

Introduction to Horizon 2020, Opportunities for U.S. Researchers & Logistics for Proposal Submission

Olaf Heilmayer & Vera Kammann Jupiter, 09-25-2015



BILAT USA 2.0

DLR's Project Management Agency

- » drive research, innovation and education
- » support policies, programmes and projects
- » operate nationally, across Europe and internationally
- » network disciplines, industries and stakeholders
- » stand for dedication and professionalism

INFORMATION, CONSULTING U COMMUNICATION, DIALOGUES ANALYSES & RESEARCH AND INNOVATION **MANAGEMENT**





BILAT USA 2.0

Our subjects

- » World of work » Education » Society
- » Environment » Health » Culture
- » Innovation » Technologies



Facts and figures

- ~1,000 employees, more than half of them researchers
 - 3 locations: Bonn, Cologne, Berlin, 1 office in Brussels
 - ∼1 billion euros in funding and 8,500 projects annually



BILAT USA 2.0

Our clients

- » Federal ministries, state ministries, public authorities
- » Foundations, associations, research organisations
- » European Commission, foreign government bodies



Selection:







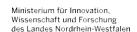






















BILAT USA 2.0 - General Information

Full project title - Bilateral Coordination for the Enhancement and Development of S&T Partnerships between the *European Union* and the *United States of America*

> Start Date: 1 November 2012

Duration:
3 years

➤ Total budget: 1.49 Mio. €

➤ Coordinated by: German Aerospace Center (DLR), Project Management Agency at DLR, European & International Cooperation Unit



BILAT USA 2.0 Partners





BILAT USA 2.0...

- ➤ Enhances the cooperation between scientists and innovation actors on both sides of the Atlantic through targeted thematic workshops
- Provides information on funding opportunities to researchers and innovators
- Analyzes the state-of-the-art and progress of transatlantic science and technology cooperation
- Supports the political dialogue within the framework of the EU-US S&T Cooperation Agreement



U.S. Partners within FP7



U.S. Partners

514 participations

€ 81,9 million (\$ 92,8 million) financial EU contributions



particularly successful in Health | ICT | Food, Agriculture, Fisheries, Biotechnology | Energy

Source: Austrian Research Promotion Agency (FFG)

^{*} signed projects, October 2014







What is Horizon 2020?

- A €80 billion research and innovation funding programme (2014-2020)
- A single programme bringing together three formerly separated programmes/initiatives (FP7/CIP/EIT)*
- Coupling research to innovation from research to retail, all forms of innovation
- Focus on societal challenges facing EU society, e.g. health, clean energy and transport
- Simplified access for all companies, universities, institutes in all EU countries and beyond (=> open for international cooperation).
- Strong participation of SMEs
- Open Access as basic principle for peer-reviewed scientific publications

^{*}The 7th Research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to the European Institute of Innovation and Technology (EIT)



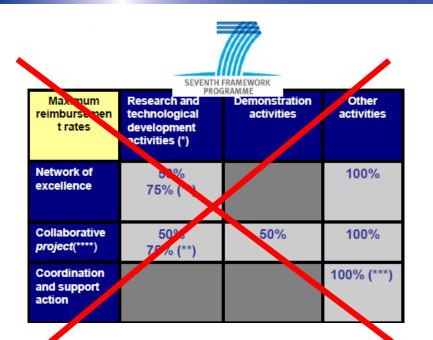
Simplification as a major feature



- A single set of rules covering all research programmes and funding bodies
- Simple evaluation criteria:
 Excellence Impact Implementation (Excellence only, for the ERC)
- Simplified funding rates (,one rate per action')
- 25% flat rate for indirect costs
- Shorter average ,time-to-grant': 8 months (5+3)
- Grant Agreement is signed electronically

Beyond the Rules: further simplified provisions in the Grant Agreement and implementing procedures to facilitate access to Horizon 2020 (e.g. common IT platform).





