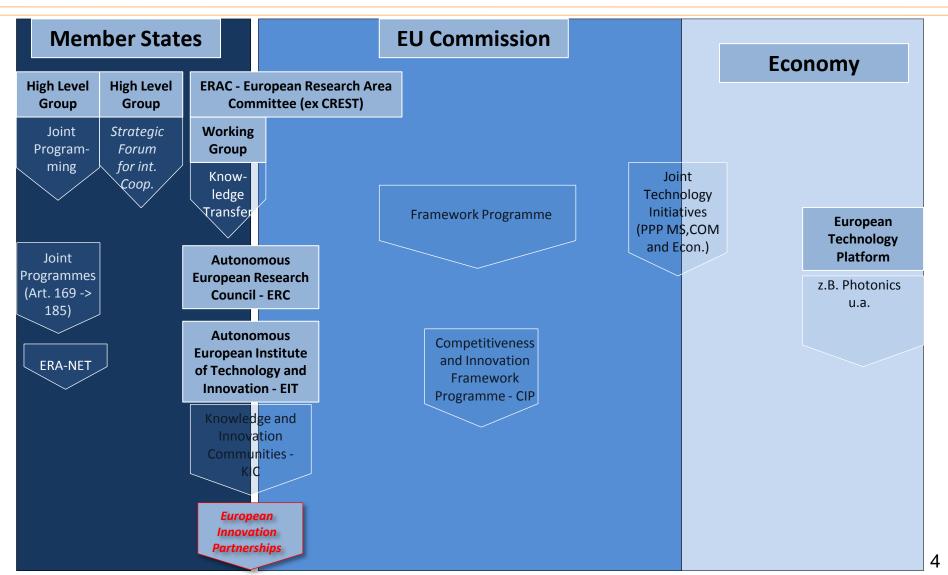
#### Implementation:

**European Innovation Partnerships (EIP)** 





#### 12 - New structures for cooperation with the Innovation Union





# **Treaty of Lisbon: General Remarks**

- Treaty under international law
- Replaces the rejected "European Constitution"
- Now: Treaty on European Union (TEU) and Treaty on the Functioning of the European Union (TFEU)
- In Force on 1 December 2009

# **Competences of the Union**



# Treaty of Lisbon has now a catalogue of competences (Art. 2 – Art. 6 TFEU):

- Exclusive Competence of the EU

   (e.g. Monetary and Common Commercial Policy, competition rules in the Internal Market)
- 2 a. Shared Competence (with barrier effect for MS)(e.g. Internal Market, Environment, Transport, Energy)
- 2 b. Shared Competence (without barrier effect for MS)(Research, Space, Development Cooperation, Humanitarian Aid)
- 3. Support, Coordination, Supplement (harmonisation of legal provisions is not allowed)

(e.g. Industry, Education, Culture)



# **Objectives and Instruments of Europe's Research Policy**

# **Objective:**

Creation of a

**European Research Area** 

Shared Competence (Art. 3 (3) TEU und Art. 4 (3) TFEU)

Research
Framework
Programme
(Art. 182),
Participation
Rules (Art.183)

Complementing Measures (Art. 182, 5)

Coordination of Research and Technology Policies (Art. 181) Measures according to Art. 185 and 187 (Ex-Art. 169 and 171)





# Research, Technological Development and Space in the Lisbon Treaty (Title XIX):

Art. 179-190 TFEU (formerly Art. 163-173 TEC)

- strengthening the scientific and technological bases of the Union by achieving a <u>European research area</u> in which researchers, scientific knowledge and technology circulate freely
- <u>Development of Competitiveness</u> of the Union and its Industry
- Support of other policies of the EU (e.g. Environment, Health etc.)
- → European Research Area has a treaty basis for the first time, more and wider objectives in the Lisbon treaty than before



# New: Complementing Measures: Art. 182 (5) TFEU

#### **Nice Treaty**

Supporting/Complementing Competence

Instruments in the TEC:

Research Framework Programme and Specific Programmes (Art. 166)

Measures according to Art. 169 and 171

Activities in the Open Method of Coordination (Art. 165)

#### **Lisbon Treaty**

Shared Competence (Art. 3 (3) TEU)
Objective: Achieving the ERA

Instruments in the TFEU:

