

Horizon 2020

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Horizon 2020 programme sections

•Excellent Science

- European Research Council
- Future and Emerging Technologies
- Marie Skłodowska-Curie actions
- European Research Infrastructures, including e-Infrastructures

•Industrial Leadership

- Leadership in Enabling and Industrial Technologies
 - Information and Communication Technologies
 - Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, and Biotechnology
 - Space
- Access to risk finance
- Innovation in SMEs

•Societal Challenges

- Health, Demographic Change and Wellbeing
- Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy
- Secure, Clean and Efficient Energy
- Climate Action, Environment, 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

Excellent Science

- Activities under this Pillar aim to reinforce and extend the excellence of the Union's science base and to consolidate the European Research Area in order to make the Union's research and innovation system more competitive on a global scale.

Excellent Science - four specific objectives

- The **European Research Council (ERC)** will provide attractive and flexible funding to enable talented and creative individual researchers and their teams to pursue the most promising avenues at the frontier of science, on the basis of Union-wide competition.
- **Future and emerging technologies** will support collaborative research in order to extend Europe's capacity for advanced and paradigm-changing innovation. They will foster scientific collaboration across disciplines on radically new, high-risk ideas and accelerate development of the most promising emerging areas of science and technology as well as the Union-wide structuring of the corresponding scientific communities.
- **Marie Skłodowska-Curie Actions** will provide excellent and innovative research training as well as attractive career and knowledge-exchange opportunities through cross-border and cross-sector mobility of researchers to best prepare them to face current and future societal challenges.
- **Research infrastructure** (including e-infrastructures) will develop European research infrastructure for 2020 and beyond, foster their innovation potential and human capital, and complement this with the related Union policy and international cooperation.

Industrial Leadership

- This pillar aims to speed up development of the technologies and innovations that will underpin tomorrow's businesses and help innovative European SMEs to grow into world-leading companies.

Industrial Leadership - three specific objectives

- **"Leadership in enabling and industrial technologies"** will provide dedicated support for research, development and demonstration and, where appropriate, for standardisation and certification, on information and communications technology (ICT), nanotechnology, advanced materials, biotechnology, advanced manufacturing and processing and space. Emphasis will be placed on interactions and convergence across and between the different technologies and their relations to societal challenges. User needs will be taken into account in all these fields.
- **"Access to risk finance"** will aim to overcome deficits in the availability of debt and equity finance for R&D and innovation-driven companies and projects at all stages of development. Together with the equity instrument of the Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME) (2014-2020) it will support the development of Union-level venture capital.
- **"Innovation in SMEs"** will provide SME-tailored support to stimulate all forms of innovation in SMEs, targeting those with the potential to grow and internationalise across the single market and beyond.

Societal Challenges

- The challenge-based approach will bring together resources and knowledge across different fields, technologies and disciplines, including social sciences and the humanities. This will cover activities from research to market with a new focus on innovation-related activities, such as piloting, demonstration, test-beds, and support for public procurement and market uptake.

Societal Challenges

Funding will focus on the following challenges:

- Health, demographic change and wellbeing;
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy;
- Secure, clean and efficient energy;
- Smart, green and integrated transport;
- Climate action, environment, 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.

WIDESPREAD-2014-1 TEAMING

H2020-WIDESPREAD-2014-1 Sub call of: [H2020-WIDESPREAD-2014-2015](#)

Publication date 2013-12-11 **Deadline Date** 2014-09-17 +17:00:00 (local time)

Budget €11,850,000 **Main Pillar** Societal Challenges

Status Open **OJ reference** [OJ C361 of 11 December 2013](#)

- **Scope:** Teaming, will involve in principle, two (2) parties: an institution of research and innovation excellence (public or private) or a consortium of such institutions and the participant organisation from a low performing Member State (a national or regional authority, or a research agency at national or regional level).
- Both parties will be required to sign the grant agreement.
- The coordinator - organisation from the low performing Member State.
- **Type of action:** Framework Partnership Agreement and Coordination and Support Action funded by a specific grant awarded under the Framework Partnership Agreement.

