

Lesson 2: The European research funding framework: funding programmes and calls

Learning outcomes:

LO#3 - The student can understand and contextualise European research funding frameworks and main European funding programmes and schemes to support research and innovation activities (e.g. Horizon Europe) and to identify synergies between funding schemes.

LO#7 - The student can analyse a given European call for funding from the perspective of its underlying policy (need for the call) and proposal (goals, activities, and expected outcomes and impact).

LO#11 - The student can explain the pre-award work and how it fits into the research cycle.

LO#17 - The student demonstrates curiosity and interest for systemic approaches and for the organization of the research ecosystem.

LO#18 - The student is able to accept others' views, and work together to provide the necessary support for the proposal's preparation.

LO#19 - The student is critical regarding his own work and that of others taking on a constructive attitude.

LO#20 - The student takes responsibility for its own work.

Introduction to European funding

The European Union's vision relies on creating a sustainable and prosperous future for people and the planet based on European values. In the previous lesson, we have seen how promoting and supporting research and innovation can help attain this vision by boosting Europe's competitiveness and growth. While this is important, tackling climate change is also a major concern, which requires competitive R&I capacity. For this reason, helping to achieve the UN Sustainable Development Goals became increasingly a major priority, which should be addressed in all European funding frameworks for R&I. Other priorities that encompass many European funding programmes relate with addressing global challenges, attaining territorial cohesion and reducing regional disparities, or strengthening the European Research Area. Together, these policies help define a research funding framework that then is transformed into preconditions ruling the major European funding programmes.

There are several large-scale European funding programmes that address different policy goals.

This short video helps to understand how policies help define a research funding framework that then is transformed into European funding programmes: [EU Funding for your project?](#)

Some of the ideas transmitted in this short video are:

European funding is the tax payers money from all European countries.

There are five main European funds debated and decided at the European Parliament and managed by national authorities: the Cohesion Fund, the European Agricultural Fund for Rural Development, the European Maritime and Fisheries Fund, the Regional Development Fund and the European Social Fund.

These funds support many important European policy areas, such as the area of Research and Innovation, which is perceived as a means to attain growth, job creation and sustainability of the planet.

There are other Funds that are managed directly by the European Commission, such as the Horizon Europe, the Erasmus Plus and others, that also support the area of Research and innovation. The latter are attributed to beneficiaries in a competitive manner, using a Call for Proposals.

The main features of the European funds managed directly by the EU can be consulted in the front page of the [Funding and Tenders Portal of the European Commission](#). Examples include the ERASMUS Plus Programme (EPLUS), Programme for the Environment and Climate Action (LIFE), Creative Europe (CREA), and the Horizon 2020 Framework Programme (H2020), the latter being the EU programme by excellence to fund research activities. The Horizon 2020 Framework Programme (H2020) ran from 2014 to 2020.

The Horizon 2020 (2014-2020) and its successor the Horizon Europe (2021-2027)