Research Framework Programmes and Specific Programmes (Art. 182)

Complementing Measures for the implementation of the ERA (Art. 182 (5))

Measures according to Art. 185 und 187

Activities in the Open Method of Coordination (Art. 181)

Guidelines, Indicators, Best Practice, Monitoring, Benchmark (Art. 181 (2))



# New: Complementing Measures: Art. 182 (5) TFEU

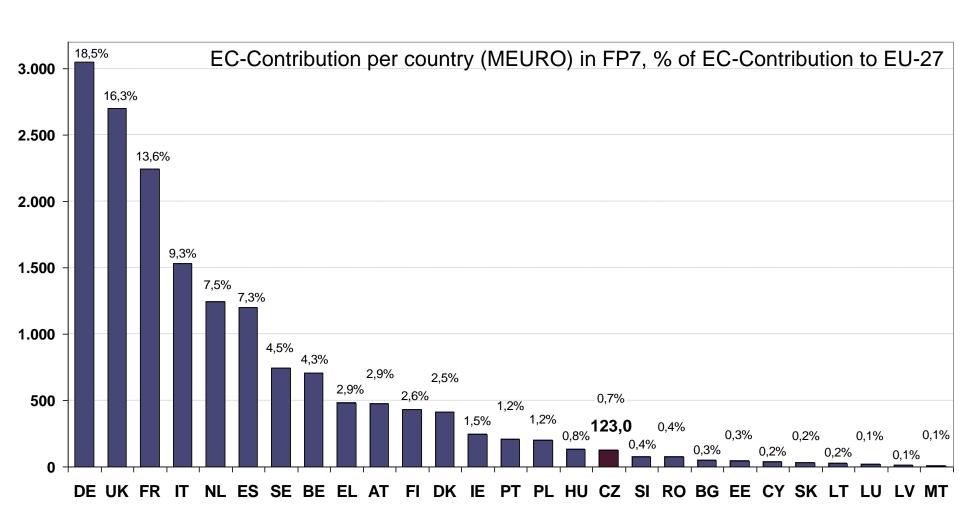
#### Art. 182 Abs. 5 TFEU

As a complement to the activities planned in the multiannual framework programme, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee, shall establish the measures necessary for the implementation of the European research area.

→ Allows for (necessary!) measures of the EU additional to the Framework Programme (own competence)



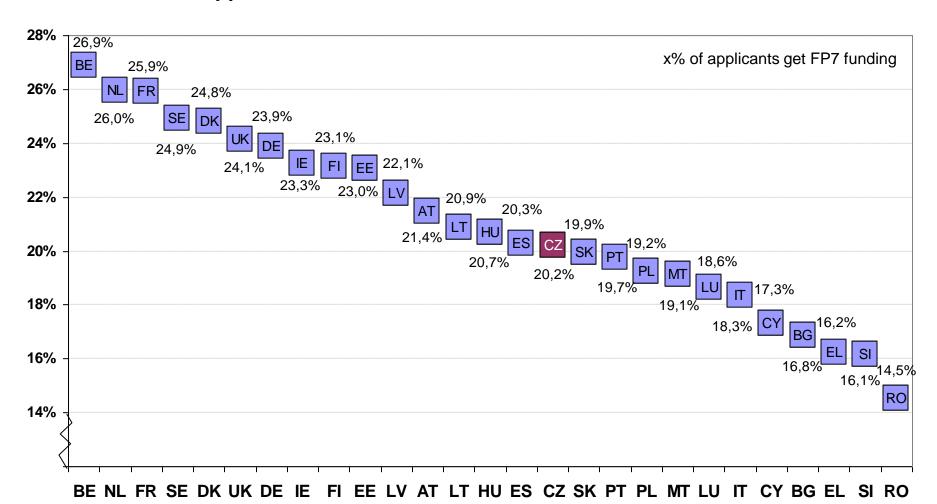
# **FP7 - Participation of Member States**





