



Horizon 2020

EU Framework Programme for Research & Innovation

Opportunities for US researchers

Vera Kammann

DLR Germany March 2014







Content

- I. Introduction to Horizon 2020 and its general structure
- II. Participation in Horizon 2020 Key legal / financial aspects and international Cooperation
- III. Practical information and guidance





The Framework Programme for Research and Innovation - Horizon 2020

- World's largest funding programme for research and innovation about 78 Billion € (2014 - 2020)
- Combines the formerly separate funding programmes for R&I (FP7, EIT, CIP)
- Stronger focus on innovation: closing the gap between knowledge and market, stronger participation of SMEs
- Orientation towards grand Societal Challenges
- Simplification with administrative issues
- Many opportunities for cooperation with non-European partners





Programme Structure of Horizon 2020

I. Excellent Science	II. Industrial Leadership	III. Societal Challenges	Widenng Participation
ERC	Leadership in enabling and industrial technologies (LEIT)* ICT, Nanotechnologies, Materials, Biotechnology, Manufacturing and Processing, and Space	Health, demographic change and wellbeing	Science with and for
CCT		Bioeconomy	Society
FET		Energy	
Marie-Skłodowska- Curie		Transport	JRC
Research Infrastructures	Access to risk finance	Climate action, Environment	
	Innovation in SME	Societies	EIT
		Secure Societies	





Part I – Excellent Science

- ➤ European Research Council (ERC): support the most talented and creative individuals and their teams to carry out frontier research
- Future and Emerging Technologies (FET): fund collaborative research to open up new and promising fields of research and innovation
- Marie Skłodowska-Curie Actions: provide mobility of researchers; focus on training and career development
- Research Infrastructures: ensure Europe has world-class research infrastructures (including e-infrastructures) accessible to all researchers in Europe and beyond





Part II – Industrial Leadership

- Leadership in enabling and industrial technologies (LEIT):
 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 SME: dedicated support for SME in three different stages covering the whole innovation cycle (feasibility part, demonstration and testing, commercialisation phase)





Part III – Societal Challenges

- 7 specific objectives which aim to contribute to solve important societal challenges of the Union
 - Policy driven: reflect the political priorities and societal challenges of the Europe 2020 strategy
 - Critical mass of knowledge and resources in order to deal with the societal challenges
- Interdisciplinary approach
- Entire cycle from basic research to market uptake
- Strong output orientation





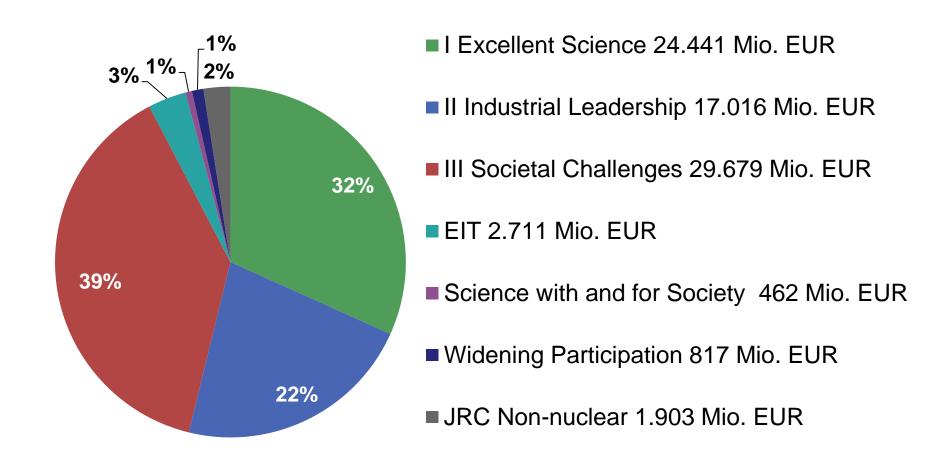
III. Societal Challenges

1.	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
5.	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





Budget allocation of Horizon 2020







Content

- Introduction to Horizon 2020 and its structure
- II. Participation in Horizon 2020 International Cooperation and Legal & financial aspects
- III. Practical information and guidance





Implementation of international cooperation in Horizon 2020

- I. General openness for the participation of partners from third countries
- II. Targeted international cooperation actions