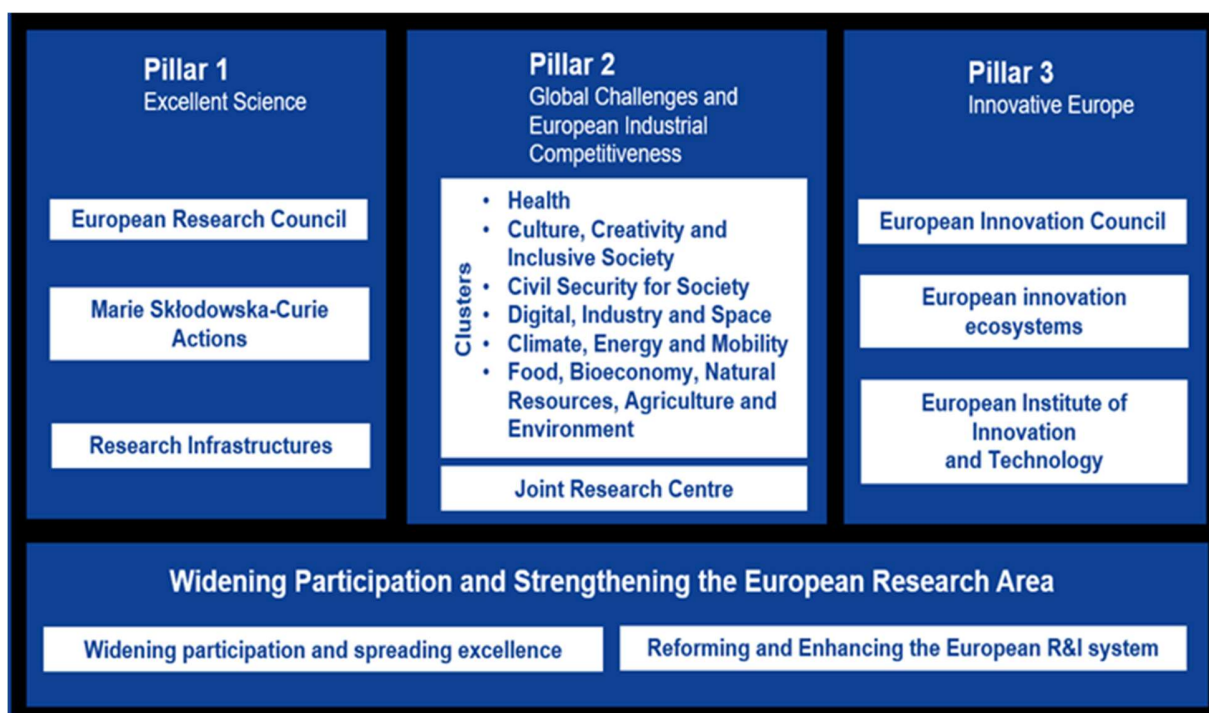
The European Commission's proposal for Horizon Europe is an ambitious research and innovation programme to succeed Horizon 2020.

This short video helps understanding The Horizon Europe (2021-2027) and its predecessor the Horizon 2020 (2014-2020): [Horizon Europe - the next R&I programme](#)

*“The Horizon Europe programme will be based on three complementary and interconnected pillars. The first pillar (**Excellent science**) will support excellent basic science. It will strengthen the Union’s scientific leadership and develop high-quality knowledge and skills. The second pillar (**Global challenges and European industrial competitiveness**) will support research which addresses societal challenges and industrial technologies in areas such as health, security, digital and key enabling technologies, climate, energy, mobility, food and natural resources. Alongside these areas, a limited number of research **missions and partnerships** will be introduced. Any given mission will contain a portfolio of research activities. The third pillar (**Innovative Europe**) will focus on scaling up breakthrough and disruptive innovation by establishing the European Innovation Council. The latter will offer a one-stop-shop for high-potential innovators.*

*In addition to these three pillars, there are provisions to improve the programme's delivery for **widening participation and strengthening the European Research Area**. These include measures to support member states in making the most of their national research and innovation potential. The regulation specifies the member states which will benefit from the actions aimed at widening participation."*

The Horizon Europe structure of funding programmes is illustrated below. The structure of its predecessor, the Horizon 2020, is also presented.





References: Council of the EU Press release 27 March 2019. EU agreement on future research and innovation programme, at <https://www.consilium.europa.eu/en/press/press-releases/2019/03/27/eu-agreement-on-future-research-and-innovation-programme/>

See also infographics about the Horizon Europe programme at https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en

Some insights into specific funding programmes

*“The **Marie Skłodowska-Curie actions** support researchers at all stages of their careers, regardless of age and nationality. Researchers working across all disciplines are eligible for funding. The MSCA also supports cooperation between industry and academia and innovative training to enhance employability and career development.”*

- More at https://ec.europa.eu/research/mariecurieactions/node_en

The **European Research Council's grants** *“encourage the highest quality research in Europe through competitive funding and to support investigator-driven frontier research across all fields,*

on the basis of scientific excellence. ... Being 'investigator-driven', or 'bottom-up', in nature, the ERC approach allows researchers to identify new opportunities and directions in any field of research, rather than being led by priorities set by politicians. ... ERC grants are awarded through open competition to projects headed by starting and established researchers, irrespective of their origins, who are working or moving to work in Europe. The sole criterion for selection is scientific excellence. The aim here is to recognise the best ideas and confer status and visibility on the best brains in Europe, while also attracting talent from abroad."

- More at <https://erc.europa.eu/>

The "**Widening actions** under the Spreading Excellence and Widening Participation programme of Horizon 2020 address the causes of low participation rates of certain countries in European projects by fully exploiting the potential of Europe's talent pool. It ensures that the benefits of an innovation-led economy are both maximised and widely distributed across the European Union. Synergies with European Structural and Investment funds are an important component." "The interim evaluation of FP7 (November 2010) identified that some Member States, mainly those that joined the EU after 2004, had low participation rates in FP7 projects."