Teaming

- Teaming actions will be selected for funding through the following process:
 - Stage 1: Partner organisations will have to explain clearly their vision for the establishment of a new Centre of Excellence (or the upgrading of an existing one) that would be hosted in the low performing Member State or region involved. This will include details on the long-term science and innovation strategy of the future Centre, in particular, the detailed provisions for the good management of the project between the partners.....
 - Stage 2: All funded proposals of the first stage will automatically enter into the second stage of the competition that will involve an in-depth evaluation (by an international expert panel) of all submitted Business Plans. These will be evaluated in terms of content (scientific excellence), impact on innovation and quality of the proposed implementation plan.
- The Commission considers that proposals requesting a contribution from the EU of between EUR 0.2 and 0.5 million for Stage 1 and between EUR 15 and 20 million for Stage 2 would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

WIDESPREAD ERA Chairs

H2020-WIDESPREAD-2014-2 Sub call of: [H2020-WIDESPREAD-2014-2015](#)

Publication date 2013-12-11 **Deadline Date** 2014-10-15 17:00:00 (local time)

Budget €33,600,000 **Main Pillar** Societal Challenges

Status Open **OJ reference** [OJ C 361 of 11 December 2013](#)

- Scope: The ERA Chairs actions will support universities or other eligible research organisations to attract and maintain high quality human resources and implement the structural changes necessary to achieve excellence on a sustainable basis. An ERA Chair holder should be an outstanding researcher and research manager in the given field of research, with a proven record of effective leadership. They should establish their own team and help the research organisation to significantly improve its research performance and to be more successful in obtaining competitive funding.
- Contribution from the **EU of EUR 2.5 million**
- Type of action: Coordination and support Actions

NEW FORMS OF INNOVATION

H2020-INSO-2014 Sub call of: [H2020-INSO-2014-2015](#)

Publication date 2013-12-11 **Deadline Date** 2014-04-29 +17:00:00 (local time)

Budget €23,500,000 **Main Pillar** Societal Challenges

Status Open **OJ reference** [OJ C 361 of 11 December 2013](#)

Topics and submission service

- [INSO-1-2014: ICT-enabled open government](#)
- [INSO-3-2014: The economic impact of the Innovation Union](#)
- [INSO-7-2014: Towards joint programming under Horizon 2020](#)
- [INSO-2-2014: Understanding and supporting business model innovation](#)
- [INSO-6-2014: Platform for ICT for Learning and Inclusion](#)
- [INSO-8-2014: Synchronised Call initiatives](#)

Topic: Towards joint programming under Horizon 2020

Scope: Proposals should cover at least one of the following areas:

- Development and implementation of a user-led 'information, learning and support platform' for Public-public partnerships.
- Optimising modalities and implementation of Public-Public Partnerships
- New modalities for aligning national/regional activities under common research agendas
- a contribution from the EU of between EUR 1 million and 3 million
- Type of action: Coordination and support actions

Topic: Platform for ICT for Learning and Inclusion

- Scope: Develop and maintain a sustainable platform engaging a large number of key actors, stakeholders and communities of practices on how to improve co-creation and delivery of digital tools, solutions and services for the modernization of education and training and for the employability of young people, as well as for tackling the risk of digital exclusion, and thereby socio-economic exclusion.
- a contribution from the EU of EUR 1 million
- Type of action: Coordination and support actions

CALL FOR MAKING SCIENCE EDUCATION AND CAREERS ATTRACTIVE FOR YOUNG PEOPLE

H2020-SEAC-2014-1 Sub call of: [H2020-SEAC-2014-2015](#)

Publication date 2013-12-11 **Deadline Date** 2014-10-02 +17:00:00 (local time)

Budget €12,200,000 **Main Pillar** Societal Challenges

Status Open **OJ reference** [OJ C361 of 11 December 2013](#)

Topics and submission service

- [SEAC-1-2014: Innovative ways to make science education and scientific careers attractive to young people](#)
- [SEAC-3-2014: Trans-national operation of the EURAXESS Service network](#)
- [SEAC-2-2014: Responsible Research and Innovation in Higher Education Curricula](#)

Topic: Innovative ways to make science education and scientific careers attractive to young people

- Scope: The action aims to support a range of activities, which will raise young boys' and girls' awareness of the different aspects encompassing science and technology in their societal content and to address the challenges faced by young people when pursuing careers in science, technology, engineering and mathematics.
- It aims at bringing both girls and boys into the scientific world via formal and informal teaching and learning and to orient them towards undertaking scientific careers.
- In order to be more attractive, research careers should also be more closely linked to labour market needs.