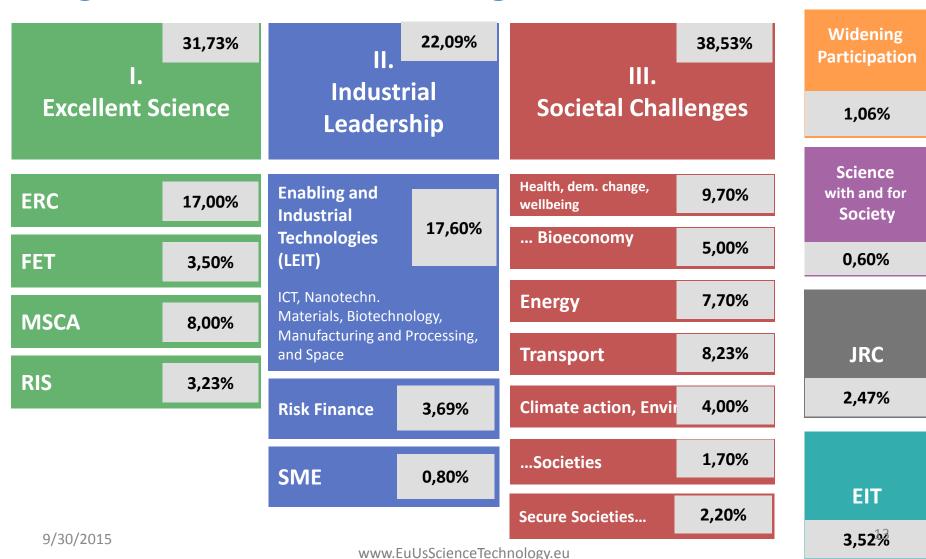
H2020 *Rules for Participation* apply for all programme areas (EIT, JTIs...) and funding bodies – exceptions where needed

Simpler funding rates (basic principle: one funding rate per action)

Type of Actions					
Type of Organization	R&IA	IA			
Profit	Direct costs = 100% Indirect costs = 25%	Direct costs = 70% Indirect costs= 25%			
Non-Profit	Direct costs = 100% Indirect costs = 25%	Direct costs = 100% Indirect costs = 25%			



Programme structure and budget allocation







I. Excellent Science

- EURAXESS: www.euraxess.org
- Marie Sklodowska-Curie Actions:
 http://ec.europa.eu/research/mariecurieactions/
- European Research Council: http://erc.europa.eu/
- Full presentation on MSCA and ERC (Source: NCURA Annual Meeting, August 2015)
- For more information on ERC and MSCA: Please contact EURAXESS links North America, please contact: northamerica@euraxess.net





Marie Skłodowska-Curie Actions (MSCA)

Innovative Training Networks	ITN early-stage researchers (< 4 years)	Doctoral and initial training: European Training Networks, European Industrial Doctorates, European Joint Doctorates
Individual Fellowships	experienced researchers (> 4 years)	Support for experienced researchers to undertake international and inter-sector mobility, incl. career restart and reintegration
Research and Innovation Staff Exchange	RISE	International and inter-sector cooperation through the exchange of staff
Co-funding of programmes	COFUND	Co-funding of regional, national and international programmes: - doctoral programmes (ESR) - fellowship programmes (ER)





European Research Council (ERC)

Starting Grants

starters (2-7 years after PhD)
up to € 2.0 Mio for 5
years

Consolidator Grants

consolidators (7-12 years after PhD) up to € 2.75 Mio for 5 years

Advanced Grants

track-record of significant research achievements in the last 10 years

up to € 3.5 Mio for 5 years

Proof-of-Concept

of marketable innovation
up to €150,000 for ERC grant holders for
18 months



Societal Challenges

	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			



Societal Challenges

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
- Largest budget share of 38,53% (about 26,5 billion EUR)
- Interdisciplinary approach and inclusion of cross-cutting issues (gender, sustainablity, international cooperation...)
- Entire cycle from basic research to market uptake
- Strong output orientation



Who can apply? What are the basic rules?

Rules of participation



Applicants from non-EU countries are **eligible to take part** in Horizon 2020 programmes, even as coordinator.

All proposals must meet certain **minimum conditions** (in Rules for Participation)

Source: http://ec.europa.eu/research/iscp/pdf/inco-h2020 for international audience.pdf



Minimum Conditions



For standard collaborative actions: at least three legal entities - each established in a different Member State or an Associated Country. In addition, participants from any other country in the world can also be included

Additional conditions can be set out in the work programme or work plan, e.g. number of participants, type of participants etc.



H2020: Open to the world



1. Projects can include international partners

2. Targeted opening

In certain topics in calls for proposals, inclusion of international partners may be:

- a) encouraged
 - or
- b) required

3. Coordinated calls

Used for specific actions (e.g. identified through joint steering committees). Paired calls, linked evaluations, two contracts

Source: http://ec.europa.eu/research/iscp/pdf/inco-h2020 for international audience.pdf



Eligibility for funding depends on the country

- List of third countries eligible for funding (,developing Countries') (see General Annexes in Work programme)
- No automatic funding for entities from ,industrialised countries' and BRIC (Brasil, Russia, India, China) and Mexico

- Only eligible for funding, if
- specified in the Work Programme or
- participation deemed essential for the project (outstanding competence/expertise, access to research infrastructure, access to particular geographical environments, access to data) or
- bilateral agreement between the EU and the respective country

US-partners are eligible under all topics in calls of the Societal Challenge 'Health, demographic change and wellbeing'.