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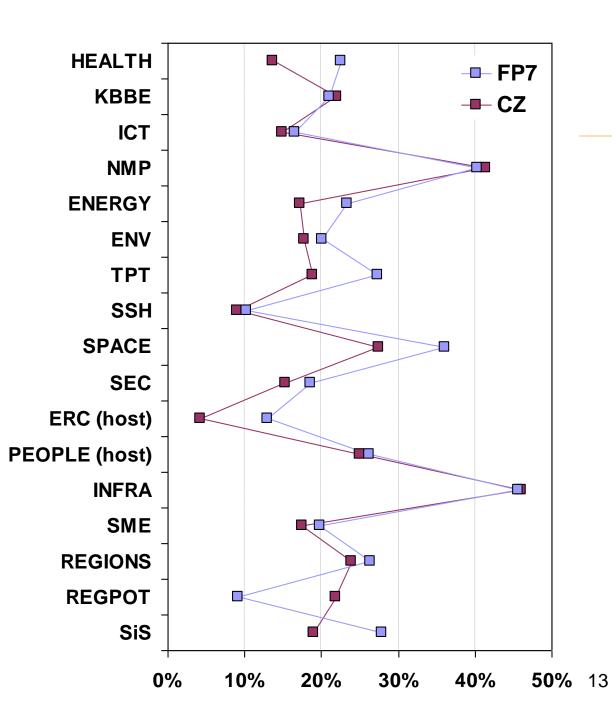
#### Success rates of applicants in FP7





# Success rates of applicants

x% of applicants get FP7 funding

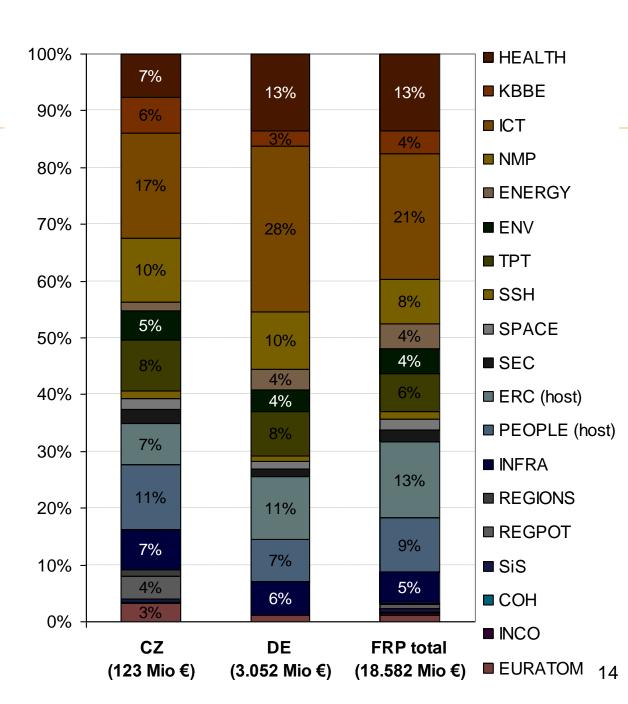


Source: ECORDA-Database, March 2011



# Thematic portfolios

EC-Contribution to country Share of thematic areas



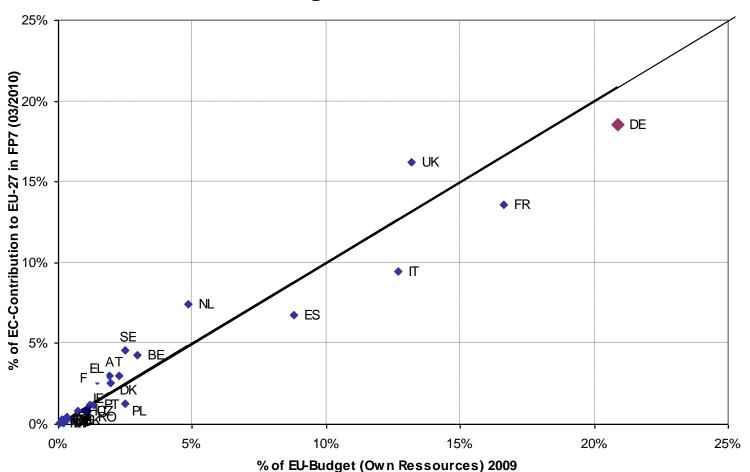
Source: ECORDA-Database, March 2011



# FP7 participation - reference point: juste-retour

#### Towards a more differentiated view

Share of contribution to EU-Budget vs. Share of FP7-returns to member state (1)