"Widening consists of three main actions, i.e. Teaming, Twinning and ERA Chairs, for which specific eligibility conditions apply. This ensures a targeted approach towards Widening Member States and Associated Countries. The Member States currently eligible for Widening support are Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia and Slovenia."

- More at <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/spreading-excellence-and-widening-participation>

Some basic vocabulary regarding European funding instruments

Can you distinguish a **Call** from a **Tender**?

A Tender usually refers to the process whereby governments and financial institutions invite bids for large projects that must be submitted within a finite deadline. Thus, in a tender, the project is predefined, and the organizations that have the most capacity to carry out that project for the best price will be the ones that win the Tender. A funding proposal is a request for money to complete a project that is proposed to the response to a Call for proposals open by a funding agency or donor organization. Such projects are usually humanitarian or community-minded in nature. The Call for proposals defines the area and the conditions necessary to apply but does not predefine the details of the project. A well formulated proposal will tell a potential donor every necessary detail about the proposed project.

Do you know what type of activities will be funded in an **Innovation Action**, a Research and **Innovation Action** and a **Coordination and Supporting Action**?

Research & innovation actions (RIA) - Type of action under the H2020 Programme that funds activities aiming to establish new knowledge and/or explore the feasibility of a new or improved technology, product, process, service or solution. This includes: basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a

laboratory or simulated environment, closely connected but limited demonstration or pilot activities aiming to show technical feasibility in a near-to-operational environment.

Innovation Action (IA) - Type of action under the H2020 Programme that funds activities aimed at producing plans and arrangements or designs for new, altered or improved products, processes or services, including: prototyping, testing, demonstrating, piloting, large-scale product validation, market replication.

Coordination and support actions (CSA) - Type of action under the H2020 Programme that funds projects consisting mainly of accompanying measures or complementary activities, such as: standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogue, mutual learning exercises, studies, networking and coordination between programmes in different countries.

What is a **single stage deadline model** versus a **two-stage** deadline model?

Call for applications can have one submission stage, that is, applicants apply one with a full proposal, or be divided into two submission stages. On the first deadline the applicants often submit a reduced version of the project and, if they are selected to the second round, they present the full proposal before the second deadline for submission.

When is a project **mono-beneficiary** versus **multi-beneficiary**?

Mono-beneficiary actions - Actions that fund projects with one beneficiary only. Beneficiaries can be many types of organizations, such as **Research performing institutions**.

Research performing institutions - Research is performed at institutions that hire researchers and other staff and that provide conditions for the research work to be carried out, such as the necessary scientific infrastructure, facilities, platforms, equipment and services to support research. Research performing organizations can be of many types. In addition to universities research institutes and R&D companies, research is performed at other types of institutions (NGOs, hospitals, patient association, regional authorities, public administration entities, museums...)

Multi-beneficiary actions - Actions that fund projects by a group of beneficiaries (normally from different EU and associated countries). In the latter, a group of beneficiaries' organizations form a **Consortium**.

What categories of countries exist within the European framework programmes? **Member States (MS)** versus **Associated Countries (AC)** versus **Third Countries**

EU member states - EU member countries have signed the treaties of the European Union and are therefore subject to the privileges and obligations of EU membership.

Associated country (AC) - Non-EU country that has entered into a specific agreement ("association agreement") with the EU, to participate in a specific EU fund/funding programme. A country that does not have an association agreement cannot normally participate, even if it has some type of other formal relationship with the EU (EEA member, EU accession country,

neighbouring country, etc) – unless the basic act specifically provides for it (with or without funding; e.g. for the H2020 programme: the work programme lists countries that are automatically eligible for participation and funding).

Third country - Depending on the context, it means either: a country that is not an EU member state or a country that is neither an EU Member State nor an associated country.

What is a **Widening** country? And a **high performing, research intensive country**?

The Composite indicator of Research Excellence (with a corrective threshold of 70% of the EU average) has been selected to distinguish those countries identified as "low R&I performing" or "Widening" countries. These are: Member States: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia and Slovenia. Associated Countries (subject to valid association agreements of third countries with Horizon 2020): Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, North Macedonia, Georgia, Moldova, Montenegro, Serbia, Tunisia, Turkey and Ukraine.

