

Horizon 2020 R&I opportunities for the GLObal and REgional Atmospheric Modelling (GLOREAM) community within Call 2015





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Europe 2020 Strategy - Flagship Initiatives A strategy for smart, sustainable and inclusive growth

The Commission is putting forward seven flagship initiatives to catalyse progress



Horizon2020 - What's new?

- > A single programme bringing together three separate programmes/initiatives*
- > Coupling research to innovation from research to retail, all forms of innovation
- > Focus on societal challenges facing EU society, e.g. health, clean energy, climate change and transport
- > Simplified access, for all companies, universities, institutes in all EU countries and beyond.

*The 7th Research Framework Programme (FP7)



Competitiveness and Innovation Framework Programme (CIP)

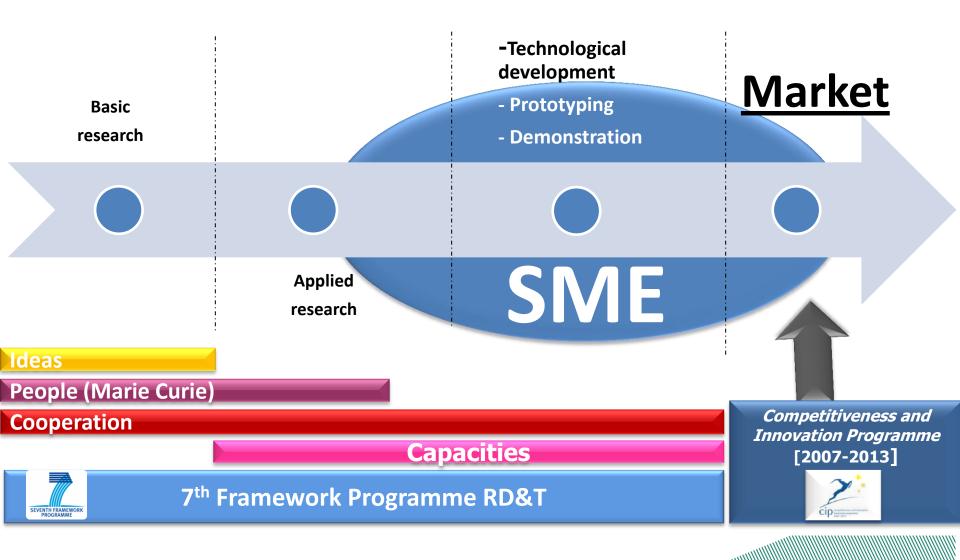






Fundação para a Ciência e a Tecnologia

HORIZON 2020 – Funding opportunities throughout the full innovation cycle





HORIZON 2020 main EU programme that supports R&I Budget: 80.000 M€



Excellent Science

- Bottom up
- European Research Council (ERC)
- Marie Sklodowska-Curie actions

Societal Challenges

- Top down → focused on results
- Active ageing, food security, clean energy, green transports, climate action, inclusive societies

Industrial Leadership

- Leadership in key enabling technologies (ICT, Space, NMP,...)
- Risk capital and innovation for SME



HORIZON 2020: rules of participation

Simplification – single set of rules to all components of H2020

- √ Simpler cost eligibility and partnering rules
- √ Simpler time-recording requirements
- ✓ Cost based reimbursement but broader acceptance of the participants' accounting systems.
- ✓ Evaluation criteria uniform (Excellence Impact Implementation)

Simple funding rates - one funding rate

- ✓ Only two reimbursement rates: 100% for research actions and 70% for demonstration, piloting, market replication = No differentiation depending on legal status
- √ one method to calculate indirect costs (single flat rate: 25%)
- ✓ VAT is an eligible cost (for institutions that cannot recover it)

Fewer better targeted controls and audits

Improvement of IPR rules and Open Access to scientific publications



Type of projects vs reimbursement rates

BUDGET: based on the type of project and not on the type of participant

Innovation Action [IA] → 70% direct costs + 25% indirect costs

activities directly aiming 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 and market replication. Projects may include limited research and development activities. Not-for-profit institutions can receive 100%.

Research and Innovation Action [RIA] → 100% direct cots + 25% indirect costs activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution. They may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment.

Coordination and Supporting Action [CSA] → 100% direct costs + 25% indirect costs actions consisting primarily of accompanying measures such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, etc.

VAT is considered an eligible cost!





