



# **Horizon 2020**

# The EU's new framework programme for research and innovation (2014-2020)

Stefanie Schelhowe EU-Bureau of the BMBF, PT-DLR MPQ Garching, 26 November 2013





#### **Disclaimer:**

- The adoption of the binding legislative acts by the European Parliament and the Council on Horizon 2020 is planned for the end of 2013.
- Until then, all information contained in this presentation is preliminary and describes the final but pre-adoption status.
- Please always check the latest versions of the Work Programmes
   & Guides for Applicants before applying.





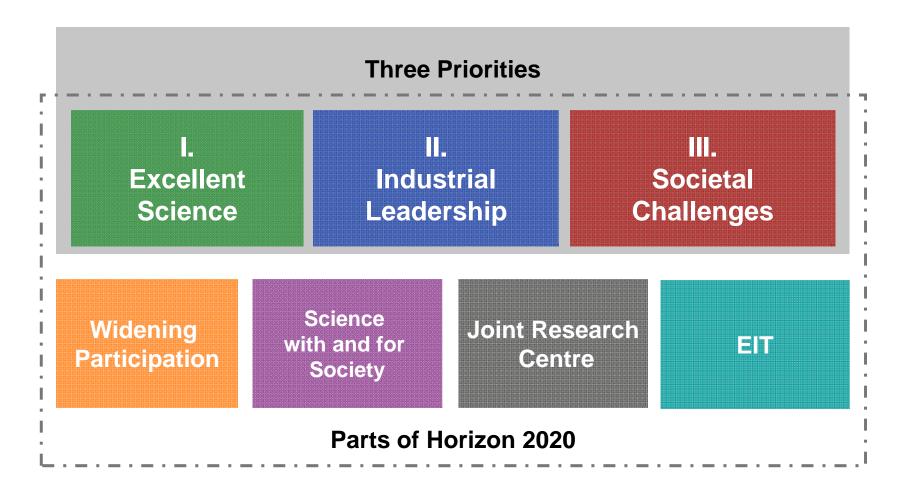
# Horizon 2020 - The new Framework Programme for Research and Innovation

- Combines the current funding programmes for R&I:
  - 7th EU Framework Programme for Research, European Institute of Innovation and Technology (EIT), innovation parts of Competitiveness and Innovation Framework Programme (CIP)
- Stronger focus on innovation: closing the gap between knowledge and market, stronger participation of SMEs
- Orientation on Societal Challenges and on socio-economic impact
- Simplification
  - Single set of rules, simplified
  - Reduction of time-to-grant
  - Single IT Participant Portal and Front Office





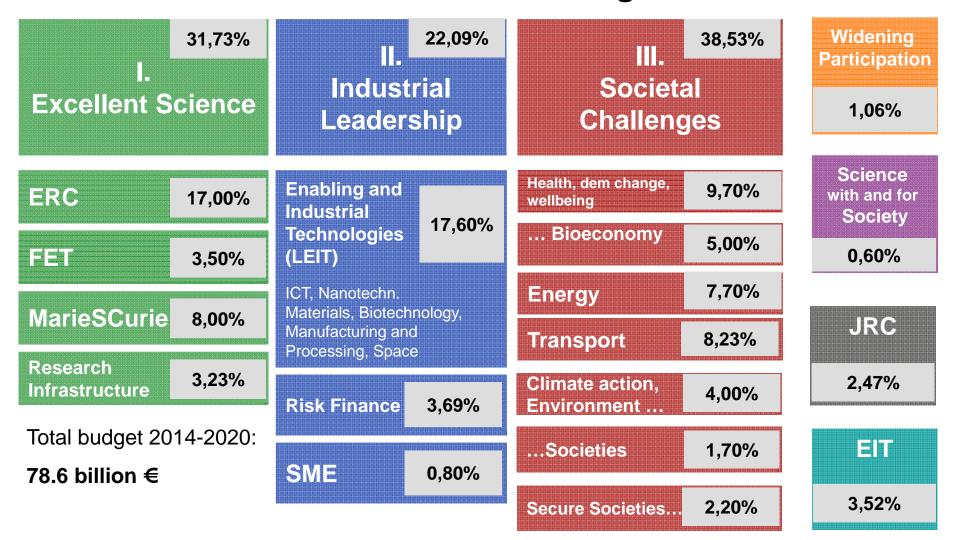
# **Programme Structure of Horizon 2020**







## Horizon 2020 — Structure & Budget allocation







## **National Contact Points (NCPs)**

- Nominated by national ministries to the European Commission
- NCPs give personalised support on the spot and in proposers' own languages on
  - application process
  - grant preparation and project management
- Organisation of workshops and information events
- In Germany located at different Project Management Agencies (Projektträger, PT) of the Federal Ministries (BMBF and BMWi), coordination: EU-Bureau of the BMBF, PT-DLR

