

EU Research&Innovation Programmes: Participation Opportunities & Challenges

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HORIZON 2020



Brief Outline

- EU R&I programmes: General Overview Horizon 2020
- Participation support structures in AM (ISTPD, NCP network, etc.)
- Horizon 2020: Overview of relevant open calls for proposals
- Other opportunities: COST, EEN, etc.
- Towards Horizon Europe
- Statistics of AM participation in H2020
- AM Measures to support participation/Concluding remarks





ISTPD NAS RA

- NAS RA main research performing structure with 35 research institutes International S&T Programs Department of the National Academy of Sciences created in 2008 (on the basis of EU FP6 Information Point)
 - Main objectives: promotion of participation of NAS RA institutes/researchers in international grant programs via providing consultancy, awareness raising, organization of events, assistance in partner search with main focus to EU programmes
 - Hosting several H2020 National Contact Points (L&F, WIDENING, MSCA, SME,): Services provided to all R&D-performing organizations of Armenia
 - Active participation in EU programs (IncoNet CASC, IncoNet EaP, BS ERA Net, ener2i, BSH, IncoNet EaP Plus, COSME EEN, EURAXESS)





EU RDI PROGRAMMES: HORIZON 2020

- The EU funding programme (2014 to 2020)
 Financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at strengthening the Europe's global position in research, innovation and technology
- The biggest EU Research and Innovation programme ever, providing funding for multi-national collaboration projects as well as to individual researchers, SMEs with a special funding instrument
- Budget €80 billion



THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020

ASSOCIATION= FULL ACCESS TO ALL ACTIVITIES

Excellent Science

European Research Council

Future and Emerging Technologies

Marie Curie Actions

Research Infrastructures

Industrial Leadership

Leadership in Enabling & Industrial Technologies

- Information and communication technologies
- > Nanotechnologies
- > Advanced materials
- > Biotechnology
- Advanced manufacturing and
 - processing Space

Access to Risk Finance

Innovation in SME

Societal Challenges

- Health, Demographic
 Change and Wellbeing
- Food security, sustainable agriculture, marine and maritime research and the bio- economy
- Secure, clean and efficient Energy
- Smart, Green and Integrated Transport
- Climate Action, Resource Efficiency and Raw Materials
- Europe in a changing world: Inclusive, Innovative and Reflective Societies
- Secure Societies -Protecting Freedom and Security of Europe and its Citizens

Joint Research Centre (JRC)

Widening Participation

Science with & for Society

European Institute of Innovation and Technology (EIT)

Joint Programming P2P

Joint Technology Initiatives P2B



H2020: Who Can Participate?

May company, research center or individual

ELIGIBLE COUNTRIES

Member States – 28

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom

Associated countries (assumed to be associated to H2020)

Albania, Armenia (2016), Bosnia and Herzegovina, Georgia, Faroe Islands, Former Yugoslav Republic of Macedonia, Iceland, Israel, Moldova, Montenegro, Norway, Serbia, Turkey, Ukraine All other countries – Third countries





Eligible for Funding

- Legal entities established in a Member State or Associated Country
- Legal entities established in the third countries identified in the work programme (140 c)
- Case by case (essential for the action, bilateral agreements)
 - Industrialized countries: US, Canada, Australia, Japan, etc.
 - Emerging economies: Brazil, China, India, Russia, Mexico, SA





CALLS FOR PROPOSALS

Generally, twice per year: Spring-Autumn

Calls are challenge-based - more open to innovative proposals

- Calls are less prescriptive
- Topics descriptions allow plenty of scope for applicants to propose innovative solutions of their own choice
- Emphasis on innovation all stages in the research and innovation chain including non-technological and social innovation and activities closer to the market
- **Different disciplines, sectors and actors -** to tackle specific challenges, scientists, industry, SMEs, societal partners, end-users...





Conditions for Participation

> At least three legal entities. Each of the three shall be established in a different EU MS/AC. All three legal entities shall be independent of each other.

1 legal entity:
✓ Some Coordination and support actions
✓ Training and mobility actions
✓ European Research Council
✓ SME Instrument





H2020 Open Calls

H2020 166 calls currently open!