Topic: Innovative ways to make science education and scientific careers attractive to young people

- In this context, the potential orientation towards more entrepreneurial and multidisciplinary research careers should be recognised. The proposals shall focus on innovative, forward-looking science education methods and/or on incentives and measures to make scientific and technological careers attractive to young students, including actions addressing the challenges in offering long term career perspectives.
- They may inter alia make young people work with open-access educational resources; become familiar with the use of science media; make the link between creativity and science; appreciate the relevance of gender balance and dimension in research; understand the practical value of research ethics and integrity; actions.
- a contribution from the EU of between EUR 1 and 1.8 million
- Type of action: Research and Innovation Actions; Coordination and Support Actions.

Topic: Responsible Research and Innovation in Higher Education Curricula

- Scope: The action assists the development of openly available curricula that embed all five RRI (Responsible Research and Innovation) keys (societal engagement, gender equality and gender in research and innovation content, open access, science education and ethics), in a comprehensive approach for students, teachers, professional trainers and academic staff of Higher Education Institutions and other higher education establishments.
- a contribution from the EU of between EUR 1 and 1.5 million
- Type of action: Coordination and Support Actions.

CALL FOR INTEGRATING SOCIETY IN SCIENCE AND INNOVATION

H2020-ISSI-2014-1 Sub call of: [H2020-ISSI-2014-2015](#)

Publication date 2013-12-11 **Deadline Date** 2014-10-02 +17:00:00 (local time)

Budget €10,300,000 **Main Pillar** Societal Challenges

Status Open **OJ reference** [OJ C361 of 11 December 2013](#)

Topics and submission service

- [ISSI-1-2014: Pan-European public outreach: exhibitions and science cafés engaging citizens in science](#)
- [ISSI-2-2014: Citizens and multi-actor engagement for scenario building](#)
- [ISSI-5-2014: Supporting structural change in research organisations to promote Responsible Research and Innovation](#)

Topic: Supporting structural change in research organisations to promote Responsible Research and Innovation

- Scope: This topic aims at developing a Responsible Research and Innovation Plan covering five RRI keys (societal engagement, gender equality and gender in research and innovation content, open access, science education and ethics) in each participating institution. The RRI plans shall:
 - Conduct impact assessment / audit of procedures and practices in order to identify RRI barriers at organisation level;
 - Implement innovative strategies to address RRI barriers;
 - Develop the RRI dimension in research content and programmes;
 - Set targets and monitor progress via indicators at organisation level.
- a contribution from the EU of between EUR 2 and 4 million
- Type of action: Coordination and Support Actions

E-INFRASTRUCTURES

H2020-EINFRA-2014-2 Sub call of: [H2020-EINFRA-2014-2015](#)

Publication date	2013-12-11	Deadline Date	2014-09-02 +17:00:00 (local time)
Budget	€82,000,000	Main Pillar	Excellent Science
Status	Open	OJ reference	OJ C361 of 11.12.2013

Topics and submission service

- [EINFRA-1-2014: Managing, preserving and computing with big research data](#)
- [EINFRA-4-2014: Pan-European High Performance Computing infrastructure and services](#)
- [EINFRA-7-2014: Provision of core services across e-infrastructures](#)
- [EINFRA-8-2014: Research and Education Networking – GÉANT](#)
- [EINFRA-3-2014: Towards global data e-infrastructures – Research Data Alliance](#)
- [EINFRA-6-2014: Network of HPC Competence Centres for SMEs](#)

