



HORIZON 2020

**The EU Framework Programme
for Research and Innovation**

2014-2020

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DG RTD*



Georgian Association to H2020



GE (data up to 27/05/2016)	Horizon 2020 (signed grants)	FP7
Total number of GE participations in signed grant agreements	14	75
Total number of signed grant agreements with GE participants	12	60
Total EC contribution to GE participants (Million euros)	0.7	5.8
Total Non EC budget of GE participants (Million euros)	0	0.9
Collaborative actions (all except ERC, MSCA, SME Instrument): Number of GE participations	12	60
Collaborative actions (all except ERC, MSCA, SME Instrument): Number of Projects with GE participants	10	48
Collaborative actions (all except ERC, MSCA, SME Instrument): EC contribution to GE participants (Million euros)	0.7	4.6
Collaborative actions (all except ERC, MSCA, SME Instrument): Non EC budget of GE participants (Million euros)	0	0.9
Collaborative actions (all except ERC, MSCA, SME Instrument): Success rates of proposals with GE participants	15.20%	
SME Instrument: Number of GE participations	0	
SME Instrument: EC contribution to GE participants (Million euros)	0	
SME Instrument: Non EC budget of GE participants (Million euros)	0	
Marie Sklodowska-Curie actions: Number of GE participations	2	15
Marie Sklodowska-Curie actions: EC contribution to GE participants (Million euros)	0	1.2
Marie Sklodowska-Curie actions: Non EC budget of GE participants (Million euros)	0	
ERC grants: Number of GE participations	0	0
ERC grants: EC contribution to GE participants (Million euros)	0	0

ASSOCIATION TO H2020 =

FULL ACCESS TO ALL H2020 FUNDED ACTIVITIES (SAME CONDITIONS AS EU MSs), including now parts only limited to EU MS and ACs, e.g. ERC grants, SME instrument, Access to risk finance, capacity-building instruments,..

+

PARTICIPATION IN THE PROGRAMME GOVERNANCE STRUCTURE (14 PROGRAMME COMMITTEES + JRC Board of Governors)

+

PARTICIPATION IN EUROPEAN RESEARCH AREA (ERA) STRATEGIC GROUPS (ERA COMMITTEE; EUROPEAN STRATEGIC FORUM ON RESEARCH INFRASTRUCTURES; STRATEGIC FORUM on INTERNATIONAL COOPERATION)

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PARTICIPATION IN EURAXESS (Researchers Mobility)

ASSOCIATION TO H2020 =

INTEGRATION OF GEORGIAN NCPs in ALL (22) EU NCP NETWORKS,
COORDINATION ACTIVITIES and TRAINING SESSIONS

+

**POSSIBLE PARTICIPATION IN P2B, P2P INITIATIVES: JOINT
PROGRAMMING INITIATIVES, JOINT TECHNOLOGY INITIATIVES,
EUROPEAN INNOVATION PARTNERSHIPS**

+

**INTEGRATION OF GEORGIAN INDUSTRY/ S&T COMMUNITY IN
RELEVANT EU STRATEGIC NETWORKS (e.g. TECHNOLOGY
PLATFORMS, KICs)**

**IMPLEMENTATION = (VERY) COMPETITIVE
CALLS FOR PROPOSALS**

No guarantee of « fair return » !!

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

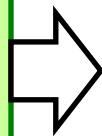
European Institute of Innovation and Technology (EIT)

Joint Programming P2P

Joint Technology Initiatives P2B

RESEARCH INFRASTRUCTURES Work Programme 2016-2017

**CALL 1
DEVELOPING NEW
WORLD CLASS
INFRASTRUCTURES**



DESIGN
STUDIES

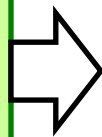
SUPPORT TO
PREPARATORY
PHASE OF ESFRI
PROJECTS

SUPPORT TO THE
INDIVIDUAL
IMPLEMENTATION
AND OPERATION
OF ESFRI PROJECTS

European Open Science Cloud for
Research

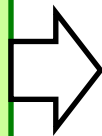
CALL 2

**INTEGRATING AND
OPENING
RESEARCH
INFRASTRUCTURES
OF EUROPEAN
INTEREST**



INTEGRATING AND OPENING EXISTING NATIONAL AND REGIONAL
RESEARCH INFRASTRUCTURES OF EUROPEAN INTEREST
(for **ADVANCED COMMUNITIES** and for **STARTING COMMUNITIES**)

