

EUROPEAN RESEARCH POLICY FOR GERMAN UNIVERSITY

HORIZON 2020 (2014-2020)

Maria da Graça Carvalho

17 January 2012



Content of Presentation

- The Place of the EU in a Multipolar World of S&T
- Horizon 2020: Financing Instrument implementing the "Innovation Union"
- Synergies between the FP and the Structural Funds
- Simplification
- European Research Area
- Next steps
- Conclusions



THE PLACE OF THE EU IN A MULTIPOLAR WORLD OF S&T



THE PLACE OF EU IN A MULTI POLAR WORLD OF S&T

According to the STC key figures report 2008/2009:

80% of researchers work outside the EU

75% of GERD is executed in other parts of the world

69% of patent applications are made outside the EU

EU's world share in GERD has diminished by 7.6% over the previous 6 years

EU's world share of patent application has declined 14.2% over the previous 6 years

While the ratio of the world share of patent applications/world share of GERD declined in the EU by 7%, it increased in the emerging economies of Asia by 53%

Conclusion: Asian economies have increased their patents even more rapidly

than their investments in research when compared with the EU

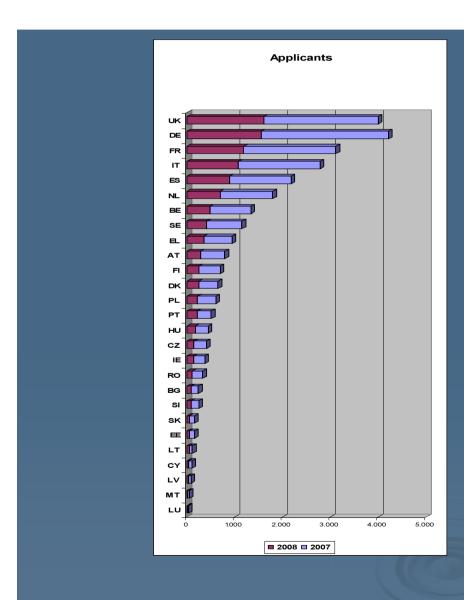


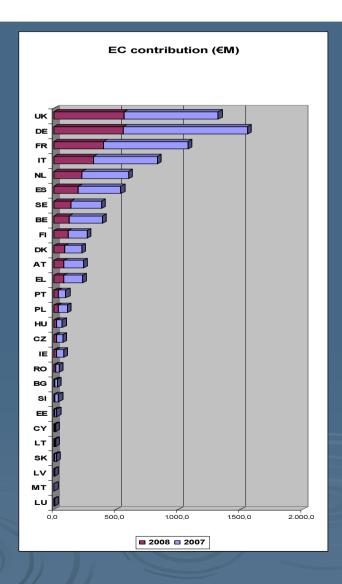
THE IMPORTANCE OF THE EUROPEAN RESEARCH PROGRAMMES

The current European Framework Programme of research and development, with 52 Million Euros of funding, has an enormous strategic importance for the development of innovation, competitiveness and therefore employment of the European area.



THE PARTICIPATION OF THE DIFFERENT M.S. IN THE EUROPEAN RESEARCH PROGRAMMES







The importance of present moment

- European Budget and European Financing Programmes 7
 years cycles. Next cycle: 2014-2020
- European Commission, Council and Parliament are negotiating the Budget post 2013 and the future Framework programme: Horizon 2020
- Europe is facing great challenges: climate changes, ageing, food security, security of energy supply, etc
- Research and innovation are in the heart of the Strategy Europe 2020



HORIZON 2020

The EU Framework Programme for Research and Innovation (2014-2020)



Horizon 2020 Principles

5 key principles:

- 1. A Trust based funding system
- 2. A chain from frontier research, to technological development, demonstration, valorisation of results and innovation
- 3. Simplification
- 4. Excellence based criteria for the FP in co-ordination with the structural funds for research capacity building: "Stairway to Excellence"
- 5. Employment of young researchers



Horizon 2020 Financing

- European Parliament adopted an amendment to doubling of the Budget for the next European Programme for Research and Innovation (increase from €50 billion to €100 billion)
- European Commission proposed €87.740 billion
- Negotiations taking place between Parliament, Council and Commission



Horizon 2020 Three priorities

> Excellent science

Industrial leadership

Societal challenges



Horizon 2020 Excellent science

Excellent science proposed funding (million euro, 2014-20):

European Research Council	13.268
Future and Emerging Technologies	3.100
Marie Curie actions	5.572
Research infrastructures	2.478