Topic: Managing, preserving and computing with big research data

- Scope: Proposals should address at least one of the first five (5) activities, or activities 6, 7 or 8 individually.
 - (1) Establishing a federated pan-European data e-infrastructure to provide cost-effective and interoperable solutions for data management and long term preservation.
 - (2) Services to ensure the quality and reliability of the e-infrastructure;
 - (3) Federating institutional and, if possible, private data management and curation tools and services used across or at some point of the full data lifecycle, including approaches for identification of open data sources and data collected with sensitive or restricted access features.
 - (4) Large scale virtualisation of data/compute centre resources to achieve on-demand compute capacities, improve flexibility for data analysis and avoid unnecessary costly large data transfers.
 - (5) Development and adoption of a standards-based computing platform (with open software stack) that can be deployed on different hardware and e-infrastructures

Topic: Managing, preserving and computing with big research data

- (6) Support to the evolution of EGI (European Grid Infrastructure)
- (7) Proof of concept and prototypes of data infrastructure-enabling software
- (8) Enable the creation of a platform and infrastructure for mining text aggregated from different sources/publishers that responds to the needs of users
- A maximum of EUR 8 million of the total budget for this topic is foreseen for activity (6).
- Type of action: Research and innovation actions

Topic: Provision of core services across e-infrastructures

- Scope: Proposals will address one of the two following actions (one proposal per action will be funded):
 - Development and promotion of the uptake of a Digital Identifier e-infrastructure for digital objects, contributors and authors which cuts across geographical, temporal, disciplinary, cultural, organisational and technological boundaries, without relying on a single centralised system but rather federating locally operated systems to ensure interoperability.
 - Deployment and promotion of a pan-European identity federation for researchers, educators and students, in compliance with existing identity inter-federation efforts (including Eduroam and Edugain).
- Type of action: Research and innovation actions

Topic: e-Infrastructure for Open Access

- Scope: Proposals should address all the following activities:
 - (1) Service-driven data e-infrastructure responding to general and specific requirements of researchers and research organisations for open access to and deposit of scientific information (including journal articles, books, monographs, conference proceedings, thesis, grey literature, software and data, as well as services linking literature, data and software
 - (2) Developing proof of concept and prototyping new services in support of open science (e.g. new forms of publishing, innovative services based on data mining, new forms of peer review etc.), assisting researchers and educators in everyday tasks.
- It is expected that one proposal will be selected. A maximum of EUR 4 million of the total budget for this topic is foreseen for the article processing charges under point (2).
- Type of action: Research and innovation actions

REFLECTIVE SOCIETIES: CULTURAL HERITAGE AND EUROPEAN IDENTITIES

H2020-REFLECTIVE-7-2014Sub call of: [H2020-REFLECTIVE-2014-2015](#)

Publication date	2013-12-11	Deadline Date	2014-09-30 +17:00:00 (Brussels local time)
Budget	€14,000,000	Main Pillar	Societal Challenges
Status	Open	OJ reference	OJ C361 of 11.12.2013

- **Topic: Advanced 3D modelling for accessing and understanding European cultural assets**
- **Scope: The specific challenge will be addressed by the focused actions:**
 - a) *Research on cost-effective technologies for advanced 3D modelling to enhance the understanding of cultural heritage.* This interdisciplinary research should focus on developing new methods and tools for automated 3D modelling and analysis of physical cultural resources and assets (e.g. cultural heritage sites, monuments, sculptures, archaeological sites...) beyond simple digital reconstruction.
 - b) *Devise standard formats for the semantic-aware 3D modelling of Europe's cultural heritage for researchers and practitioners.* Proposals should extend or develop standard formats of 3D semantic-aware objects with a view to improve their archiving, reusability and sustainability.
- The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 4 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

REFLECTIVE SOCIETIES: CULTURAL HERITAGE AND EUROPEAN IDENTITIES

H2020-REFLECTIVE-SOCIETY-2015 Sub call of: [H2020-REFLECTIVE-2014-2015](#)

Publication date 2013-12-11 **Deadline Date** 2015-01-07 +17:00:00 (Brussels local time)

Budget €16,500,000 **Main Pillar** Societal Challenges

Status Open **OJ reference** [OJ C361 of 11 December 2013](#)