**CALL 3
E-INFRASTRUCTURES**



MANAGING,
PRESERVING AND
COMPUTING WITH
BIG RESEARCH

DATA AND DISTRIBUTED
COMPUTING
E-INFRASTRUCTURES FOR OPEN
SCIENCE

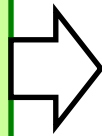
PAN-EUROPEAN
HIGH PERFORMANCE COMPUTING
INFRASTRUCTURE AND SERVICES

DATA
DRIVEN E-
INFRASTRUCTURE
INNOVATION

USER-DRIVEN
E-
INFRASTRUCTURE
INNOVATION

INFRASTRUCTURES
FOR VIRTUAL
RESEARCH
ENVIRONMENTS
(VRE)

**CALL 4: FOSTERING
THE INNOVATION
POTENTIAL OF
RESEARCH
INFRASTRUCTURES**
**CALL 5: INTERNATIONAL
COOPERATION**

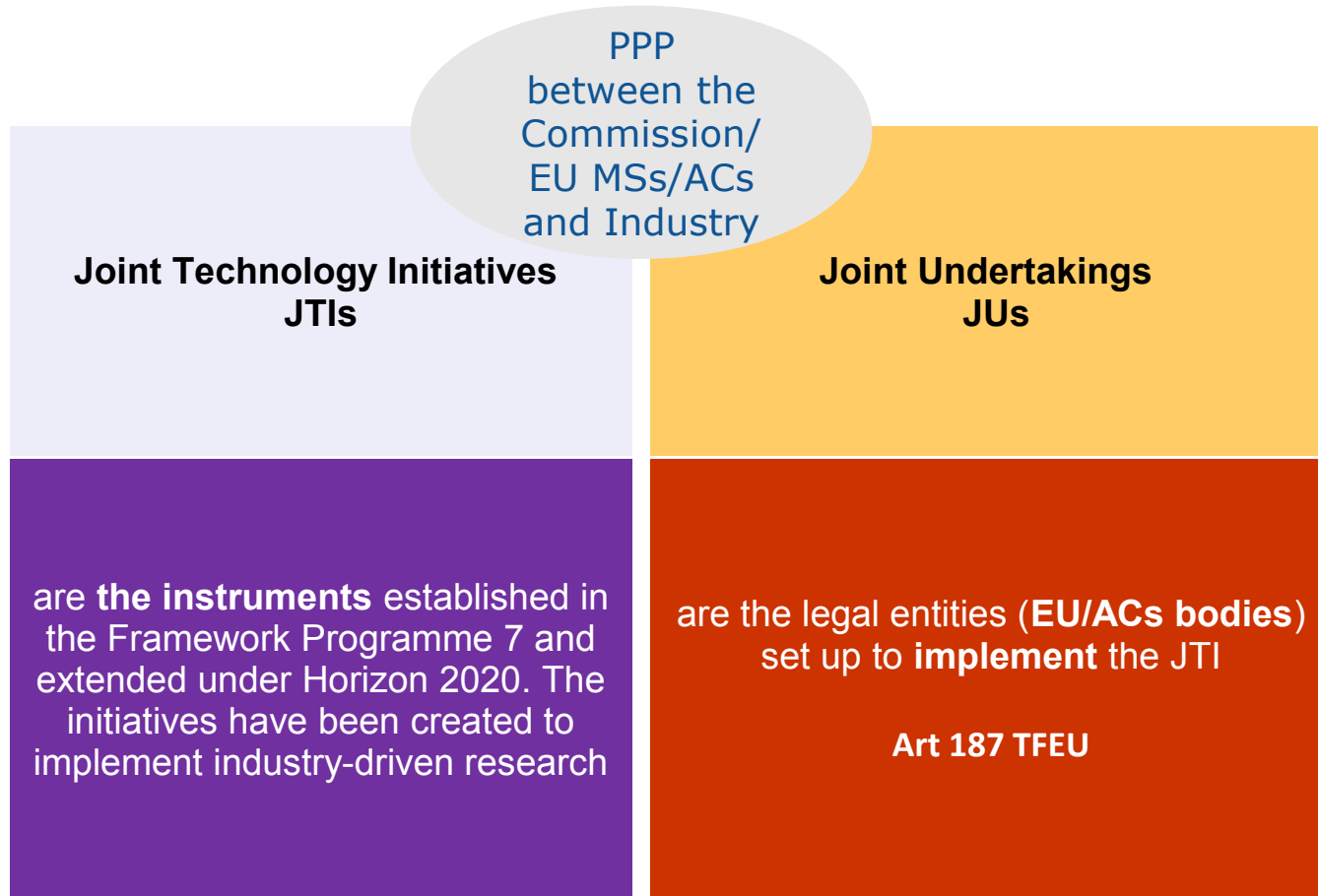


FOSTERING CO-
INNOVATION
FOR FUTURE DETECTION
AND IMAGING
TECHNOLOGIES

SUPPORT TO
TECHNOLOGICAL
INFRASTRUCTURES

SUPPORT TO POLICIES
AND INTERNATIONAL
COOPERATION
FOR E-
INFRASTRUCTURES

JTI vs JU



•Total investment: €22 billion

- €8 billion from Horizon 2020
- €10 billion from industry
- €4 billion from Member States/ACs

JTI JUs BUDGET

(million € for 2014-2020)

Public Private Partnerships	EU (H2020)	Private Partners
Innovative Medicines Initiative 2 (IMI2)	1 638	1 425
Fuel Cells and Hydrogen 2 (FCH2)	665	380
Clean Sky 2 (CS2)	1 755	2 194
Electronic component and systems (ECSEL)	1 185 (+ 1170 from MSs)	1 657
Bio-based Industries (BBI)	975	2 730
Shift2Rail (S2R)	450	470
European ATM system (SESAR)	585	1 000 (incl. Eurocontrol)

Horizon 2020 Programme Committee

- **Open to Member States as members and Associated Countries as observers**
- **Fourteen configurations**
- **The Commission reimburses “the expenses of one representative per Member State, as well as one expert/adviser per Member State for those agenda items where a Member State requires specific expertise” – also applies to Associated Countries.**

Programme Committee Configurations (1/2)

1. Strategic Configuration

Strategic overview of the implementation of the whole programme
Coherence across all parts of the programme
Cross-cutting issues including “Spreading Excellence and widening participation” and “Science with and for society”

2. European Research Council (ERC), Future and Emerging Technologies (FET), and Marie Skłodowska-Curie Actions

3. Research Infrastructures

4. Information and Communication Technologies

5. Nanotechnologies, Advanced Materials, Biotechnology, Advanced manufacturing and processing

6. Space

7. SMEs and Access to Risk Finance

Programme Committee Configurations (2/2)

- 8. Health, demographic change and wellbeing**
- 9. Food security, sustainable agriculture and forestry, marine, maritime and inland water research and bioeconomy**
- 10. Secure, clean and efficient energy**
- 11. Smart, green and integrated transport**
- 12. Climate action, environment, resource efficiency and raw materials**
- 13. Europe in a changing world: Inclusive, innovative and reflective societies**
- 14. Secure societies – protecting freedom and security of Europe and its citizens**