+

Horizontal international cooperation activities





International Cooperation in Horizon 2020 - Objectives

- Three main objectives:
 - Strengthen the Union's excellence in research and innovation + competitiveness
 - Jointly tackle global societal challenges
 - Support the Union's external policies





Eligibility for Funding – Third countries

- Horizon 2020 is generally open to participation of researchers from third countries (neither member state, nor associated country)
- Automatic funding for legal entities identified in the work programme

3 country groups → Differences regarding funding



- Industrialized countries: US, Canada, Australia, South Korea, etc.
- Emerging economies: Brazil, Russia, India, China and Mexico





Exceptional cases for funding....

Participants from industrialised countries and emerging economies are eligible for funding, if:

- Specific provision in the call text
- Provided for under a bilateral scientific and technological agreement or any other arrangement
 - Specific arrangement for US partners to be eligible for funding in "Health, demographic change and well-being"
- ➤ The participation is deemed **essential for carrying out** the action (case by case assessment)





Participation in H2020 in a nutshell - I

- Applications in response to calls for proposals published in a 2-year work program with 18 separate parts (exception ERC)
- Calls are either
 - "top down": topics defined
 - or "bottom-up": proposers suggest the topics themselves
- Consortia of different project participants (majority) or individual researchers / organizations





Participation in H2020 in a nutshell - II

- Gate to H2020 = Participant Portal with information on calls, relevant documents, submission of proposals + project management (http://ec.europa.eu/research/participants/portal)
- Applications in general in English
- Fixed deadlines or cut-off-dates
- Time to grant in general max. 8 months:





Participation of US-Researchers & Organisations

1. Individually

- In the "Excellent Science" pillar
 - European Research Council grantees
 - Marie Skłodowska-Curie Action fellows

2. As collaborative project participants

- In "Societal Challenges" and "Industrial Leadership" pillars
- MSC Partners, Hosts of MSC fellows

3. Program-level cooperation

- With government departments and agencies (e.g. NSF, NIH, NOAA, DOE, etc.)
 - Joint call (with joint evaluation and selection procedures)
 - Coordinated / synchronized calls
 - International Consortia (shared research agenda and coordination mechanisms)





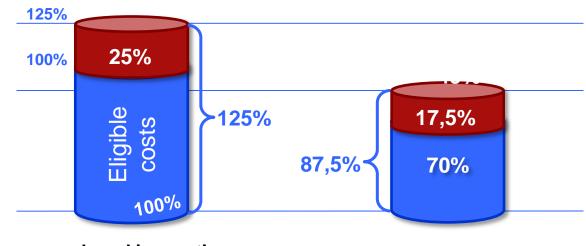
Funding rates in Horizon 2020

Simplified:

One funding rate per project

Reimbursement:

Actual costs (personell costs, subcontracting, travel costs, equipment, etc.)



research and innovation actions

(100% direct eligible costs +25% overhead flat rate) ×100% funding rate = 125% EC-contribution Close-to-market activities ("innovation actions"), but non-profit legal entities 100 %

(100% direct eligible costs +25% overhead flat rate) x70% funding rate = 87,5% EC-contribution





Participation of U.S. Organizations in previous EU programme: FP7 (2007-2013)

- U.S. instances of participation
 - 482 in signed grant agreements for R&D collaborative projects
 - 774 in Marie Curie Actions fellowships and networks
 - 139 European Research Council Pls (45% of all non-Europeans



- Most popular themes in collaborative projects
 - ➤ Health 153
 - ➤ Information and Communications Technologies 83
 - ➤ Food, Agriculture, Fisheries and Biotechnology 43
 - ➤ Nanosciences, Materials and New Production Technologies 29
 - ➤ Environment (incl. Climate Change) 28
 - ➤ Energy 19





Why Participate in Horizon 2020?

- Access to Europe's best expertise, equipment & facilities
- Greater economies of scale & scope
- Increased research quality
- Greater impact, efficiency and rate of progress
- Joining existing/ creating new networks & alliances
- Faster career development
- Strong focus on business opportunities & commercialization
- Many indirect/ unintended benefits ...
 - New research avenues
 - Exchange possibilities
 - Cross-disciplinary/ cross-border fertilization
 - ...