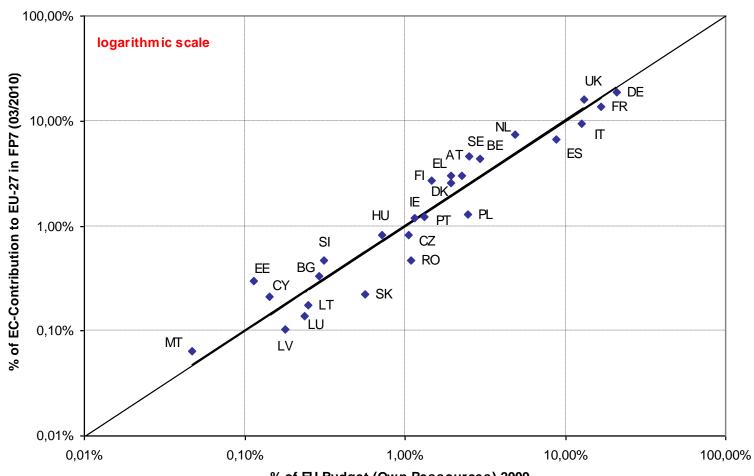


Source: ECORDA-Database, March 2010, EUROSTAT



# FP7 participation - reference point: juste-retour

# Towards a more differentiated view Share of contribution to EU-Budget vs. Share of FP7-returns to member state (2)



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# Think national and european levels together!

# Success factors for good performance in FP7

- Focused national strategy to build up capacities
- Strategy in line with major EU policy lines
- National support tailored to enhance FP-participation
- Using structural funds

# How much is 'good'?

- Develop indicators that map national strategy
- Define reasonable target corridor for FP participation
- Compare performance only with peer group countries



# FP7 Interim Evaluation - Recommendation of experts

- FP7 Interim Evaluation Recommendation No. 9:
   "To pave the way for increased participation from Member States that are underrepresented greater prominence should be given to improved connections between the Structural Funds and the FP."
- Council Conclusions 7585/11 of 10th March 2011, point h: "The Commission, in consultation with the Member States, is invited to analyse the reasons of low participation rates from certain Member States and report back to the Council as soon as possible but before the end of 2011, and put forward appropriate actions in this regard, aiming at spreading scientific excellence."





# **Excellence and cohesion are communicating tubes**

#### **Excellence supports cohesion**

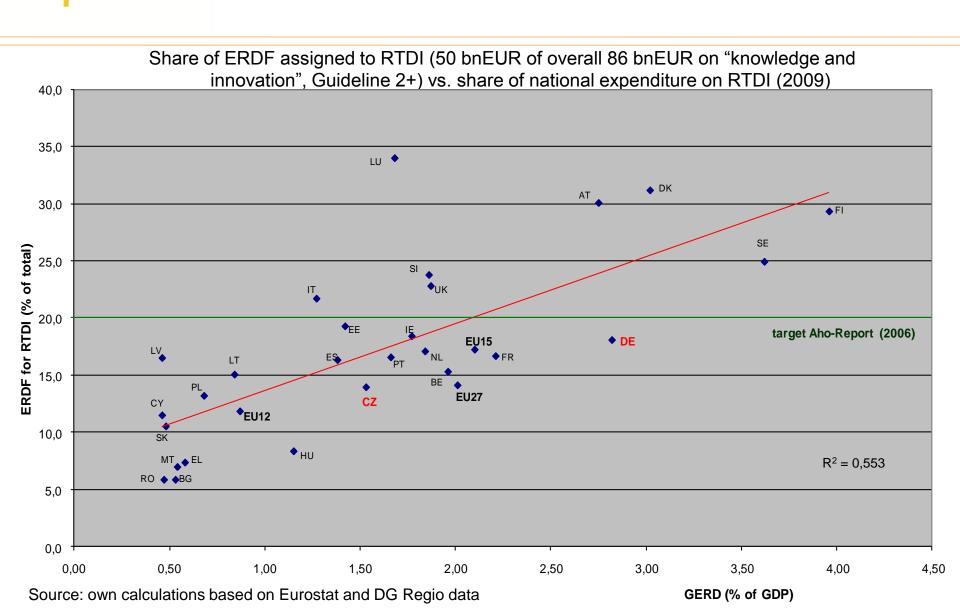
- Lighthouse function of excellent research
- Spreading of excellence through cooperation, networking and knowledge transfer
- Brain circulation using the ERC and the Marie-Curie programme
- Joint use of infrastructures
- Mutual learning within ERA-Nets
- Joint development of innovation strategies in "Regions of Knowlege"

## Structural funds support regional RTD

- Budget share of 50 Mrd. Euro for R&I in period 2007-2013 ≈ FP7 Budget
- Enabling participation in the Framework Programme
- Not just "money" for research but achieving strategic aims!