Research Infrastructures – 2 calls

- 1. Centres of Excellence in exascale computing (RIA) Deadline 13 November 2019
- 2. Design Studies Deadline 12 November 2019

More info:

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities





Gentres of Excellence in exascale

Computing: Call ID:H2020-INFRAEDI-2018-2020 Specific Challenge:

- Supporting Centres of Excellence (CoE) that advance and promote the use of upcoming exascale computing capabilities in areas where user communities in collaboration with other High Performance Computer (HPC) stakeholders can develop or scale up existing parallel codes towards exascale performance, resulting into tangible benefits for scientific, industrial or societal challenges.
- Funding: up to 5 mln. Euro/project; from 24 to 36 months
- Cross-cutting priorities: Open Innovation; Open Science, Clean Energy, Gender





Design Studies: Call ID: INFRADEV-01-2019-2020

Specific Challenge:

The aim of this activity is to support the conceptual and technical design for new research infrastructures forming the basis for identifying and constructing the next generation of Europe's and the world's leading research infrastructures of strategic importance.

- Funding: from 1 to 3 mln. Euro/project;
- Deadline: 12 November 2019





Forthcoming calls with deadlines in April 2020

- Integration and consolidation of the existing pan-European access mechanism to public research infrastructures and commercial services through the EOSC Portal INFRAEOSC-03-2020
- Co-Innovation platform for research infrastructure technologies INFRAINNOV-03-2020
- Responsible Open Science: an ethics and integrity perspective SwafS-30-2020
- More info at: <u>https://ec.europa.eu/info/funding-</u> <u>tenders/opportunities/portal/screen/programmes/h2020</u>





Spreading Excellence & Widening Participation Programme

- Low performing RDI member states & regions = WIDENING countries
- Targeted approach to raise the R&I capacity of participants from "Low performing" countries
- Threshold below 70% of EU Average
- "Widening" Countries:
- MS: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia and Slovenia
- AC: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Former Yugoslav Republic of Macedonia, Georgia, Moldova, Montenegro, Serbia, Tunisia, Turkey and Ukraine





Open Calls under Widening Programme - Twinning

WIDESPREAD-05-2020: Twinning

- <u>Scope:</u> Twinning aims at significantly strengthening a defined field of research in a university or research organization from a Widening country by linking it with at least two internationally-leading research institutions from two different MS or Associated Countries.
- Funding: up to 0.9 mln. Euro/project; up to 3 years
- Deadline: 14 November 2019
- Up to 10% of the budget can be allocated to equipment & research





Open Calls under Widening Programme – ERA Chairs

WIDESPREAD-06-2020: ERA Chairs

- <u>Scope:</u> Create appropriate conditions and bring over outstanding researchers on fulltime basis (The ERA Chair) and their teams to high potential universities and research organisations. Institutions are called to implement structural changes to achieve excellence on a sustainable basis
- Funding: 2.5 mln. Euro/project; 5 years duration
- Deadline: 14 November 2019



Science and Technology

- Intergovernmental organisation with 39 members, funded from H2020
- Provides funds to bottom-up open networks in a wide range of scientific topics for
 - Meetings/networking
 - short scientific exchanges or other networking activities
 - organising conferences and training schools
- Creates open spaces where people and ideas can grow, COST unlocks the full potential of science
- Prioritization of participants from Neighbourhood countries, including Armenia & other EaP – additional funds



Benefits of participation in a COST Action

Scientific

- Work on topics not yet funded by other sources
- Participate in leading scientific networks
- Engage with peers
- Contribute to publications

• Career

- Short-term mobility
- Increase visibility by hosting and/or participating at scientific events

Networking

- Initiate and Participate in any H2020 project at the same time
- Easy access to existing networks
- Extend one's network
- Reimbursement





Opportunities for Engaging

Possible to join ongoing actions

- Express interest contacting the Coordinator of ongoing action
- 80 new COST Actions approved in 2018/19 (over 330 actions in total)
- Actions list at:

https://www.cost.eu/cost-actions/browseactions/





Enterprise Europe Network

- Helping companies innovate and grow internationally
- Active in more than 60 countries of the world
- 600 member organizations
- AM Consortium
 - SME Development National Center
 - National Academy of Sciences of Armenia (ISTPD)
 - More info at: <u>https://een.ec.europa.eu/</u>