The detailed scores of the composite indicator can be found in p. 5 (Excellence in S&T 2010) of the "Research and Innovation Performance in EU Member States and Associated Countries 2013" at

http://ec.europa.eu/research/innovation-union/pdf/state-of-theunion/2012/innovation_union_progress_at_country_level_2013.pdf

What are the **Missions**? Partly inspired by the Apollo 11 mission to put a man on the moon, the European research and innovation missions aim to deliver solutions to some of the greatest challenges facing our world. The Missions are an integral part of the Horizon Europe framework programme beginning in 2021. Each mission is a mandate to solve a pressing challenge in society within a certain timeframe and budget. This short video explains the Mission concept: <https://youtu.be/KlvjfPgwDKg>

The Call for Proposals and RMA roles

Often, a funding agency regularly opens calls for funding. A **call for funding** is a public competition for funding within a funding programme. Often, they focus on specific R&I topics, or groups of topics. At the opening of the call, a group of guiding documents is generally made public that specifies the particular set of rules applicable to the call, defining many aspects such as eligibility of applicants and institutions, maximum budget, indicated length for the project, eligibility of partners, eligibility of proposed activities, etc.

Typical guiding documents to read to understand the funding call are:

- the call text

- the work programme
- the guide for applicants
- the guide for evaluators
- ethical guidelines

The Call text for a European programme, typically from the Horizon 2020 programme, follows a uniform format regardless of the context of the text, which is:

- 1) Heading containing basic information such as the name of the programme, name of the call, type of action, date of publication and deadline,
- 2) Specific challenge
- 3) Scope
- 4) Information about amount of funding available and expected duration for the project
- 5) Expected Impact

The idea of this lesson is to explore in groups different funding calls and look at different aspects of the call in order to get prepared to easily extract the important information for the applicants from, while understanding what is the underlying policy that applicants to a given call will have to respond to.

Examples of Calls:

- Twining call
- Societal Challenge call (thematic)
- ERC call

An example for the full text for the Twining call is presented below:

Twining Call

Type of action: CSA Coordination and support action

Deadline Model: single stage

Opening: **24 July 2019**

Deadline: **14 November 2019 17:00:00 Brussels time** Closed

Work programme: [Spreading Excellence and Widening Participation](#)

Work programme year: H2020-2018-2020

Call ID: H2020-WIDESPREAD-2018-2020

Topic Description

Specific Challenge: The specific challenge is to enhance networking activities between the research institutions of the Widening countries and internationally leading counterparts at EU level. Driven by the quest for excellence, research intensive institutions tend to collaborate increasingly in closed groups, producing a crowding-out effect for a large number of promising institutions. This is the challenge that a specific Twinning action will try to address.

Scope: Twinning aims at significantly strengthening 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 from two different Member States or Associated Countries. Twinning will:

1. Enhance the scientific and technological capacity of the linked institutions with a principal focus on the university or research organisation from the Widening Country;
2. Help raise the research profile of the institution from the Widening country as well as the research profile of its staff.

Successful Twinning proposals will have to clearly outline the scientific strategy for stepping up and stimulating scientific excellence and innovation capacity in a defined area of research as well as the scientific quality of the partners involved in the twinning exercise. This scientific strategy should include arrangements for formulating new (or ongoing) joint research project(s) in the scientific area of choice and describe how Twinning will take this research to a new stage, by enlarging its scope and/or the research partnership. If relevant, any links with sustainable development objectives are to be outlined.

Such a strategy should include a comprehensive set of activities to be supported. These should include at least a number of the following: short term staff exchanges; expert visits and short-term on-site or virtual training; workshops; conference attendance; organisation of joint summer school type activities; dissemination and outreach activities.

A dedicated focus towards promoting the involvement of early stage researchers (as per the MSCA definition^[1]) in the coordinating institution from the Widening country is expected. This should take the form of a dedicated work package or task in the proposal describing activities dedicated to early stage researchers from the coordinating institution that could include training, mentoring and networking measures within the Twinning exercise, with a special focus on the promotion of gender equality among early stage researchers.