# Think national and European levels together!





# Think national and European levels together!

 How important is the ERDF relative to national expenditure on RTDI?

#### Importance of ERDF for innovation and progress in implementation in selected countries:

	National gross expenditure on R&D (GERD) (bn EUR) (2009)	% of GDP (2009)	ERDF earmarked for RTDI (decided OPs) (bn EUR)	Relative importance of ERDF for RTDI (ERDF as % of GERD)
EU-27	236,8	2,01	48,5	2,9
AT	7,5	2,75	0,4	0,7
CZ	2,1	1,53	3,7	24,9
DE	67,7	2,82	4,6	1,0
FR	42,1	2,21	2,2	0,8
NL	10,5	1,84	0,3	0,4
IT	19,3	1,27	6,1	4,5
PL	2,1	0,68	8,6	58,4
SI	0,7	1,86	1,0	21,2
SK	0,3	0,48	1,2	56,1
UK	29,3	1,87	2,3	1,1

Source: Eurostat; National Strategic Reference Frameworks (NSRF); own calculations



# Think national and European levels together!

 Strategy vs. Reality: how do Member States manage to spend the funds for innovation?

#### Progress made in the implementation of ERDF in selected countries:

	ERDF total funds (decided OPs) (bn EUR)	ERDF total - funds allocated to projects (% of decided OPs)	ERDF on RTDI – funds earmarked (decided OPs) (bn EUR)	ERDF on RTDI – funds allocated to projects (% of decided OPs)
EU-27	344,3	27,1	48,5	28,5
AT	1,2	20,5	0,4	27
CZ	26,3	21,4	3,7	8,1
DE	25,5	33,3	4,6	37,5 (estimated)
FR	13,4	26	2,2	26,9
NL	1,7	55,8	0,3	76,3
IT	28,0	38	6,1	43,8
PL	65,2	19,4	8,6	29,4
SI	4,1	42,2	1,0	54,8
SK	11,4	18,5	1,2	7,4
UK	9,9	35,2	2,3	25,4

Source: DG Regio Strategic Report 2010; data as of 30.9.2009 (for DE: 31.12.2008); own calculations





#### Building bridges between the CSFs for Cohesion and R&I

### What are our options? Some ideas:

### SF adjustments

- SF an important tool to build the ERA: define RTDI as mandatory priority area in SF programmes
- Lift the restriction for combining SF with other EU funds
- Encourage more cooperative (interregional, transnational) approaches and competitive calls

#### FP adjustments

- Encourage combination with SF, e.g. explicitly in Council decision on FP and in the Annual Work Programmes
- Link establishment of research infrastructure to criteria for smart specialisation

## Global / mutual adjustments

- Promote integrated use of FP-SF funds, e.g. SF topping up of FP projects, multi-stage projects, multi-fund programmes
- Establish a <u>single</u> financial regulation for EU programmes

### National / regional strategy

- Promote a strategic approach to RTDI policies through national and regional strategies integrating the various programmes supporting RTDI (strategic use of the available toolbox)
- Intelligent mix of ERDF spent at national and regional levels to support national innovation systems/ strategies, RISs, regional clusters, networking between stakeholders, intermediary institutions



# Features of Common Strategic Framework for cohesion policy

- Focus on EU2020 priorities: concentration of funds i. a. on RDTI
- Strategic Programming: aligned EU and national development / investment priorities
- Integrated approach: Greater synergies with FP
- Smart specialisation strategies: regional excellence global competitiveness
- Implementation mechanisms: regulatory harmonisation, onestop shop



Bridges to CSF for research and innovation funding?