- **Topic: Emergence and transmission of European cultural heritage and Europeanisation**
- Scope: The multidisciplinary and comparative research will focus on the emergence of a European cultural heritage in a historical perspective. It will address how the local, regional, national and European aspects of cultural heritage are interlinked, how they are understood or not by citizens and encouraged or not by various stakeholders and promoters of cultural heritage.
- **Topic: The cultural heritage of war in contemporary Europe**
- Scope: The multidisciplinary, geographically balanced and comparative research will aim at exploring the complex relationship that contemporary European societies have with the tangible and intangible cultural heritage of the major armed conflicts fought on their soil in the 20th century (*inter alia* World War I and World War II but also Balkan wars, civil wars, revolutions, etc.).

REFLECTIVE SOCIETIES: CULTURAL HERITAGE AND EUROPEAN IDENTITIES

H2020-REFLECTIVE-SOCIETY-2014Sub call of: [H2020-REFLECTIVE-2014-2015](#)

Publication date 2013-12-11 **Deadline Date** 2014-06-03 +17:00:00 (Brussels local time)

Budget €9,000,000 **Main Pillar** Societal Challenges

Status Open **OJ reference** [OJ C361 of 11 December 2013](#)

Topics and submission service

- [REFLECTIVE-9-2014: Social Platform on Reflective Societies](#)
- [REFLECTIVE-1-2014: ERA-NET on Uses of the past](#)
- [REFLECTIVE-10-2014: Mobilising the network of National Contact Points in Societal Challenge 6](#)

ICT 2014 - INFORMATION AND COMMUNICATIONS TECHNOLOGIES

H2020-ICT-2014-1 Sub call of: [H2020-ICT-2014](#)

Publication date 2013-12-11 **Deadline Date** 2014-04-23 +17:00:00 (local time)

Budget €658,500,00 **Main Pillar** Industrial Leadership

Status Open **OJ reference** [OJ C361 of 11.12.2013](#)

Topics and submission service

- [ICT-01-2014: Smart Cyber-Physical Systems](#)
- [ICT-02-2014: Smart System Integration](#)
- [ICT-03-2014: Advanced Thin, Organic and Large Area Electronics \(TOLAE\) technologies](#)
- [ICT-05-2014: Smart Networks and novel Internet Architectures](#)
- [ICT-06-2014: Smart optical and wireless network technologies](#)
- [ICT-07-2014: Advanced Cloud Infrastructures and Services](#)
- [ICT-09-2014: Tools and Methods for Software Development](#)
- [ICT-11-2014: FIRE+ \(Future Internet Research & Experimentation\)](#)
- [ICT-13-2014: Web Entrepreneurship](#)
- [ICT-15-2014: Big data and Open Data Innovation and take-up](#)
- [ICT-17-2014: Cracking the language barrier](#)
- [ICT-18-2014: Support the growth of ICT innovative Creative Industries SMEs](#)
- [ICT-21-2014: Advanced digital gaming/gamification technologies](#)
- [ICT-22-2014: Multimodal and Natural computer interaction](#)
- [ICT-23-2014: Robotics](#)
- [ICT-26-2014: Photonics KET](#)
- [ICT-29-2014: Development of novel materials and systems for OLED lighting](#)
- [ICT-31-2014: Human-centric Digital Age](#)
- [ICT-32-2014: Cybersecurity, Trustworthy ICT](#)
- [ICT-33-2014: Trans-national co-operation among National Contact Points](#)
- [ICT-35-2014: Innovation and Entrepreneurship Support](#)

Topic: Tools and Methods for Software Development

- Scope: Proposals are expected to cover one or both of the themes:
 - **Software tools and methods for large, complex and data-intensive systems**
 - **Software architectures and tools for highly distributed applications**
- Types of action: Research & Innovation Actions – Proposals requesting a *Small contribution* are expected

Topic: Web Entrepreneurship

- Scope:
 - a. **Accelerate web entrepreneurship in Europe:
Online platforms with new services**
 - b. **Coordination activities in the area of web entrepreneurs**
- Types of action:
 - a. Innovation Actions – Proposals requesting a *Small contribution* are expected
 - b. Coordination and Support Actions

Topic: Cracking the language barrier

- Scope:
 - **Research & Innovation Actions** to kick off a multidisciplinary research path to develop a new paradigm leading to radically improved quality and coverage (in terms of languages and text types) of machine translation. Special focus is on issues where current methods fall short in quality or fail to adapt to different languages and different needs of translation, or where further improvement with current methods becomes very expensive or requires such amounts of training data that are not available. The projects should use existing and emerging structures (in particular, those developed under action c) below) for testing, validating and evaluating the novel methods against agreed benchmarks.