One of the lessons learned from previous calls and from the interim evaluation of Horizon 2020, is the lack of experience about research management and administration in widening countries. That is why proposals should also focus on strengthening the research management and administration skills of the coordinating institution from the Widening country. This should take the form of a dedicated work package or task, placing emphasis on specific activities, in view of

helping the staff of the coordinating institution to improve their proposal preparation and project management/administration skills. If not yet in place, setting up/upgrading a research management/administration unit within the coordinating institution would be beneficial. This will be achieved by fully utilising the experience and best practices of the internationally leading partners and is expected to be a concrete deliverable of the Twinning exercise.

In general, costs relating to administration, networking, coordination, training, management, travel costs are acceptable under a Twinning project. While the action does not focus on equipment and research costs, these could be accepted if they constitute only a minor part (up to 10%) of the total Horizon 2020 funding requested and are deemed necessary to fulfil the action's specific scope and objective.

Therefore, for grants awarded under this topic and type of action the following cost categories will be ineligible costs:

- infrastructure costs;

The respective option of Article 6.5.C of the Model Grant Agreement will be applied.

The duration of a Twinning project can be up to 3 years.

If the coordinating entity has already been funded (as a coordinator) under other Horizon 2020 Twinning calls, these projects need to be described in the proposal. Proposers need to clearly demonstrate the added value and impact of the proposal in achieving the Twinning programme objectives, in comparison to the already funded Twinning project within the coordinating entity.

The Commission considers that proposals requesting a contribution from the EU of EUR 0.9 million, would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting lower amounts.

Expected Impact:

- Increased research excellence of the coordinating institution in the field of research as a result of the twinning exercise.
- Enhancing the reputation, attractiveness and networking channels of the coordinating institution.
- Improved capability to compete successfully for national, EU and internationally competitive research funding.
- Illustrate quantitatively and qualitatively the expected potential impact of the twinning exercise within the coordinating institution (and possibly at regional/national level) based on indicators like expected future publications in peer reviewed journals, collaboration agreements with businesses, intellectual property, new innovative products or services.

- It should be explained how the leading scientific institutions in the partnership will contribute in terms of provision of access to new research avenues, creativity and the development of new approaches, as well as acting as a source for increased mobility (inwards and outwards) of qualified scientists.

- The benefits for the internationally leading scientific institutions and the way they would materialise through the partnership should be substantiated.

[1] Early stage researchers shall, at the time of recruitment by the host organisation, be in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree. Full-time equivalent research experience is measured from the date when the researcher obtained the degree entitling him or her to embark on a doctorate, (either in the country in which the degree was obtained or in the country in which the researcher is recruited) even if a doctorate was never started or envisaged. Part-time research experience will be counted pro-rata.

It is important to analyse a Call for Proposals from different perspectives.

First, one can analyse it from the perspective of the policy need giving rise to the topic. There are Research Managers and Administrators (RMAs) whose job is focused on contributing to the design of funding programmes and calls. As examples of this category of RMAs, we have the European Officers for specific Horizon 2020/Horizon Europe programmes, or policy officers at the European Commission that are actively engaged into the writing of the call itself and accompanying documentation. But you do not need to work for the European Commission to do this sort of work: at universities, NGOs, research institutes, companies, etc., that perform R&I can exist dedicated policy advisers that can have important roles in advocating for the interests of their own institution or research field. The policy advisers are often consulted during the preparatory work leading to the creation of funding programmes and calls for proposals.

The vocabulary used in the text of a Call for proposals has been widely scrutinised by many different stakeholders, as there is a process of extensive public and internal consultations prior to the design of a call or funding programme. The opening of a Call for Proposals is a lengthy and highly political process, requiring extensive preparatory work. Hence, the vocabulary used in a call for proposals can tell you much about the genesis and the policy purposes of a given call.

Secondly, a Call for Proposals can be analysed from the perspective of supporting the applicants. Here, it is important to transmit crucial information to the candidate, who will subsequently prepare the project proposal. There is a category of Research Managers and Administrators (RMAs) that is specialised into providing support to applicants into the assembly of funding proposals. This is the area of Pre-award, because it relates to the project cycle before the funding is obtained and the funding contract (or award) is established. Pre-award RMAs often work at research performing institutions in direct contact with the applicants, which are often researchers.

In summary, in this lesson the aim is to analyse the following aspects of a Call for Proposals.