Horizon 2020 Industrial leadership

Industrial leadership proposed funding (million euro, 2014-20):

Leadership in enabling and industrial technologies (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13.781
Access to risk finance	3.538
Innovation in SMEs	619



Horizon 2020 Societal challenges

Societal challenges proposed funding (million euro, 2014-20):

Health, demographic change and wellbeing	8.033
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	4.152
Secure, clean and efficient energy	5.782
Smart, green and integrated transports	6.802
Climate action, resource efficiency and raw materials	3.160
Inclusive, innovative and secure societies	3.819



Horizon 2020 Role of EIT and JRC

> Three priorities to be supported by:

European Institute of Innovation and Technology (EIT)	1.360
Joint Research Centre (JRC)	1.962



Synergies between the Framework Programme and the Structural Funds



Synergies between the FP and the SF

- Greater synergy between Research Framework Programme and Structural Funds
 (47 recommendations in the followring areas):
 - A. Develop strategies and strengthen governance in the area of "Research, Technological Development and Innovation" (RTDI)
 - B. Strengthen and develop RTDI Infrastructure and Human Resources
 - c. Develop RTDI Excellence
 - Develop R&D cooperation at European and international levels
 - Strengthen the exploitation and economic and social valorisation of R&D results
 - Improve communication and information



SIMPLIFICATION



Simplification Rules for Participation

1. A single set of rules

- Adapted for the whole research and innovation cycle
- Covering all research programmes and funding bodies
- Aligned to the Financial Regulation, coherent with other new EU Programmes

2. One project – one funding rate

- Maximum of 100% of direct costs (except for actions close to market (70% maximum)
- Indirect eligible costs: a flat rate of 20% of direct eligible costs



Simplification Rules for Participation

3. Simple evaluation criteria

Excellence – Impact – Implementation (Excellence only, for the ERC)

4. New forms of funding

Aimed at innovation: pre-commercial procurement, inducement prizes, dedicated loan and equity instruments

5. International participation

Facilitated by better protecting EU interests



Simplification Rules for Participation

6. Simpler rules for grants

- Broader acceptance of participants accounting practices for direct costs, flat rate for indirect costs, no time-sheets for personnel working full time on a project, possibility of outputbased grants
- 7. Fewer, better targeted controls and audits
 - Lowests possible level of requirements for submission of audit certificates without undermining sound financial management
 - Audit strategy focused on risk and fraud prevention
- 8. Improved rules on intellectual property
 - Balance between legal security and flexibility
 - Tailor-made IPR provisions for new forms of funding
 - A new emphasis on open access to research publications



Simplification Summary

- Single set of simpler and more coherent participation rules
- New balance between trust and control
- Moving from several funding rates for different beneficiaries and activities to just two
- Replacing the four methods to calculate overhead or "indirect costs" with a single flat rate
- Major simplification under the forthcoming financial regulation
- Successful applicants to get working more quickly: reduction of average time to grant by 100 days (current average of around 350 days under FP7)



EUROPEAN RESEARCH AREA (ERA)



European Research Area

- ERA complemented by Horizon 2020
- Removes barriers, open to the world and with cooperation with third countries
- Single market for knowledge, research and innovation





From 30/11: Parliament and Council negotiations on the basis of the Commission proposals

Ongoing: Parliament and Council negotiations on EU budget 2014-20 (including overall budget for Horizon 2020)

Mid 2012: Final calls under 7th Framework
Programme for Research to bridge gap
towards Horizon 2020

Mid 2013: Adoption of legislative acts by Parliament and Council on Horizon 2020

1/1/2014: Horizon 2020 starts; launch of first calls



CONCLUSIONS



Conclusions Horizon 2020

- A balance between the scientific, industrial and societal pillars
- Simplification
- More synergies with structural funds
- New mechanism "stairway to excellence"
- A substantial increase of the budget for research and innovation: €80 billion
- A dedicated financial contribution to the EIT (from 300 million to 3 billion Euros)
- A substantial increase 77% of the budget for European Research Council



Conclusions

- **EU research and innovation brings unique responses to address Europe's societal challenges whilst stimulating growth and jobs**
- Doubling of the financiancing of Horizon 2020 and better synergies between the FP and Structural Funds
- Horizon 2020 simplification, more trust, flexibility and excellence based criteria
- Parliament and Council negotiations on the basis of the Commission proposals to be adopted by the end of 2013
- > Further analysis of the details, namely of the participation rules