Joint Research Centres

Board of Governors

1. **Institute for Environment and Sustainability (IES)**
Meeting the challenges of a changing environment
2. **Institute for Energy and Transport (IET)**
Towards sustainable energy and transport for tomorrow and beyond
3. **Institute for Health and Consumer Protection (IHCP)**
Science for a healthier life
4. **Institute for Prospective Technological Studies (IPTS)**
Understanding the links between technology, economy and society
5. **Institute for Reference Materials and Measurements (IRMM)**
IRMM - Confidence in measurements ®
6. **Institute for Transuranium Elements (ITU)**
Strengthening nuclear safety and security
7. **Institute for the Protection and Security of the Citizen (IPSC)**
Turning data into information

European Strategy Forum on Research Infrastructures (ESFRI)

Strategic instrument to develop the scientific integration of Europe and to strengthen its international outreach. The competitive and open access to high quality Research Infrastructures supports and benchmarks the quality of the activities of European scientists, and attracts the best researchers from around the world

- **Two delegates from Georgia**
- **One high-level Ministry official responsible for research infrastructures**
- **One scientific expert in the field**
- **Forum meetings are held four times a year**

European Research Area and Innovation Committee (ERAC) 1/2

- ERAC is a strategic policy advisory committee that **advises the Council, the Commission and member states** on the full spectrum of research and innovation issues in the framework of the governance of the European Research Area.
- The Committee is co-chaired by the Commission and an elected representative from a member state.
- The Council provides its secretariat.

European Research Area and Innovation Committee (ERAC) 2/2

ERAC can also meet in two dedicated configurations, which were established by the Council and are chaired by an elected representative of an EU country:

the High Level Group on Joint Programming (GPC), which contributes to the preparation of the debates and decisions of the Competitiveness Council on joint programming

the Strategic Forum for international S&T Cooperation (SFIC), which advises the Council and the Commission on the implementation of a European Partnership in the field of international scientific and technological cooperation (S&T cooperation)

Spreading Excellence and Widening Participation (competitive calls)

Teaming will invest in Europe's research and innovation potential through supporting the creation of new (or upgrading of existing) Centres of Excellence in low R&I performing Member States and Associated Countries on the basis of partnerships with internationally leading institutions.

Twinning aims to build on the huge potential of networking for excellence through knowledge transfer and, exchange of best practice between research institutions and leading partners.

ERA Chairs will bring outstanding researchers to universities and other research organisations, in those countries, that have high potential for research excellence to help them attract and maintain high quality human resources and implement the structural changes necessary to achieve excellence on a sustainable basis.

Teaming objective in H2020

- Creation of new (or significant upgrade of existing) Centres of Excellence in low R&I performing or "Widening" countries

The Partnership: 2 parties in each Teaming project

- (1) the COORDINATOR from a "Widening" country (must be a national/regional authority, research funding agency, university or res. organisation)
- (2) a university or res. organisation with an international reputation in R&I excellence (from all EU28 or AC)

➤ **Implementation in 2 Phases**

Teaming: Scheme Design

Phase 1: Funding the development of a **Business Plan** for the new/upgraded Centre of Excellence facilitated by a teaming process with a leading counterpart in Europe

Proposals (Phase 1):

- Demonstrate the long-term science and innovation strategy of the future Centre
- Outline how this strategy broadly fits with the RIS3 of the Widening country
- Demonstrate that the project is based on a true joint venture between the parties

Phase 2: Subject to the quality of the Business Plan, and the financial commitment for the project from other sources, the Commission may provide further substantial financial support for the **first steps of implementation** of the Centre

Proposals (Phase 2):

• Business Plan (Phase 1 deliverable) with robust financial commitments (national/ESIF/private funds)

➤ **IMPORTANT:** Access to Phase 2 is only available to those proposals already supported in Phase 1!

Teaming under the 2016-17 WP

Phase 1 Call : Business Plan for a Centre of Excellence (CoE)

Budget: €12 million
Call publication: 14 October 2015
Call opening: 28 July 2016
Call deadline: 15 November 2016
Project Size: €400,000 (eligibility condition)
Project Duration: 12 months (eligibility condition)
Funding for: Business Plan
Implementation: Coordination and Support Action

Phase 2 (Restricted) Call in 2018: Start-up/Implementation of the CoE

Project size & duration: ~ €15 million & 5-7 years
Implementation: Coordination and Support Action
Funding for: Substantial support for the start-up phase of the CoE (administrative, personnel and operational costs as well as very limited support for equipment and consumables)

➤ **More information for Phase 2 in the future 2018 Work Programme**

21 **Twining: Aim, Objectives & Partnership**

Aim of the action:

Strengthen a defined field of research in a university or research organisation from a Widening country by linking it with at least two internationally-leading research institutions in other Member States or Associated Countries.