Web: http://www.forschungsrahmenprogramm.de/nks.htm





# **Front Office – Hotline Germany**

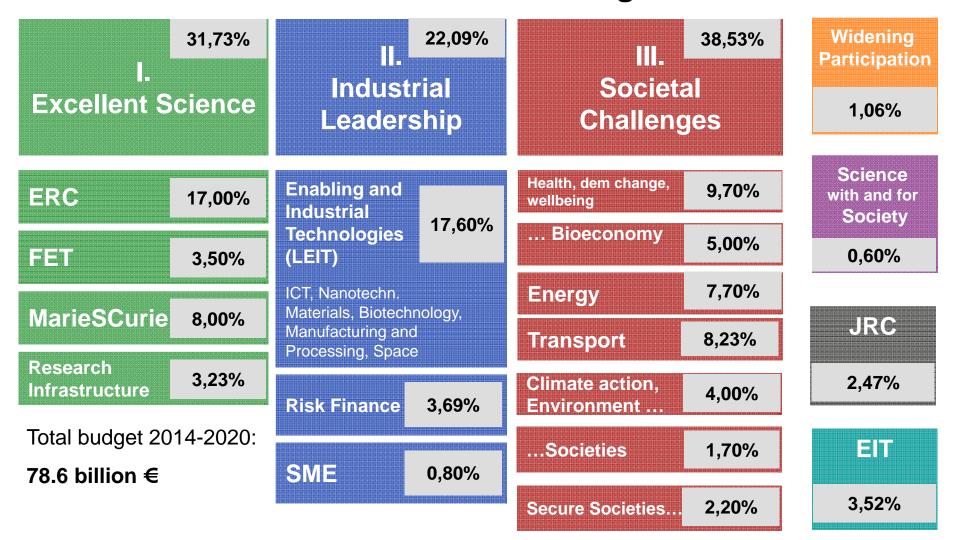
- First Contact Point for all questions regarding EU research funding
- Connection to the right contact person
- Support in all questions during the application process and project management







## Horizon 2020 — Structure & Budget allocation







**Excellent Science** 

# Future and Emerging Technologies (FET) – Objectives

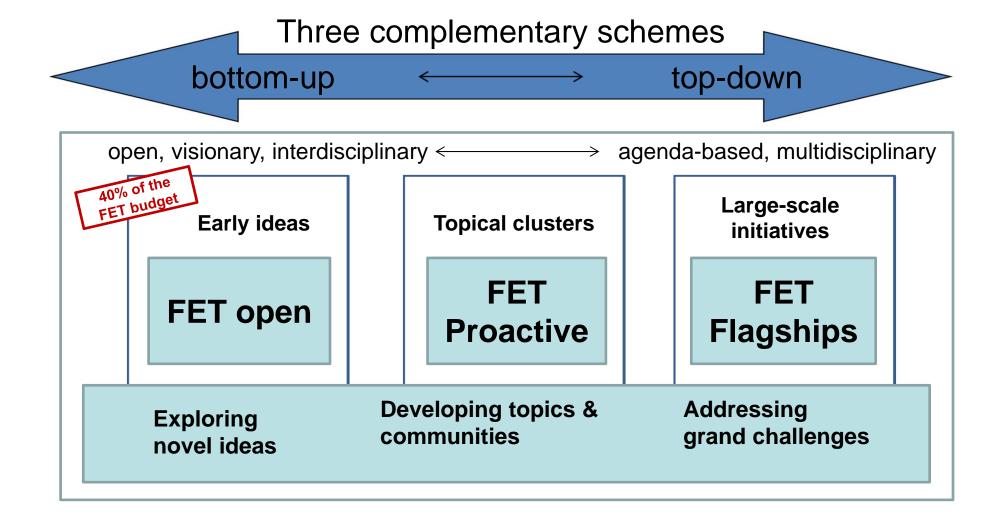
- Foster scientific collaboration across disciplines on visionary,
   high-risk ideas uncover radically new technology areas
- Science-driven and revolutionary research
- Interdisciplinary and collaborative
- Pathfinding Europe's technological future + bootstrapping new R&I eco-systems
- Complementary to activities in other parts of Horizon 2020 exploting synergies





Excellent Science

#### FET – activities







**Excellent Science** 

### Research Infrastructures (RI)

- **EU definition of RI:** "Facilities, resources and related services used by the scientific community to conduct top-level research in their respective fields. RI can be single-sited or distributed."
- Examples: synchotrons, neutron sources, telescopes, research vessels, but also data bases, archives, specialsed labs,...
- Calls for existing and new RI's of European Interest
  - networking, transnational access or service activities, joint research
  - Design Studies & preparatory phase of new infrastructures