HORIZON 2020 Societal Challenge 5 (SC 5) Climate action, environment, resource efficiency and raw materials

Fighting and adapting to Climate Change

Sustainably managing natural resources and ecosystems

Sustainable supply of non-energy and non-agricultural raw materials

Transition towards a green economy through eco-innovation

Global environmental observation and information systems

Cultural Heritage

Main proposed activities

Work Programme 2014 - 2015 Societal Challenge 5 Climate action, environment, resource efficiency and raw materials

http://ec.europa.eu/research/participants/portal/doc/call/h2020/common/1617615-part 12 climate action v2.0 en.pdf

Referência tópico	Título	Ano	Tipo de projeto	M€ por projeto	Concurso	Deadline
Call Waste: a resou	irce to recycle, reuse and recover raw materials					
WASTE-4d-2015	WASTE-4d-2015: Raw materials partnerships	2015	CSA	1,5	Single-stage	21 Abr 2015
WASTE-6a-2015	WASTE-6a-2015: Eco-innovative solutions	2015	IA	8-10	Two-stage	1º fase: 21 Abr 2015 2º fase: 8 Set 2015
VASTE-6b-2015	WASTE-6b-2015: Eco-innovative strategies	2015	RIA	4-5	Two-stage	1º fase: 21 Abr 2015 2º fase: 8 Set 2015
WASTE-7-2015	WASTE-7-2015: Ensuring sustainable use of agricultural waste, co- products and by-products	2015	RIA	7	Two-stage	1ª fase: 21 Abr 2015 2ª fase: 8 Set 2015
Call Water innovat	ion: boosting its value for Europe					•
WATER-1b-2015	WATER-1b-2015: Demonstration/pilot activities	2015	IA	6-8	Two-stage	1º fase: 21 Abr 2015 2º fase: 8 Set 2015
WATER-2b-2015	WATER-2b-2015: Integrated approaches to food security, low-carbon energy, sustainable water management and climate change mitigation:	2015	RIA	6-8	Two-stage	1º fase: 21 Abr 2015 2º fase: 8 Set 2015
WATER-4b-2015	WATER-4b-2015: Water management solutions for agricultural sector, thematic networks	2015	CSA	3	Single-stage	21 Abr 2015
WATER-5b-2015	WATER-5b-2015: A coordination platform	2015	CSA	3	Single-stage	21 Abr 2015
VATER-5c-2015	WATER-5c-2015: Development of water supply and sanitation technology, systems and tools, and/or methodologies	2015	RIA	2-3	Two-stage	1ª fase: 21 Abr 2015 2ª fase: 8 Set 2015
Call Growing a low	carbon, resource efficient economy with a sustainable supply of raw	materials	s			•
ighting and adapt	ing to climate change					
GC5-4-2015	SC5-04-2015: Improving the air quality and reducing the carbon footprint of European cities	2015	RIA	6-8	Two-stage	1º fase: 21 Abr 2015 2º fase: 8 Set 2015
C5-5b-2015	SC5-05b-2015: Earth-system modelling and climate services	2015	CSA	-	Single-stage	21 Abr 2015
rotecting the envi	ironment, sustainably managing natural resources, water, biodiversit	y and eco	systems			
C5-7-2015	SC5-07-2015: More effective ecosystem restoration in the EU	2015	RIA	5-7	Two-stage	1º fase: 21 Abr 2015 2º fase: 8 Set 2015
C5-10c-2015	SC5-10c-2015: An EU support mechanism for evidence-based policy on blodiversity & ecosystems services	2015	CSA	-	Single-stage	21 Abr 2015

2015 R&I topics

DEADLINES Single-stage → 21 Apr 2015

Two-stage: 1st stage \rightarrow 21 Apr 2015 | 2nd stage \rightarrow 8 Sept 2015



Work Programme Societal Challenge 5 (2014-2015) - topics structure

Structure respects the challenge based approach – 3 key features

Specific challenge

Sets the context, the problem to be addressed, why intervention is necessary

> Scope

Delineates the problem, specifies the focus and the boundaries of the potential action BUT without describing specific approaches

Expected impact

Describe the key elements of what is expected to be achieved in relation to the specific challenge

SC5-4-2015: Improving the air quality and reducing the carbon footprint of European cities