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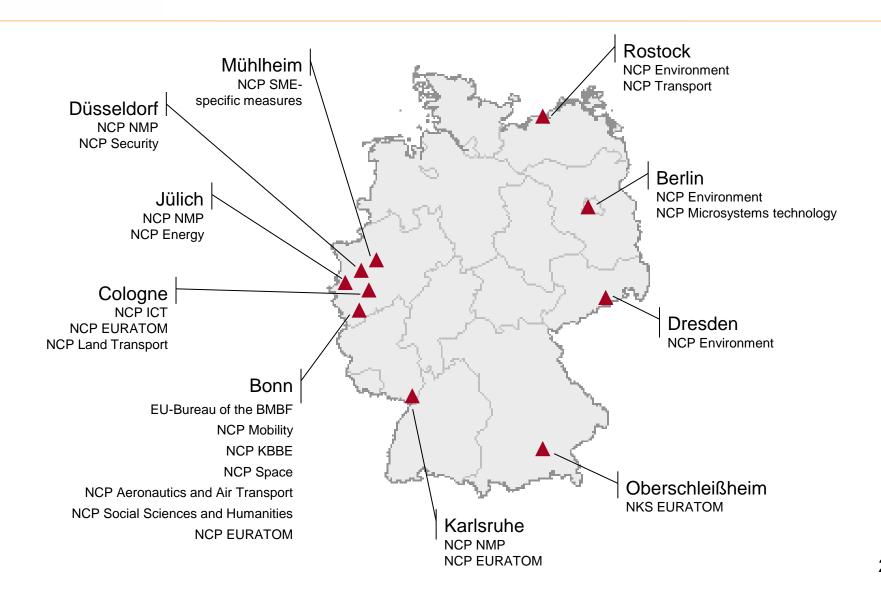


#### The German NCP-network

- 90 nominated NCPs
- NCPs work for the Federal Ministry of Education and Research (BMBF) and the Federal Ministry of Economics and Technology (BMWi)
- NCPs are located at Project Management Organizations
- EU-Bureau of the BMBF (EU-Büro des BMBF, EUB)
  - coordinates the German NCP-network
  - liaison to other support structures
  - hosts 9 NCPs as well as the inital information point and the networks general Website (www.forschungsrahmenprogramm.de)
  - organizes general info events (e. g. for multipliers)



# The German NCP-network – a geographical challenge





# **Germany: NCP Network & "Multipliers"**

#### **NCP Network**



- officially nominated NCPs
- "Program coordinators" (10 Topics, People, ERC, Research Capacities, Euratom)

# **Network of Multipliers**



Universities, research institutes, industry



- >> targeted workshops / training events
- >> annual "Exchange of Information"



# Identification of stakeholder interests - Current positions on FP8 and/or the CSFRI

acatech – German Academy of Science and Engineering	April 2011
MPG – Max Planck Society	23 March 2011
DFG – German Research Foundation	March 2011
VDMA – German Engineering Federation	January 2011
FHG – Fraunhofer-Gesellschaft	March 2011
HRK – German Rectors' Conference	6 January 2011
WGL – Leibniz Association	4 October 2010
DIHK – Association of German Chambers of Industry and Commerce	23 July 2010
HGF – Helmholtz Association	February 2010

# **National position papers**



- First Guideline Paper of the Federal Government for the 8th EU Research Framework Programme (Structure and Instruments), 26 March 2010
- Resolution of the **Bundesrat** on the organisation of the forthcoming 8th EU Framework Research Programme (**Federal States** interests), 7 May 2010
- Opinion of the German Federal Government on the Green Paper From Challenges to Opportunities: Towards a Common Strategic Framework for EU Research and Innovation funding, 19 April 2011
- Second Guideline Paper of the Federal Government for the 8th EU Research Framework Programme (Thematic priorities); XX May 2011

**More information:** 

http://www.forschungsrahmenprogramm.de/zukunft.htm



# Political Core Demands of the German Federal Government

#### Continuation of Cooperative Research

- Support to the objectives of the Innovation Union
- Major contributions to solving major societal challenges
- A Specific Programme "Innovation" and integration of the EIT to improve the conditions for knowledge and technology transfer
- Strengthening the competitiveness of Europe's industries with a Specific Programme "Key EnablingTechnologies"
- Long-term strengthening of the ERC
- Considerable simplification of procedures



#### **Thematic Priorities**

#### of the German Federal Government