Industrial Leadership

### Part II – Industrial Leadership

- Leadership in enabling and industrial technologies (LEIT): LEIT, inclusive key enabling technologies): Research and innovation in areas of particular relevance for the competitiveness of the industry (ICT, Nanotechnology, Materials, Biotechnology, Manufacturing and Processing and Space)
- Acess to risk finance: debt facility and equity facility in order to leverage yet further private high-risk research and innovation (R&I) investments
- **Innovation in KMU**: dedicated support for SME in three different stages covering the whole innovation cycle (feasibility part, demonstration and testing and commercialisation phase)





Societal CHallenges

## **Societal Challenges**

- 7 Societal Challenges defined by the EU's decision makers (policy-driven)
- Problem-solving oriented
- Topics defined in Work Programmes (every two years)
- Interdisciplinary research
- Big European consortia
- Highest part of H2020 budget 38,53% (ca. 26.5 billion €)





Societal Challenges

	Societal Challenges		
	Health, Demographic Change and Wellbeing		
2.	Food Security, Sustainable Agriculture and Forestry, Marine and Maritime and Inland Water Research and the Bioeconomy		
3.	Secure, Clean and Efficient Energy		
4.	Smart, Green And Integrated Transport		
<b>[5.]</b>	Climate action, Environment, Resource Efficiency and Raw Materials		
6-	Europe In A Changing World – Inclusive, Innovative And Reflective Societies		
7.	Secure Societies – Protecting Freedom And Security Of Europe And Its Citizens		





# Eligibility for Funding - EU 28 and Associated Countries



#### 28 EU Member states

#### **Associated Countries (FP7):**

Turkey

Macedonia (FYR)

Serbia

Montenegro

Bosnia & Herzegovina

Switzerland

Israel

Liechtenstein

Albania

Republic of Moldova

**Iceland** 

Norway

Faroe Islands





# **International Cooperation in Horizon 2020**

- General openness for the participation of partners from third countries
- Targeted international cooperation activities (defined in Work Programmes)

3 country groups — Differences regarding funding

EU enlargement countries + countries of the European Neighbourhood policy

**Developing countries** 

in general eligible for funding

Industrialised countries and emerging economies

only funded in exceptional cases





## **New Funding Rates and Rules in Horizon 2020**

- One funding rate per project all parts of H2020
  - Research and Development: max. 100% of the actual eligible costs
  - Close-to-market activities ("innovation actions"):
    - max. 70% of the actual eligible costs
    - Exception: non-profit legal entities max. 100%
- Indirect costs: flat rate of 25% of the total direct eligible costs
- Non-deductable VAT become eligible costs
- Only one certificate on the financial statement (audit certificate) at project's end if EU-contibution reaches 325.000 € or more
- Time-to-Grant: max. 8 months (some exceptions, i.e. ERC)





## **Research and Innovation Actions**

Funding 100% +25%

		Relevant Parts
All research actors	3 institutions from 3 countries (EU/AS)	LEIT, Societal Chall, FET

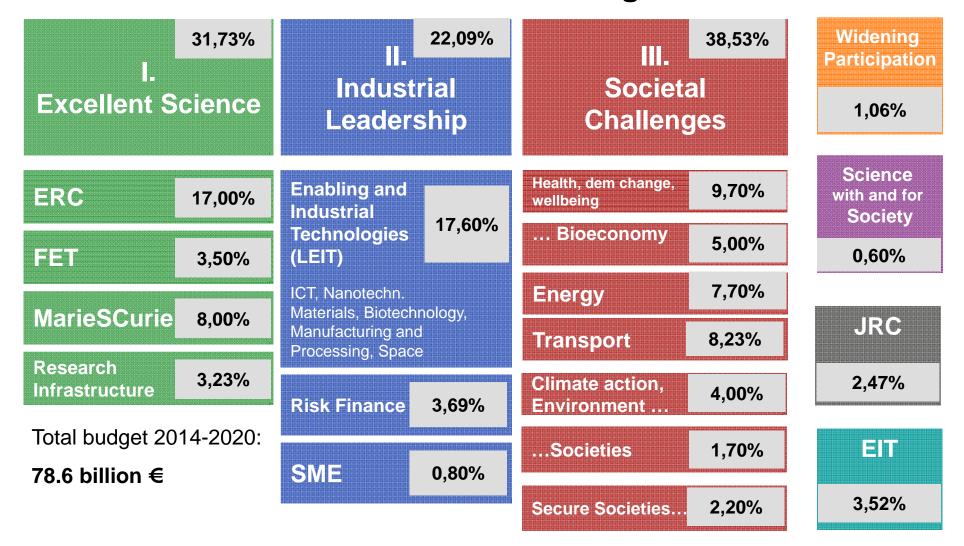
Top down

- Generating new Knowledge
- Basic and applied research, technology development and -integration,
- Feasibility Studies
- Prototypes