Specific challenge he European population lives in urban environments sed to levels of air pollutants exceeding the limit values estatorished by the European directives. The sources of pollution in cities are mainly linked to urban activities such as transport and heating. Other activities such as energy production, industrial activity, agriculture and trans-boundary pollution play an important role. Air pollution and climate change are strongly connected and there is

pment of technological options and strategies to fight against air pollution onments and against climate change, ensuring the involvement of the main pollution-generation sectors. Proposals should include the development and application of tools in support of integrated air quality and climate change governance in EU Member States, with the aim of designing and implementing adequate abatement strategies and practices. The specific circumstances of the different regions and cities of Europe and the complex systems dynamics of societal and technological changes required for a transition to air pollution free/low carbon society should be taken into account. Proposals should foster the integration of advanced tools for the assessment, monitoring, modelling – including source apportionment – with innovative technological options and strategies to improve air quality and reduce the carbon footprint of urban areas. Furthermore, awareness-raising actions and policy support activities should be included. Proposals should include the participation of SMEs, as far as possible.

negative effects on health and climate together with ion in the EU. Increase compliance with the EU air quality legislation. Support to EU air policy at EU and Member State level. Rapid market deployment of technological and non-technological innovative solutions. Contribution to the goals of the Smart Cities and Communities focus area. Societal transformation to a green and low carbon economy. Improved air quality in EU cities in the medium- to long-term.

Type of action: Research and innovation actions

Societal Challenge 5 Climate Action



SC5-4-2015: Improving the air quality and reducing the carbon footprint of European cities

- <u>Development of technological options and strategies</u> to fight against air pollution in <u>urban</u> <u>environments</u> and against climate change, ensuring the <u>involvement of the main pollution-generation sectors.</u>
- <u>Development and application of tools</u> in support of integrated air quality and climate change governance in EU Member States.
- <u>Integration of advanced tools for the assessment, monitoring, modelling including source apportionment with innovative technological options and strategies to improve air quality and reduce the carbon footprint of urban areas.</u>
- Awareness-raising actions and policy support activities.
- Include the <u>participation of SMEs.</u>

Societal Challenge Climate Action



WASTE-6b-2015: Promoting eco-innovative waste management and prevention as part of sustainable urban development – Eco-innovative strategies

- Development of <u>innovative</u> and <u>sustainable strategies</u> for waste prevention and <u>management in urban and peri-urban areas</u>.
- Proposals should highlight how <u>urban patterns</u>, <u>drivers</u>, <u>consumer behaviour</u>, <u>lifestyles</u>, <u>culture</u>, <u>architecture and socio-economic</u> issues can influence the <u>metabolism of cities</u>.
- Proposals should highlight the possible benefits to be derived from <u>ecosystems services</u> and green infrastructure, and their gender sensitive application.

RIA | 4-5 M€ | 10 M€ available for this topic | two-stage

Excellent Science Marie Skłodowska-Curie actions

- ✓ Operates in a 'bottom-up' basis, covering all scientific domains
- ✓ **To support** the research career
- ✓ Mobility, transnational and intersectoral
 - Opportunities to work and train with the best researchers in Europe and worldwide
 - Exchanges between academia/industry (staff exchange)
- ✓ Aim: develop new knowledge / enhance skills of people behind research and innovation
- ✓ Excellent conditions to recruit Researchers following the **Charter & Code**European Charter for Researchers & Code of Conduct for the Recruitment of Researchers





Main added value of the MSCA

For the involved institutions

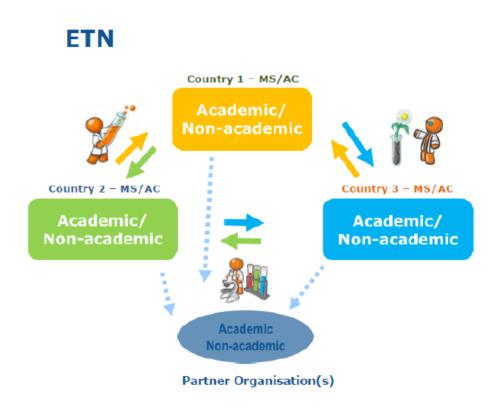
- To recruit a new human resources
- Enhance a transfer of knowledge in the *staff*
- Boost the excellence of doctoral programmes
- To promote innovative, international, intersectoral PhD
- Build a consortium around a common research and innovation project
- Strengthen previous Partnerships/ Collaborations
- Leverage the know-how already generated and qualify new generations of researchers
- Possibility of synergies with the <u>collaborative</u>
 <u>projects</u>