HORIZON 2020



EEN-Armenia

A broad range of services for growth-oriented SMEs

INTERNATIONAL PARTNERSHIPS	ADVISORY SUPPORT	INNOVATION SUPPORT
Partnership database	Advice on EU laws and standards	Access to finance and funding
Brokerage events	Market intelligence	Innovation Management Services
Company missions	IPR expertise	Technology transfer





EEN-Armenia

Innovation Support Services for innovative reserach-oriented SMEs

Access to finance and funding - Horizon 2020 SME Instrument

Innovation Management - EIMC Enhancing Innovation Management Capacity

KAM- Key Account Management Services for beneficiaries of H2020 SME Instrument

TECHNOLOGY TRANSFER





EEN-Armenia

Horizon 2020 Services



 Assistance and consultancy on preparation and submission of project proposals

✓Partner search

 Continues advice from idea to project submission and project implementation





International S&T Programes Department

H2020 Statistics of Participation – AM (by September 2019)

	No of Applicati ons	No of Funded Projects	No of organization s	Funding (mln Euro)
Total AM	192	29	36	3.4
NAS RA	60	14	7	1.9

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REGISTER AS EXPERT

Work as an expert

The European Union Institutions appoint external experts to assist in the evaluation of grant applications, projects and tenders, and to provide opinions and advice in specific cases.



In particular, experts assist in:

- Evaluation of proposals, prize applications and tenders
- Monitoring of actions, grant agreements, public procurement contracts

In addition, experts provide opinion and advise on:

 Preparation, implementation and evaluation of EU programmes and design of policies.

In order to select experts, the European Union Institutions publish regularly calls for expression of interest (see list below) detailing the selection criteria, the required expertise, the description of the tasks, their duration and the conditions of remuneration.

Interested? Please join the database of external experts:

Register as expert

As new expert, you will be first requested to create your EU login account and register your profile.



Quick Links

Thursday, 4 April, 2019 - 00:00 European Research and Innovation Days 24-26 September 2019 More ... Friday, 22 March, 2019 - 00:00 Call for experts on tasks for the LIFE Technical Assistance More ... Thursday, 28 February, 2019 - 00:00 Call for expression of interest for experts: Innovation Radar More ... Tuesday, 19 February, 2019 - 00:00 Call for volunteer Scientific Expert in business More Tuesday, 29 January, 2019 - 00:00 Call for experts to assist the European Defence Industrial Development Programme (EDIDP) More ... Wednesday, 17 October, 2018 - 00:00 Call for experts to assist the European Maritime and Fisheries Fund (EMFF) More Thursday, 30 August, 2018 - 00:00 New, improved 'My Expert Area' released More Tuesday, 5 June, 2018 - 00:00 Expert evaluators needed: help us select high-potential (social) innovators More...

Work as an Expe

Registered experts can update the profile via the My Expert Area after



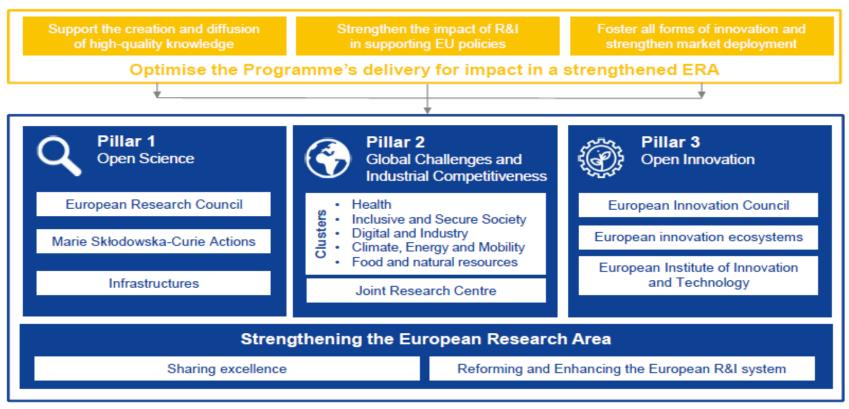
Towards HORIZON EUROPE (2021-2017)

- The Commission proposal for around € 100 billion research and innovation funding programme for seven years (2021-2027)
 - to strengthen the EU's scientific and technological bases
 - to boost Europe's innovation capacity, competitiveness and jobs
 - to deliver on citizens' priorities and sustain EU's socio-economic model and values

HORIZ N 2020

Horizon Europe: evolution not revolution

Specific objectives of the Programme





HORIZ N 2020



Get Support: NCP Network

- **NCP System –** in all M/S, A/C, majority of third countries
- **Mission:** Nationally operating NCPs to provide highly professional support services to research community via spreading awareness about H2020, giving specialist advice and on-ground guidance to ensure that the programme is known and readily accessible to all potential applicants, irrespective of sector and discipline.