Topic: Cracking the language barrier

- **Innovative Actions** in view of optimizing translation quality and language/topical coverage in demanding, realistic use situations arising from well documented market needs, for example in pan-European online services. The pilots should focus on areas where multilingualism contributes to competitiveness and user-friendliness and optimize, evaluate and test performance improvements with languages that are poorly served by current machine translation systems. The pilots should make use of and contribute to existing and emerging platforms and infrastructures for pooling, building, and adding value to language resources and tools.

Topic: Cracking the language barrier

- **Coordination actions** to promote benchmarking and competitive evaluation of machine translation, as well as the optimal use of language resources from various sources, in view of federating the sources and repositories towards a single access mechanism, respecting appropriate standards of interoperability and metadata.
- Types of action:
- a. Research & Innovation Actions – Proposals requesting a *Small contribution* are expected
- b. Innovation Actions – Proposals requesting a *Small contribution* are expected
- c. Coordination and Support Actions

Topic: Support the growth of ICT innovative Creative Industries SMEs

- Scope: The scope is to stimulate the adoption and deployment of innovative ICT solutions by the creative industries SMEs. This can be achieved through collaboration with ICT providers and by accelerating and supporting the growth of European creative industries.
- Types of action:
 - a. Innovation Actions
 - a contribution from the EU between EUR 0.5 million and EUR 1 million for a period between 6 and 18 months would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts or duration.
 - b. Coordination and Support Actions

Topic: Advanced digital gaming/gamification technologies

- Scope:
- **a. Research & Innovation actions:** Multidisciplinary research experimentations and collaboration on advanced digital gaming technologies and components **produced by and for the traditional digital game industry** but applied into wider scenario of use in non-leisure contexts. Activities must lead to the creation of a repository of core reusable, open components to enable publishers and game producers as well as user organisations and individual programmers to build specific games applications in non-leisure contexts. Application scenarios will focus on learning and skills acquisition in formal and informal education, in workplace learning and in policy making and collective social and public processes.
- **b. Innovation actions:** Stimulate technology transfer and new non-leisure applications by SMEs traditionally working on digital games through coordinating and incubating small scale experiments, thus underpinning new market developments on digital games for learning and skills acquisition, and for empowerment and social inclusion.

Topic: Human-centric Digital Age

- Scope:
 - a. The **Research & Innovation Actions** should aim at in-depth exploration of the development of fundamental notions such as identity, privacy, relationships, culture, reputation, motivations, responsibility, attention, safety and fairness, in the hyper-connected age where the limits between offline and online are blurred in numerous ways. Gender, generational and cultural differences in behaviours should also be considered where relevant.

Topic: Human-centric Digital Age

- Scope:
 - b. The **coordination and support activities** should facilitate community building between ICT developers, researchers in SSH and other disciplines, and stakeholders for responsible research and innovation. They should provide concrete incentives and motivations for cross-disciplinary collaborations.