Main objectives:

- Enhance the S&T capacity of the institutions-Focus on institution in Widening country
- Raise the research profile of the institution and of its research staff

The Partners: (Minimum Conditions)

ONE institution located in a "Widening" MS/AC (**COORDINATOR**)

A **minimum of TWO** additional partners from two different MS or AC other than the country of the coordinator.

Twinning: Proposal Design & Impact

Proposals:

Scientific strategy for excellence and innovation in a defined area of research;

Outline the scientific quality of the partners;

Activities supported:

Short term staff exchanges; expert visits and short-term training; workshops; conference attendance; dissemination and outreach activities.

Expected Impact:

Research excellence, in particular, in the selected field of research;

Improved capability to succeed in competitive research funding;

Enhanced reputation, attractiveness and networking;

The expected potential impact of the project illustrated by a number of indicators.

Twinning: Costs & Call 2017 details

Eligible Costs:

Coordination and networking;

Joint activities;

Dissemination and outreach activities.

Infrastructure, equipment & research costs will NOT be funded.

Twinning Call 2017:

Budget: €20 million

Call publication: 14 October 2015

Call opening: 11 May 2017

Call deadline: 15 November 2017

Project Size: up to €1 million (eligibility condition)

Project Duration: up to 3 years (eligibility condition)

Implementation: Coordination and Support Action

ERA Chairs: Proposal Design & Impact

Proposals:

Bottom-up approach but connected with the ERA Chair holder expertise to fully capitalise on his/her presence;

Include measures to foster ERA priorities (open recruitment, peer review, gender balance, Charter & Code);

Include a plan to increase Research Capacity - if infrastructures foreseen present a strategy for funding (including possible use of ESIF funding).

Expected Impact:

Increased attractiveness of institution and region for excellent researchers;

Research excellence in the fields covered by the ERA Chair;

Improved capability of the institution to succeed in competitive research funding;

Institutional changes to comply with ERA priorities.

ERA Chairs: The ERA Chair holder

- The ERA Chair should be an outstanding researcher and research manager with a proven record of leadership;
- The ERA Chair appointment must follow an open and merit-based recruitment process - to be subjected to monitoring by the European Commission;
- ERA Chair holder should be appointed in a full time position but part-time arrangements are possible;
- The institution should ensure autonomy for the Chair and his/her team;
- ERA Chairs can be of any nationality;

ERA Chairs: Costs & Call 2017 details

Eligible Costs:

Salaries of ERA Chairs and his/her team.

Contribution towards measures aimed at facilitating structural changes at the institution:

- ERA priorities;
- Costs including training, meetings, publication and patenting costs, equipment (minor part of budget and duly justified);
- The grant will not cover infrastructures and research costs!

ERA Chairs Call 2017:

Budget: €33.91 million

Call publication: 14 October 2015

Call opening: 12 April 2017

Call deadline: 5 October 2017

Project Size: up to €2.5 million (eligibility condition)

Project Duration: up to 5 years (eligibility condition)

Implementation: Coordination and Support Action

Policy Support Facility

“Improving the design, implementation and evaluation of R&I policies”

1. Peer reviews of national R & I systems
2. “Mutual learning”
3. Specific support
4. The PSF Knowledge Centre

Not a competitive call. The PSF is an *on demand* service and is open for spontaneous requests. An expression of interest will be launched through ERAC in summer 2016.

For further information RTD-PSF@ec.europa.eu



European
Commission



HORIZON 2020

**Thank you
for your attention!**

Find out more:

www.ec.europa/research/horizon2020

HORIZON 2020