Coordinating & Legal and Financial Aspects Tigran ARZUMANYAN, ISTPD NAS RA	Marie Sklodowska-Curie Actions Anahit KHACHIKYAN, ISTPD NAS RA
Information and Communication Technologies Dr. Levon ASLANYAN, IIAP, NAS RA	Small & Medium Size Enterprises Anahit KHACHIKYAN, ISTPD NAS RA Lilit Apujanyan, SME DNC
European Research Council Davit Piliposyan, IM NAS	Future and Emerging Technologies Ani Mikaelyan, SCS CANDLE
<u>European Research Infrastructures</u> Dr Hrachya Astsatryan, IIAP NAS RA Anna Mkrtchyan, YSU	Nanotechnologies, advanced materials Paytsar Mantashyan, IPR, NAS RA
Space Hripsime Mkrtchyan, YERPHI Gor Mikayelyan, BAO	<u>Health</u> Dr Seyran Kocharyan, YSMU
Food security, sust. agriculture, marine, bioeconomy Davit Pipoyan, CENS NAS RA	Smart, green & integrated transport Davit Piliposyan, Institute of Mechanics
Climate action Vardan Asatryan, CH&I, NAS RA	Inclusive, innovative and reflective societies Tigran Harutyunyan, PAAA
Security Hripsime Mkrtchyan, YERPHI	<u>Euratom</u> Karen Haroyan
Joint Research Centre	Science with and for Society



The EU Framework Programe for Research & Innovation HORIZON 2020

National Information Point of Armenia







Business Support on Your Doorstep





WELCOME TO THE WEBSITE OF THE ARMENIAN NATIONAL INFORMATION POINT OF THE EU FRAMEWORK PROGRAMME FOR RESEARCH & INNOVATION HORIZON 2020

The website of H2020 National Information Point (NIP) has been established to serve the needs of H2020 National Information Persons network of Armenia. It is intended to be the main information platform in Armenia towards raising general awareness on H2020, provide information on open calls for proposals, various events and trainings, activities within projects directed to promote international S&T cooperation and NCP projects, providing consultancy to Armenian research community.



INT NEWS

Call for Entries: ILUCIDARE Special Prizes within the European Heritage Awards / Europa Nostra Awards 2020

H2020 MSCA IF and <u>NCP Training was</u> <u>held in Yerevan</u>

EIF Food Summer school on New Products Development 2-6 Spetember 2019

<u>H2020 JRC Webinar</u> <u>and Infoday was</u> <u>held at YerPhi</u>

H2020 MSCA IF Training in Yerevan

H2020 MSCA IF CALL 2019 IS OPEN!

Meeting of local H2020 NCPs at NAS



The website is maintained by the International S&T Programmes Department of The National Academy of Sciences of RA

HORIZON 2020



AM Measures Towards H2020

To stimulate participation targeted activities needed on national level to develop adequate potential, create centers of excellence, to ensure national support to participating entities, etc.

- Some measures to stimulate AM teams in H2020 since 2017
 - Additional National Grants to Coordinating AM teams in successful H2020 projects (RI projects, up to 30000 Euro for two years)
 - Additional National Grants to successful H2020 project participants (RI projects, up to 25000 Euro for two years)
- Importance to keep momentum: Association to Horizon Europe!!!





Additional Info

- Funding & tender Opportunity Portal <u>https://ec.europa.eu/info/funding-</u> tenders/opportunities/portal/screen/home
- Horizon 2020 Documents
 <u>http://ec.europa.eu/research/participants/portal/desktop/en/funding/ref</u>

 <u>erence_docs.html</u>
- Horizon 2020 On-line Manual <u>http://ec.europa.eu/research/participants/portal/desktop/en/funding/gui</u> <u>de.html#</u>
- Questions? Research Enquiry Service
 <u>http://ec.europa.eu/research/enquiries</u>
- H2020 National Information Point
 http://h2020.sci.am/

HORIZON 2020



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