SUPPORT TO INNOVATION, HUMAN RESOURCES, POLICY AND INTERNATIONAL COOPERATION

H2020-INFASUPP-2014-2 Sub call of: [H2020-INFASUPP-2014-2015](#)

Publication date 2013-12-11 **Deadline Date** 2014-09-02 +17:00:00 (local time)

Budget €20,000,000 **Main Pillar** Excellent Science

Status Open **OJ reference** [OJ C361 of 11.12.2013](#)

Topics and submission service

- [INFASUPP-1-2014: Innovation support measures](#)
- [INFASUPP-3-2014: Strengthening the human capital of research infrastructures](#)
- [INFASUPP-5-2014: Policy measures for research infrastructures](#)
- [INFASUPP-6-2014: International cooperation for research infrastructures](#)
- [INFASUPP-7-2014: e-Infrastructure policy development and international cooperation](#)

MARIE SKŁODOWSKA-CURIE RESEARCH AND INNOVATION STAFF EXCHANGE (RISE)

H2020-MSCA-RISE-2014

Publication date	2013-12-11	Deadline Date	2014-04-24 +17:00:00 (local time)
Budget	€70,000,000	Main Pillar	Excellent Science
Status	Open	OJ reference	OJ C361/9 of 11 December 2013

- **Objective:**
- The RISE scheme will promote international and inter-sector collaboration through research and innovation staff exchanges, and sharing of knowledge and ideas from research to market (and vice-versa) for the advancement of science and the development of innovation.
- The scheme fosters a shared culture of research and innovation that welcomes and rewards creativity and entrepreneurship and helps to turn creative ideas into innovative products, services or processes.
- **Scope:** RISE involves organisations from the academic and non-academic sectors (in particular SMEs), based in Europe (EU Member States and Associated Countries) and outside Europe (third countries).

- Support is provided for the development of partnerships in the form of joint research and innovation activities between the participants. This is aimed at knowledge sharing via international as well as inter-sectoral mobility, based on two-way secondments of research and innovation staff (exchanges) with an in-built return mechanism.
- The proposed research and innovation activities should exploit complementary competences of the participants, as well as other synergies, and enable networking activities, organisation of workshops and conferences to facilitate sharing of knowledge, new skills acquisition and career development for research and innovation staff members.
- Exchanges can be for both early-stage and experienced researchers' levels and can also include administrative, managerial and technical staff supporting the research and innovation activities of the proposal.
- Support for the exchanges between institutions in the EU Member States and Associated Countries covers only inter-sectoral secondments.
- No secondments between institutions located in third countries or within the same EU Member State or Associated Country can be supported.
- **Type of action:** Marie Skłodowska-Curie action.

MARIE SKŁODOWSKA-CURIE ACTION: INNOVATIVE TRAINING NETWORKS (ITN)

H2020-MSCA-ITN-2014

Publication date 2013-12-11 **Deadline Date** 2014-04-09 +17:00:00 (local time)

Budget €405,180,000 **Main Pillar** Excellent Science

Status Open **OJ reference** [OJ C361 of 11 December 2013](#)

- **Objective:** The Innovative Training Networks (ITN) aim to train a new generation of creative, entrepreneurial and innovative early-stage researchers, able to face current and future challenges and to convert knowledge and ideas into products and services for economic and social benefit.
- **Scope:** ITN supports competitively selected joint research training and/or doctoral programmes, implemented by partnerships of universities, research institutions, research infrastructures, businesses, SMEs, and other socio-economic actors from different countries across Europe and beyond.
- Partnerships take the form of collaborative European Training Networks (ETN), European Industrial Doctorates (EID) or European Joint Doctorates (EJD).

European Training Networks (ETN)

- ETNs are multi-partner research training networks and must be composed **of at least three beneficiaries established in at least three different EU Member States or Associated Countries**. Above this minimum, the participation of other organisations, including international organisations and those from Other Third Countries, is possible under the conditions provided by the Horizon 2020 Rules for Participation. Although there is no pre-defined size for these multi-partner networks, **it is strongly recommended to keep the size of the consortium between 6 and 10 beneficiaries**. It is expected that beneficiaries will be drawn from the academic and non-academic sectors and that ETN proposals will offer intersectoral and interdisciplinary research training as well as high-quality supervision arrangements. Each beneficiary must recruit and host at least one ESR.