Legal framework

EU Financial Regulation H2020 - Rules for Participation Work Programme

Grant Agreement (GA)

provides the rights and obligations between the EC and the beneficiaries

Consortium Agreement (CA)

provides the rights and obligations between the beneficiaries www.desca-2020.eu

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf



Specific legal issues relevant to U.S. participants

- Legal rights and obligations depend on whether the U.S. organization receives EU funding
- ➤ U.S. beneficiaries that receive EU-funding: all rights and obligations of the Grant Agreement apply (Please check if your organization is legally entitled to sign the GA)
- ➤ U.S. beneficiaries who don't receive EU- funding: some obligations such as e.g. cost reporting, do not apply (Article 9 GA).

 Other obligations still remain:
- IPR, transfer and licensing of results
- Access rights, dissemination of results incl. Open Access, ethics, administrative and financial penalties
- Liability for damages



Current U.S. participation in Horizon 2020

Preliminary results after the first 117 calls

Based on e-CORDA data base, 24.07.2015

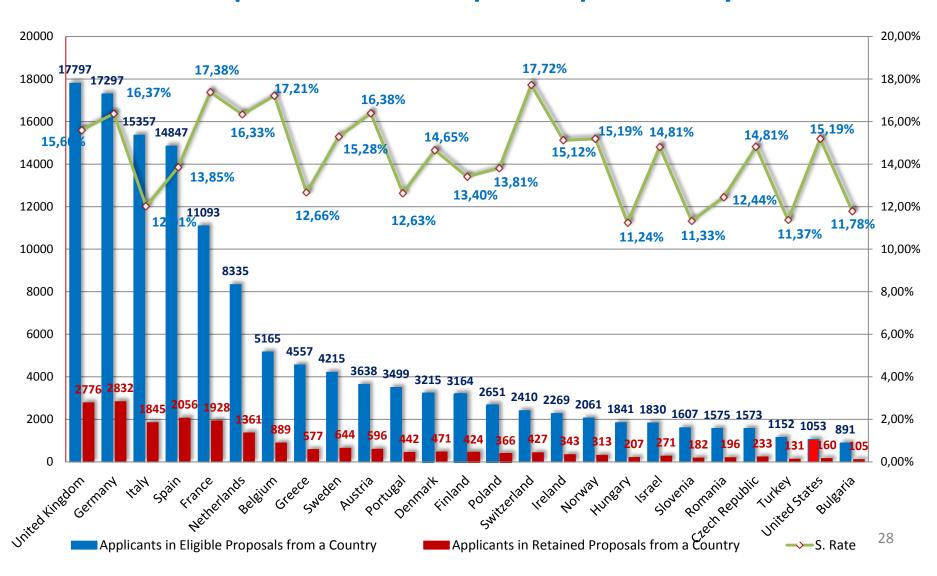


H2020 – General information

	Applicants in eligible proposals	Applicants in granted proposals	Success rate	EU contribution mln EURO	Participation in coll. projects	EU contr. mln EURO in coll. projects	
All countries	141 117	21 044	14,9%	9 024,3	18 234	7 358,2	
DE	17 297	2 832	16,4%	1 896,9	2 451	1 505,2	
US	1 053	160	15,2%	17,6	29	4,3	