Strengthen existing networks

FCT Fundação para a Ciência e a Tecnologia

<u>Innovative Training Networks (ITN) –</u>

1. European Training Networks (ETN)



Deadline: January 13rd, 2015

- Train a new generation of creative, entrepreneurial and innovative earlystage researchers (ESR – less than 4 years in research and without PhD)
- Collaboration between the academia and non-academic sectors
- Developing entrepreneurship and skills matching research labour market needs
- Participation of non-academic partners is essential
- At least 3 partners from 3 different countries

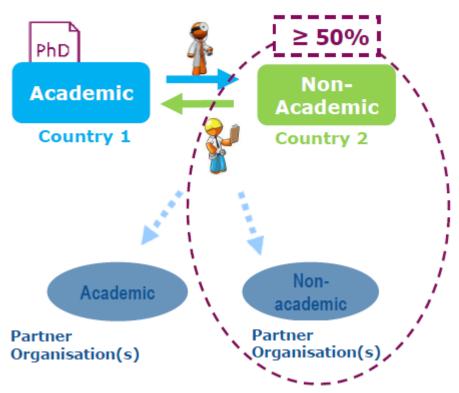
Strengthen existing networks



<u>Innovative Training Networks (ITN) –</u>

2. European Industrial Doctorates (EID)

EID – 2 beneficiaries



Deadline: January 13rd, 2015

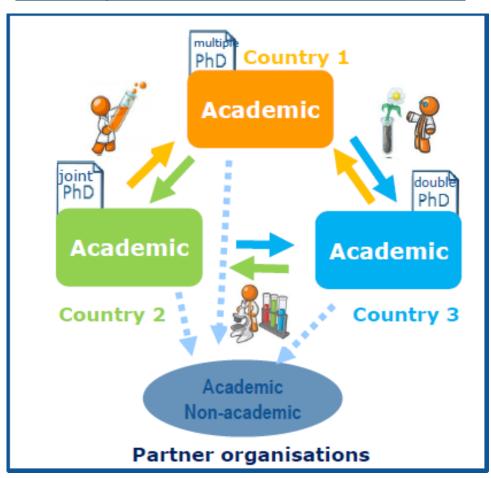
- 2 beneficiaries
 - 1 academic
 - 1 non-academic
- 2 countries (MS/AC)
- >50% of time at non-academic sector
- Inscription at a joint PhD
- Joint PhD supervision

Strengthen existing networks

Fundação para a Ciência e a Tecnologia

<u>Innovative Training Networks (ITN) –</u>

3. European Joint Doctorates (EJD)



- 3 beneficiaries
- 3 countries (MS/AC)
- Inscription at a joint PhD
- Joint PhD diploma is compulsory
- Joint PhD supervision
- Non-academic partners is very important

Deadline: January 13rd, 2015

Societal Challenge's Proposal preparation and submission



1 REGISTER your organization

→ Participant Identification Code – PIC

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

REGISTER yourself in the ECAS portal

→ Login and Password associated to your email that will be used to register and submit the proposal

https://webgate.ec.europa.eu/cas/eim/external/register.cgi?loginRequestId=ECAS_LR-6009668-aikPxuzLKsahDFC8rtnOtzTlerooSPJiWuOWW4lnlAEjENVRzzU8sbHP2F75JeY1uXba0wgMDMTzzeaoO79BYzpa-Jj71zxYb8yrzphppHGpwQW-wojOxV8G5TVYC1Lswlj8BwOxHKMCbqMXiPznrn5ctEN

At the Participants Portal, SELECT the topic and START the submission

→ After registering your proposal you can edit it at any time

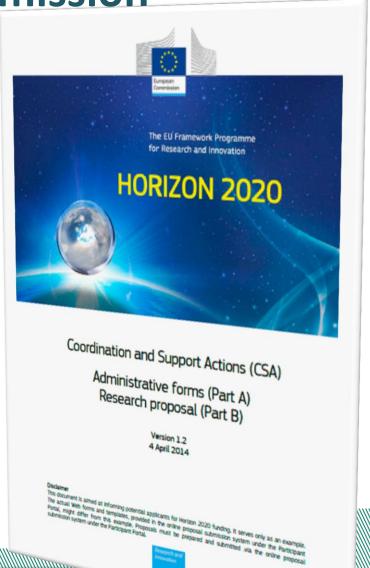
Societal Challenge's Proposal preparation and submission