- the policy that gave rise to the need of that topic, and the format in which it was conceived. Analyse the vocabulary used (linked to policy action).
- the objectives of the call
- the activities it funds
- the expected outcomes and impact
- the financial aspects
- the effort that is needed to be put into building partnerships.

And to understand the role that RMAs can have in the design of the Call for Proposal and in the support to applicants in designing a suitable project for the given call.

The following example illustrates the identification of the policy aspects, the objectives, the activities, the expected outcomes and impact, the budget, and the partnership requested in a Twinning Call:

Policy/need	<p>...Strengthen one field of research in a university or research institution from the Widening country</p> <p>... Reduce the crowding-out effect for a large number of promising institutions that exists when, driven by the quest for excellence, research intensive institutions tend to collaborate increasingly in closed groups</p> <p>...Links with sustainable development goals</p>
Objectives	<p>...Address network gap and deficiencies of your institution</p> <p>...Twin with international partners in high performing countries</p>
Activities	<p>... Enhance S&T capacity of the linked institutions with a particular focus on the Widening institution</p> <p>... Raise the research profile of the Widening institution and staff</p> <p>... Involve early stage researchers (specific work package)</p>

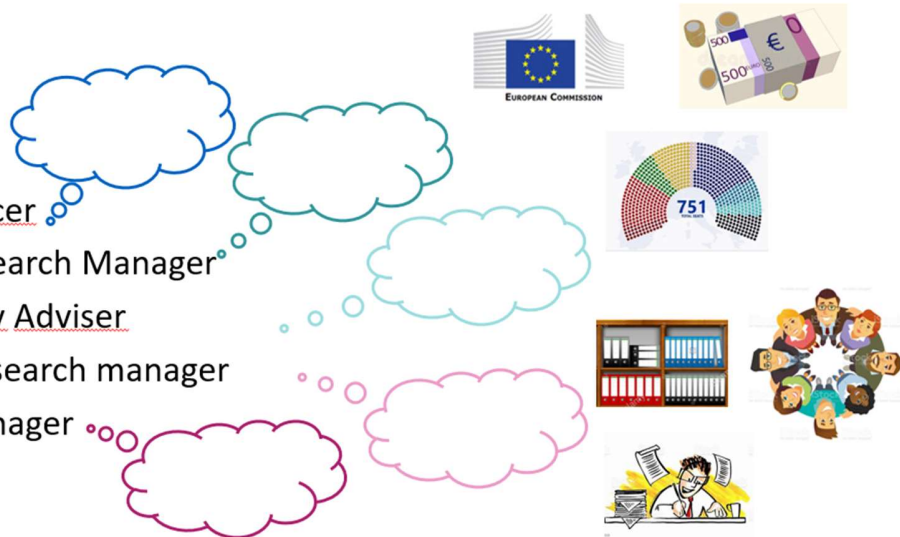
	<p>...Strengthen the research management and administration skills of the coordinating institution (dedicated work package or task)</p> <p>...Short term staff exchanges, expert visits and short-term on-site or virtual training, workshops, conference attendance, organization of joint summer school type activities, dissemination and outreach activities</p> <p>...Within 3 years of project</p>
Outcomes & Impact	<p>...Increase research excellence of the coordinating institution in a particular field</p> <p>...Enhance the reputation, attractiveness and networking channels of the coordinating institution</p> <p>... Improve capability to compete successfully for national, EU and international competitive research funding</p> <p>...Quantitative and qualitative indicators</p> <p>...For the coordinating institution and at regional and national level</p> <p>...Benefits for the more-intensive research performers</p>
Funding	<p>... EUR 0.9 million; does not preclude submission and selection of proposals requesting lower amounts</p>
Partnerships	<p>... a university or research organisation from a Widening country and at least two internationally leading research institutions from two different Member States or Associated Countries</p>

RMA Roles

Several professionals in Research Management intervene from the drawing of a call to the preparation and submission of a project proposal to the implementation of the research project. Some of these professionals work for funding agencies or government bodies, others work directly with the research teams that will be carrying out the approved projects. The figure below illustrates some of these roles. Even if the context affecting these professions and the nature of their daily activities change substantially over time, students can look for more information about each of the examples presented, or examples of people working in these areas can be brought to the class to provide their testimony and answer questions from the students.

RMA roles

- EC Project Officer
- Pre-award Research Manager
- Research Policy Adviser
- Post-award Research manager
- EU Project Manager



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