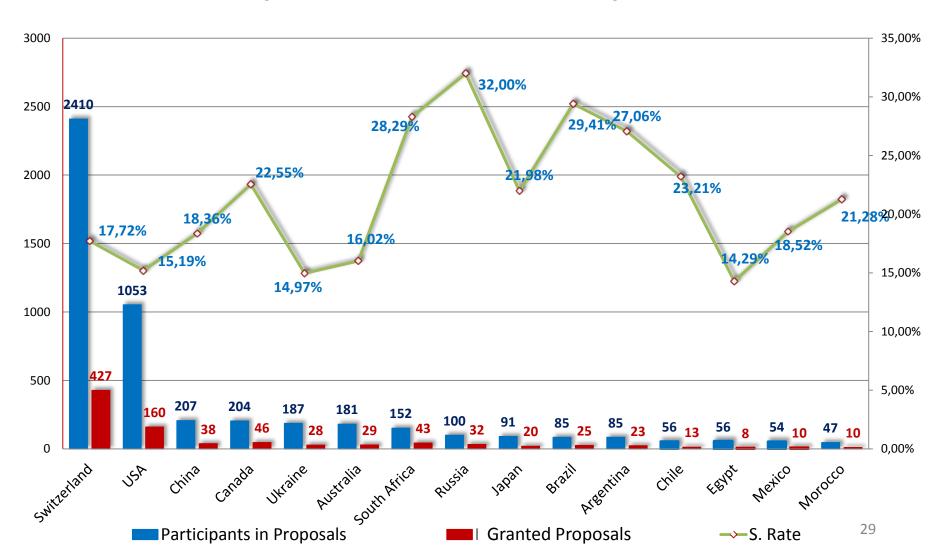


Top 25 H2020 Participations per Country

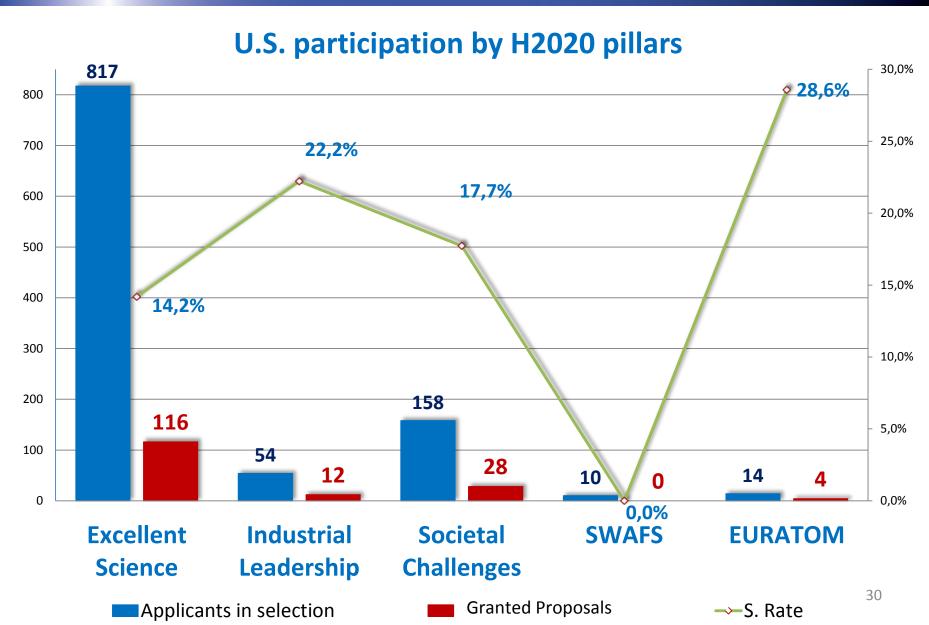




Top 15 H2020 Non-EU Participations

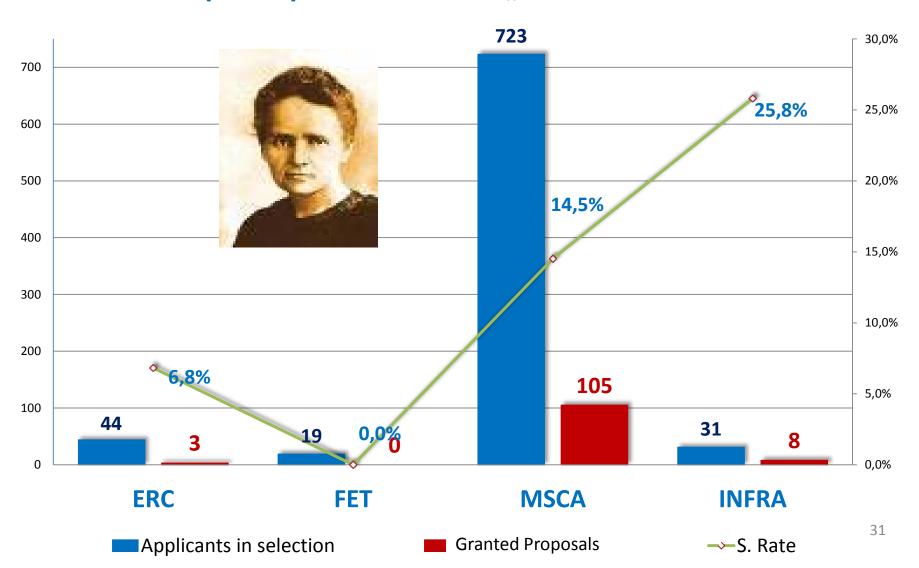






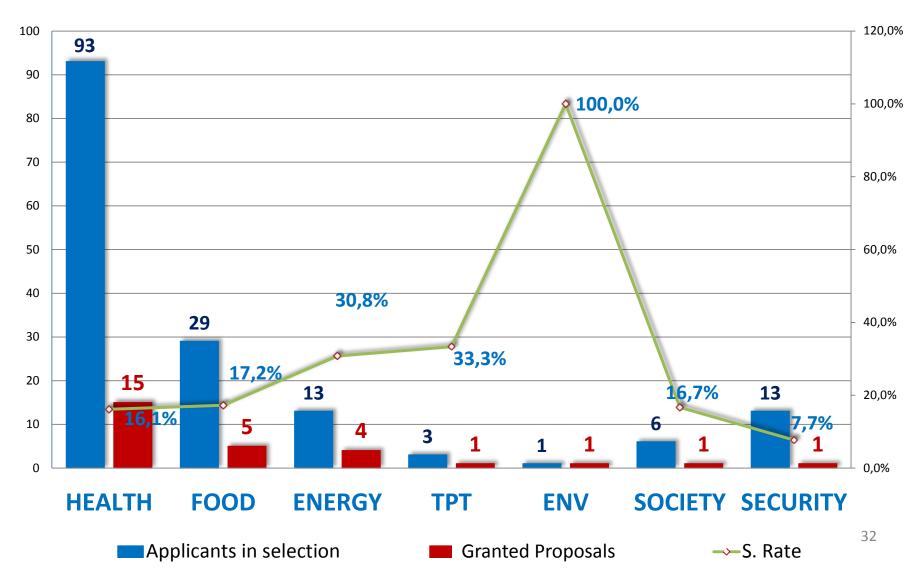


U.S. participation in H2020 "Excellence Science"



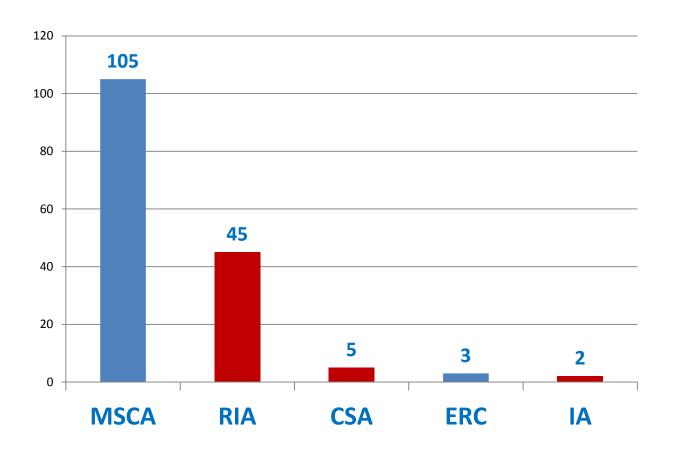


U.S. participation in H2020 "Societal Challenges"





U.S. participants in granted proposals by action type

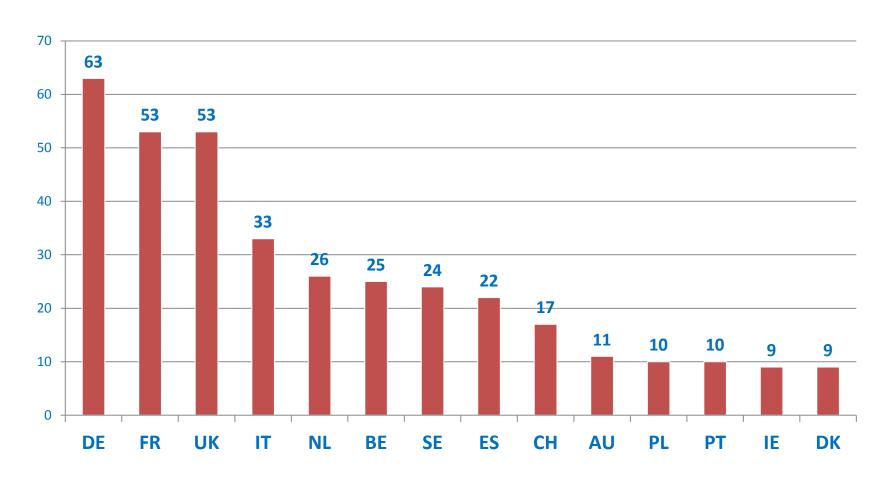


RIA - Research and Innovation action MSCA - Marie Skłodowska-Curie Actions CSA - Coordination & Support Action

IA - Innovation action ERC - Support for frontier research



U.S. H2020 collaborative links





33,3%

13,0%

27,3%

27,3%

25,0%

14,3%

15,4%

16,7%

100,0%

5,7%

15,4%

40,0%

50,0%

10,5%

11,8%

11

11

12

21

13

12

35

13

17

L.p.	Top 20 U.S. institutions in H2020	Applicants in eligible proposals	Participants in granted proposals	Success rate
1.	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA	80	16	20,0%
2.	PRESIDENT AND FELLOWS OF HARVARD COLLEGE	34	9	26,5%
3.	THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY	21	5	23,8%
4.	ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI	12	4	33,3%
5.	United States Department of Health and Human Services	8	4	50,0%

6. GEORGIA INSTITUTE OF TECHNOLOGY

9. TRUSTEES OF PRINCETON UNIVERSITY

20. University of California at Berkeley

8. RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

12. CALIFORNIA INSTITUTE OF TECHNOLOGYCORP

14. GEORGE WASHINGTON UNIVERSITY CORPORATION

10. UNIVERSITY OF MICHIGAN THE REGENTS OF THE UNIVERSITY OF MICHIGAN

15. MASSACHUSSETTS INSTITUTE OF TECHNOLOGY MIT CORPORATION

17. THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA CORP

19. TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

18. THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

7. NEW YORK UNIVERSITY

11. YALE UNIVERSITY

13. CORNELL UNIVERSITY

16. Stanford University



What next?