Part A – Administrative information

Part B – Technical proposal
Annex 1-3
Annex 4-5

Templates are available at the topic description page http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/pt/h2020-call-pt-ria-ia-csa_en.pdf



Societal Challenge's Proposal preparation and submission



Part A – Administrative information edited online

- General information title, duration, keywords, abstract
- Administrative data of participating organisations
- Budget of the whole proposal and for each participating organization



Societal Challenge's Proposal preparation and submission



Part B – Technical annex

- the template in word format can be downloaded
- after completion, the annexes, should be uploaded in pdf format

- \rightarrow Annex 1-3 \rightarrow for CSA, max 50 pages
 - → for RIA, IA, max 70 pages
- \rightarrow Annex 4-5 \rightarrow no page limits

Please refer to submission system for the definitive template for your call

1. Excellence

Your proposal must address a topic set out in the work programme, for this call for

A. This section of your proposal will be assessed only to the extent that it is relevant to that topic.

1.1 Objectives

 Describe the specific objectives for the project¹, which should be clear, measurable. realistic and achievable within the duration of the project. Objectives, should be consistent with the expected exploitation and impact of the project (see section 2).

1.2 Relation to the work programme

 Indicate the work programme topic to which your proposal relates, and explain how your proposal addresses the specific challenge and scope of that topic, as set out in the work

1.3 Concept and approach, quality of the coordination and support measures

- Describe and explain the overall concept underpinning the project. Describe the main
- Describe any national or international research and innovation activities which will be Describe any national or international research and innovation activines which will be linked with the project, especially where the outputs from these will feed into the
- Describe and explain the overall approach, distinguishing, as appropriate, coordination
- Where relevant describe how sex and/or gender analysis is taken into account in the

As Set and gender refer to biological characteristics and social/cultural factors respectively. For guidance on methods of set / gender analysis and the tissues to be taken into account please refer to http://ec.europs.eu/reservivisionse-social/frendered-provintions/index, en. cfer

The term 'project' used in this template equates to an 'action' in certain other Horizon 2020 documentation.

Proposal structures vs. evaluation criteria



Page limits

Objectives Excellence 1.2 Relation to the work programme 1.3 Concept and approach 1.4 Ambition **2.1** Expected impacts **Impact** 2.2 Measures to maximise impact a) Dissemination and exploitation of results b) Communication activities **3.1** Work plan — Work packages, deliverables and milestones **Implementation 3.2** Management structure and procedures 3.3 Consortium as a whole 3.4 Resources to be committed

Section 4: Members of the consortium

- 4.1. Participants (applicants)
- 4.2. Third parties involved in the project (including use of third party resources)

Section 5: Ethics and Security

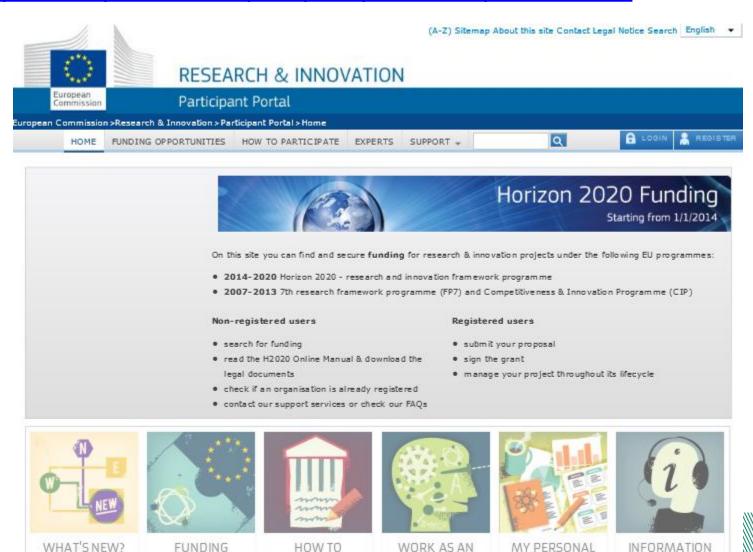
Participants Portal



AND SUPPORT

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

OPPORTUNITIES



PARTICIPATE



Can we use H2020 opportunities to finance GLOREAM activities?

In what way? Training networks? Collaborative projects?