European Industrial Doctorates (EID)

- EIDs have the objective of training highly-skilled researchers and stimulating entrepreneurship, creativity and innovation in Europe. This is to be achieved in particular by involving the non-academic sector in doctoral training so that skills better match public and private sector needs.
- **Each EID is composed of at least two beneficiaries established in two different Member States or Associated Countries. At least one beneficiary must be entitled to award doctoral degrees (*) and at least one beneficiary must come from the non-academic sector, primarily enterprise.**
- Each participating researcher must be enrolled in a doctoral programme and spend at least 50% of their time in the non-academic sector. **The joint supervision of fellows by supervisors from each sector is mandatory.** A wider set of partner organisations may also complement the training.

European Joint Doctorates (EJD)

- EJDs have the objective of promoting international, intersectoral and multi/inter-disciplinary collaboration in doctoral-level training in Europe through the creation of joint doctoral programmes, leading to the **delivery of joint, double or multiple doctoral degrees (*)**.
- They are composed of **at least three beneficiaries established in different Member States or Associated Countries that are entitled to deliver doctoral degrees.**

European Research Council



European Research Council

Established by the European Commission

- The European Research Council supports frontier research, cross disciplinary proposals and pioneering ideas in new and emerging fields which introduce unconventional and innovative approaches.
- The ERC's mission is to encourage the highest quality research in Europe through competitive funding and to support investigator-driven frontier research across all fields of research, on the basis of scientific excellence.
- A total budget of 13 095 million euro is available for the implementation of the ERC funding schemes under Horizon 2020.

What are the main ERC principles?

- 1 researcher; 1 host institution; 1 project; 1 selection criterion: scientific excellence
- No consortia, no networks, no co-financing
- Applications can be made in any field of research, including social sciences and humanities
- Independent researchers from anywhere in the world, of any age and career stage can apply
- Host institutions must provide conditions for the researcher to direct the research and manage its funding
- The grant is 'portable' to another host institution, if the grantholder wishes so
- Research must be carried out in one of the 28 EU member states or associated countries

What type of grants does the ERC fund?

- [ERC Starting Grant](#) for young, early-career top researchers (2-7 years after PhD) -up to 2 million euro for a period of 5 years.
- [ERC Consolidator Grant](#) for already independent excellent researchers (7-12 years after PhD) -up to 2.75 million euro for a period of 5 years.
- [ERC Advanced Grant](#) for senior research leaders with significant research achievements in the last 10 years -up to 3.5 million euro for a period of 5 years.
- [ERC Proof of Concept Grants](#) for ERC grant holders who want to check the market and/or innovation potential of research results from ERC-projects -up to 150,000 euro for a period of 12 months.
- [ERC Synergy Grants](#) for small groups of individual researchers -up to 15 million euro for a period up to 6 years.

Future and Emerging Technologies

- FET actions are expected to initiate **radically new lines of technology** through unexplored collaborations between advanced multidisciplinary science and cutting-edge engineering. It will help Europe grasp leadership early on in those promising future technology areas able to renew the basis for future European competitiveness and growth, and that can make a difference for society in the decades to come.
- Under Horizon 2020, FET actions have been allocated a provisional budget of 2 696 million euro.

The FET programme lines (1)

- **FET Open** supports early-stage joint science and technology research around new ideas for radically new future technologies. It will explore a wide range of new technological possibilities, inspired by cutting-edge science, unconventional collaborations or new research and innovation practices. It represents 40% of the overall FET budget.

The FET programme lines (2)

- **FET Proactive** nurtures emerging themes and structure communities by addressing a number of promising exploratory research themes. The main benefits of this structuring yet exploratory approach are emerging novel areas that are not yet ready for inclusion in industry research roadmaps, and building up and structuring of new interdisciplinary research communities around them. The present work programme supports emerging themes and communities in:
 - 'Global Systems Science' (GSS), to help integrate the abundance of data on social, economic, financial, technological, and ecological systems available today and elaborate societal responses across policy domains and cross-cutting authorities
 - 'Knowing, doing and being: cognition beyond problem solving', to establish new foundations for future robotics and other artificial cognitive systems with clear progress beyond current capabilities and design concepts
 - 'Quantum simulation', to contribute to solving problems in fundamental and applied science using new tools based on quantum physics and quantum technologies
 - 'Towards exascale high-performance computing', to deliver a broad spectrum of extreme scale HPC systems and to develop a sustainable European HPC Ecosystem