How can I participate?



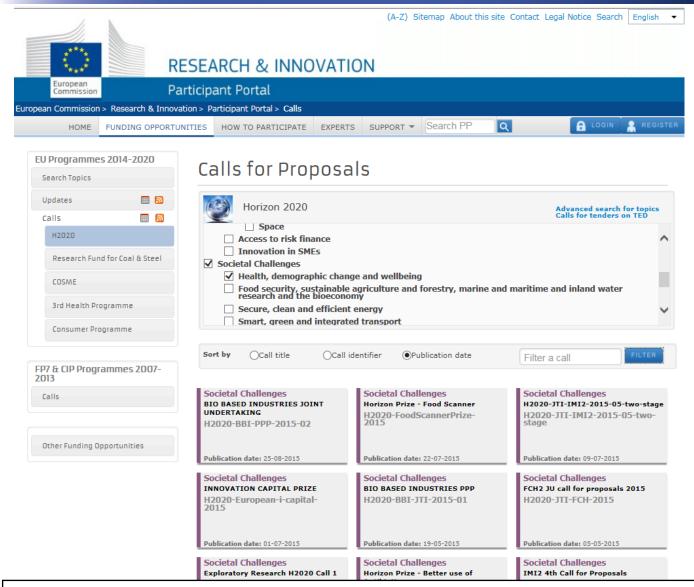
Participant Portal – Single Entry Point to H2020

- One principal gateway
- Public Area:
 - Register
 - PIC Search
 - H2020 Calls and Documents
- Private Area:
 - Submission
 - Contract negotiations
 - Contract changes
 - Reporting



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







Work Programme/ Calls for proposals/ Topics

Work Programme

Describes research and innovation objectives for each specific activity and the calls for proposals to be implemented.

Call for Proposals

Up-to-date information on "open", "closed" and "forthcoming" calls for proposals for all H2020 Work Programmes is available on the Research and Innovation Participant Portal.

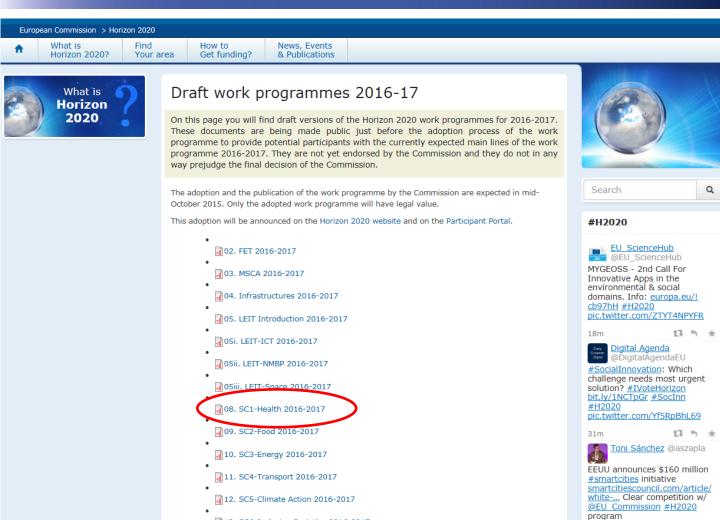
For each call, the EC indicates the opening and deadline date, total call budget, call description and call documents.

Topics

Most of the Horizon 2020 calls are divided into topics.

For each topic, the EC indicates the specific challenge, scope, expected impact, type of action, topic conditions, documents and link to the submission service.





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More tweets

13. SC6-Inclusive Societies 2016-2017

14. SC7-Secure Societies 2016-2017



Calls targeting US researchers

PROGRAMME AREAS	CALL IDENTIFIER	TOPIC	TARGET COUNTRY/REGION
Health, demographic change and wellbeing		all calls in the area of Health, demographic change and wellbeing	US
Health, demographic change and wellbeing	SC1-HCO-15-2016	EU-US interoperability roadmap	USA
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy	SFS-39-2017	How to tackle the childhood obesity epidemic?	US, Australia, New Zealand and Canada.
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy	BG-9-2016	An integrated Arctic observing system	Third countries (especially Canada and the US)
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy	BG-10-2016	Impact of Arctic changes on the weather and climate of the Northern Hemisphere	Third countries (especially Canada and the US)
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy	BG-11-2017	Climate impacts on Arctic permafrost, with a focus on coastal areas, and its socio-economic impact	Third countries (especially Canada and the US)
Secure, clean and efficient energy	LCE 27 – 2017	Measuring, monitoring and controlling the subsurface containment of CO2 and natural gas	Canada, United States (in particular)