Content

- I. Introduction to Horizon 2020 and its structure
- II. Participation in Horizon 2020 International Cooperation and Legal & financial aspects
- III. Practical information and guidance





How to Apply?

- Find a call for proposals on the Participant Portal:
 http://ec.europa.eu/research/participants/portal/desktop/en/home.html
- Find partners (where necessary)
 - Use Partner Search facility on the Horizon 2020 Participant Portal website: http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/applying-for-funding/find-partners_en.htm
 - Use existing contacts with experience of EU funding programs
 - Search the CORDIS database for participants similar projects in FP7: http://cordis.europa.eu/projects/home_en.html
 - Use social media (e.g. LinkedIn forums)?
- Create an account and register your organization





Modalities

Research and Innovation Actions

II. Innovation Actions

Two-stage
evaluations
First deadline:
12/03/2014 for some
26/04/2014
Second deadline:
26/06/2014

III. Coordination and Support actions

Single-stage evaluation
Deadline: 26/06/14

Find out more and get support:

http://ec.europa.eu/research/participants/portal/desktop/en/home.html





Evaluation Criteria



- ✓ ERC frontier Research actions >>> only EXCELLENCE
- ✓ **Innovation actions** higher weighting for "IMPACT"





Time to Grant

A maximum time to grant of 8 months

5 months

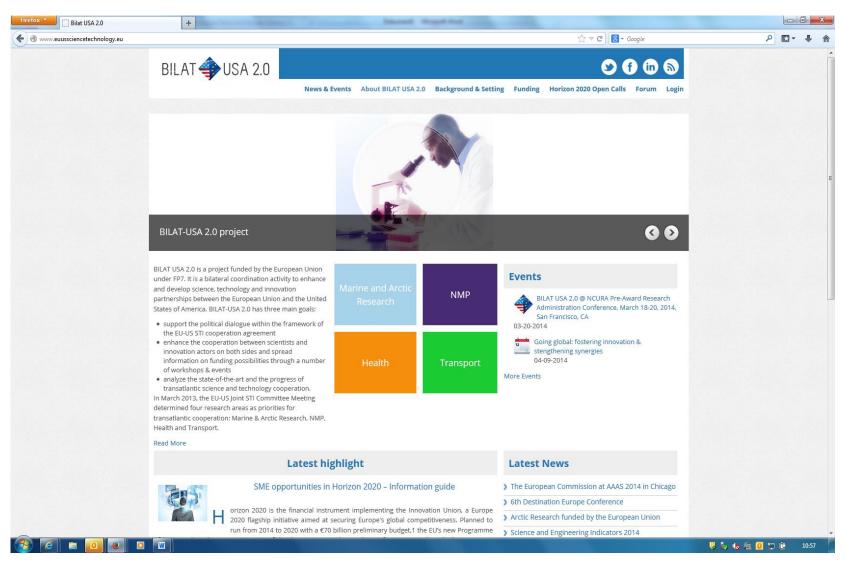
for informing all applicants on scientific evaluation

3 months
for signature of GA





BILAT USA 2.0







Useful H2020 documents

Horizon 2020 Online Manual

http://ec.europa.eu/research/participants/docs/h2020-funding-guide/index_en.htm

Specific Program(me)

http://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/sp/h2020-sp_en.pdf

Rules for Participation

http://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/rules_participation/h202 <u>0-rules-participation_en.pdf</u>

- Work Program(me) for your areas of interest
 http://ec.europa.eu/programmes/horizon2020/en/h2020-sections
- ➤ Calls for Proposals for your areas of interest http://ec.europa.eu/programmes/horizon2020/find-your-area





Useful Websites

➤ Horizon 2020 website & Horizon 2020 Expert Database

http://ec.europa.eu/programmes/horizon2020/

http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html

➤ BILAT-USA 2.0 http://www.euussciencetechnology.eu/bilat-usa



Destination Europe

http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=destinationEurope



Destination Europe 2013

EURAXESS Links North America

http://ec.europa.eu/euraxess/index.cfm/links/eurRes/north_america







Thank you for your kind attention!

Questions?

Vera Kammann
International Bureau of the BMBF, Germany

<u>Vera.kammann@dlr.de</u>

0049 228 3821-1917