## Horizon 2020 — Structure & Budget allocation









## **Spreading Excellence & Widening Participation**

#### **Objectives**

- Closing the research and innovation divide between Member States and regions
- Exploitation of the R&I potential within the entire EU
- Widening participation in Horizon 2020 (compared to FP7)
- Contribution to the realisation of the European Research Area

#### **Implementation**

- Measures following the principle of excellence
- Main focus on low performing RDI regions
- Foster synergies with the European Structural and Investment Funds (ESIF)



#### Spreading excellence and widening participation - implementation



#### **Funding schemes**

#### **Teaming**

Creation of new/ upgrade of existing centres of excellence in low performing MS/regions in terms of research and innovation

#### **Twinning**

specific objectives

Strengthening significantly an emerging institution of a low performing MS/region in a defined field of research

#### **ERA Chairs**

Attraction of outstanding reseachers to organisations with a clear potential for excellence in research

#### **Policy Support Facility**

Improving the design, implementation and evaluation of national/ regional innovation and research policies

#### **Support** in COST

part B) "Widening" actvities

Structural support to ERA:

Bringing together 'pockets of excellence" not yet well integrated;

Enhancing capacity building

#### Synergies with the European Structural and Investment Funds (ESIF)

Research organisation

(ONE applicant) in

close cooperation with

authorities and other

stakeholders

#### partner constellations

Partnership between a leading scientifc institution and an organisation from a low performing RDI Member State (applicant)

Coordination and support Action (100%): 2-stage: 1 year (1st phase) + 5-7 years (2nd phase)

Partnership between one knowledge **Institution** (applicant) and two leading research intensive

counterparts

#### Instrument

Coordination and support Action (100%)

Coordination and support Action (90%); 2,5 M. €/project; 60 months

**Authority** (applicant) receives expert advice through S3 platform und **R&I Observatory** 

Coordination and support Action (Expert and service contracts)

Researcher and research organisations

Coordination and support Action





#### Science with and for Society

### Science with and for society

- Objectives: effective cooperation between science and society, recruit new talent for science, pair scientific excellence with social awareness and responsibility.
- Broad range of issues covered, top-down:
  - Young people and science
  - Gender equality in science
  - Societal engagement in research activities
  - Science education for a scientific literate public
  - Access and use of results of publicly funded research, Open Access
  - Responsible Research and Innovation, Ethics
  - Anticipation and Assessment of research and innovation activities
  - Science communication
- Instruments: Coordination and support actions, collaborative projects





JRC

# Joint Research Centre (JRC)

- The JRC is a General directory in the European Commission (COM) and works as an in-house science service of the COM and a reference centre for science and technology
- It consists of seven research institutes in five EU member states with 2900 employees
- Mission: to provide EU policies with independent, evidence based scientific and technical support through the whole policy cycle (conception, development, implementation and monitoring/evaluation)
- Opportunities to collaborate:
  - JRC as project partner, Calls for Tender, job vacancies, work at the JRC as a Seconded National Expert, European Forum for Science and Industry,





EIT

#### EIT: European Institute for Innovation and Technology

- Integration of the three sides of the knowledge triangle (higher) education, research, and innovation
- Means: Knowledge and Innovation Communities (KICs), i.e. cluster networks good fit with both the themes of the German Hightech-Strategy and the character of the German leading edge clusters (cluster approach)

In planning: 5 new KICs

2014: Innovation for Healthy Living and Active Ageing; Raw Materials

2016: Food 4 the future; Added-value Manufacturing

2018: Urban Mobility

German institutions are core partners of all 3 KICs existing so far: KIC InnoEnergy, EIT ICT Labs, Climate KIC





#### **Horizon 2020 Calls**

- First Calls for many parts of Horizon expected: 11 December 2013, first Deadlines spring 2014
- Work Programmes (2 years)
  - Calls with research topics
  - Budget distribution
  - Form of projects (instrument)
- Most drafts of Work Programmes 2014-2015 already available: http://ec.europa.eu/research/horizon2020/index\_en.cfm?pg=h2020-documents





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**⋈** *h2020@dlr.de* 

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www.eubuero.de
www.horizont2020.de
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