Calls targeting US researchers

PROGRAMME AREAS	CALL IDENTIFIER	TOPIC	TARGET COUNTRY/REGION
Secure, clean and efficient energy	LCE 30 - 2017	Geological storage pilots	Australia ; United States (in particular)
Smart, green and integrated transport	MG-3.2-2017	Protection of all road users in crashes	Industrialised countries (i.e. US, Japan, Canada, Australia) and emerging economies (primarily China, India, Brazil).
Smart, green and integrated transport	MG-3.4-2016	Transport infrastructure innovation to increase the transport system safety at modal and intermodal level (including nodes and interchanges)	Third countries (in particular United States)
Smart, green and integrated transport	MG-3.5-2016	Behavioural aspects for safer transport	Industrialised countries (i.e. US, Japan, Canada, Australia) and emerging economies (primarily China, India, Brazil)
Smart, green and integrated transport	MG-7.1-2017	Resilience to extreme (natural and man-made) events	Third countries (in particular United States)
Smart, green and integrated transport	MG-7.2-2017	Optimisation of transport infrastructure multi-modal corridors and terminals	Third countries (in particular United States and Neighbouring Partner Countries)
Smart, green and integrated transport	ART-04-2016	Safety and end-user acceptance aspects of road automation in the transition period	Third countries (in particular United States)



Calls targeting US researchers

PROGRAMME AREAS	CALL IDENTIFIER	TOPIC	TARGET COUNTRY/REGION
Smart, green and integrated transport	ART-05-2016	Road infrastructure to support the transition to automation and the coexistence of conventional and automated vehicles on the same network	Third countries (in particular United States)
Smart, green and integrated transport	ART-06-2016	Coordination of activities in support of road automation	Third countries (in particular United States)
Smart, green and integrated transport	ART-07-2017	Full-scale demonstration of urban road transport automation	Third countries (in particular United States)
Smart, green and integrated transport	GV-02-2016	Technologies for low emission light duty powertrains	Third countries (in particular Japan and the United States)
Smart, green and integrated transport	GV-08-2017	Electrified urban commercial vehicles integration with fast charging infrastructure	Third countries (in particular Japan and the United States)
Climate action, environment, resource efficiency and raw materials	SC5-16-2016-2017	Raw materials international cooperation	In particular the US, Japan, G20 countries and other countries active in mining and other raw materials sectors
Europe in a changing world – inclusive, innovative and reflective Societies	ENG-GLOBALLY-09-2016	Centres/Networks of European research and innovation	Brazil, China, United States (in particular)
Secure societies – Protecting freedom and security of Europe and its citizens	DS-05-2016	EU Cooperation and International Dialogues in Cybersecurity and Privacy Research and Innovation	United States ; Japan



Finding partners

CORDIS Partner Search: Very large database of self-registered profiles of researchers and innovators, it is searchable by area of expertise, country and call for proposals and accepts US profiles.

https://cordis.europa.eu/partners/web/guest/home

→ Experienced researchers, who have led or participated in funded Framework Programme projects in relevant areas, can be identified in the searchable database of "Projects and Results" on the CORDIS website. The database contains grant details, project descriptions and information on funding, participants and publications for all projects since 1990. The database is searchable by the country of each participant, by theme, project title and other variables.

http://cordis.europa.eu/projects/home_en.html



National Contact Points (NCPs)

NCPs are individuals or groups of individuals chosen by national authorities to provide information and assistance to researchers and innovators in a country regarding all aspects of the EU FP. Searchable database of NCPs at: https://ec.europa.eu/research/participants/portal4/desktop/en/support/national_co_ntact_points.html

Thematic NCP networks across Europe maintain searchable subject specific databases, with dedicated information and support services, in the following fields:

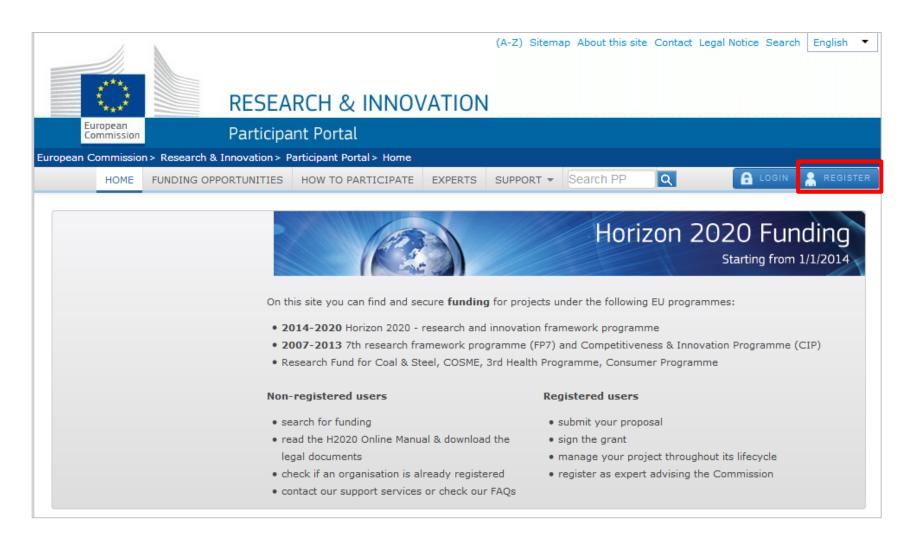
- Health: http://www.fitforhealth.eu/
- Biotechnology: http://biocircle-project.eu/partner-search.aspx

Other examples:

- ICT: http://www.ideal-ist.eu/partner-search/pssearch
- Nanotechnologies: https://www.nmp-partnersearch.eu/index.php
- Pharmaceuticals: https://cloud.imi.europa.eu/web/eimi-pst
- Environment: http://www.irc.ee/envncp/?page=search



ECAS Account

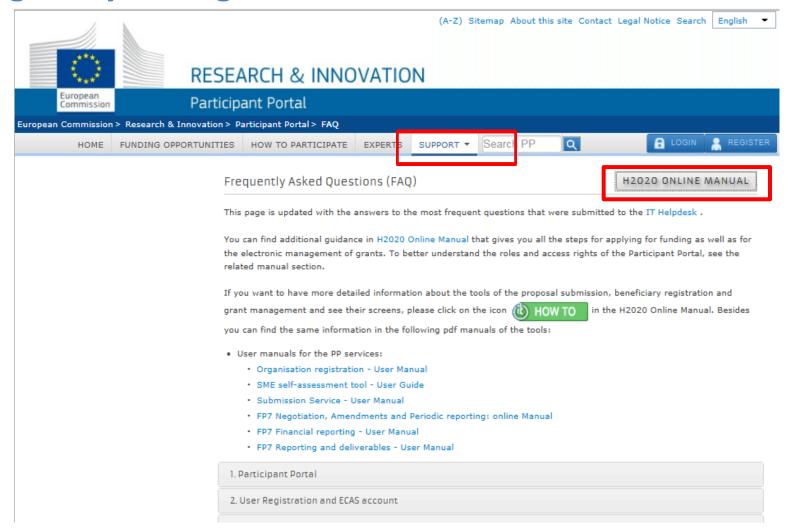








Register your organization





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Horizon 2020 Guide for US researchers

A Guide to US participation in the European Union's Framework Programme for Research and Innovation (2014-2020)

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For the latest information on the BILAT USA 2.0 project, Horizon 2020 or the contents of this guide, please visit us at www.EuUsScienceTechnology.eu.



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A Guide to US participation in the European Union's Framework Programme for Research and Innovation (2014-2020)

http://www.euussciencetechnology.eu/sites/default/files/H20 20%20Guide%20for%20US%20researchers%20FINAL 0.pdf



Get ready...!

Workprogramme 2016/17 will be published October 13th 2015!



Further Information

Horizon 2020 Webpage (EC)

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

Reference documents (e.g. Annoted GA)

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

Participant Portal

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

IPR Helpdesk

http://www.iprhelpdesk.eu/

Factsheet Horizon 2020 budget

http://ec.europa.eu/research/horizon2020/pdf/press/fact_sheet_on_horizon2020_budget.pdf

Fact sheet: International Participation in Horizon 2020

http://ec.europa.eu/research/horizon2020/pdf/press/fact sheet on international participation in horizon 2020.pdf

Factsheet on Industrial participation

http://ec.europa.eu/research/horizon2020/pdf/press/fact_sheet_on_industrial_participation_in h2020.pdf

Information on ERC and MSCA: Please contact EURAXESS links North America northamerica@euraxess.net



Next BILAT USA 2.0 event:

NEW FRONTIERS IN SCIENCE DIPLOMACY - Opportunities for U.S.-EU Cooperation

28 September 2015

Center for Transatlantic Relations
Johns Hopkins University
School of Advanced International Studies
1717 Massachusetts Ave., NW
Washington, DC

<u>http://www.euussciencetechnology.eu/content/eu-us-science-technology-and-innovation-sti-cooperation-forum-%C2%B4new-frontiers-science</u>



Thank you for your kind attention!

Come and visit us on our website!

http://www.euussciencetechnology.eu



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