HORIZONTE 2020

Programa-Quadro Comunitário de Investigação & Inovação

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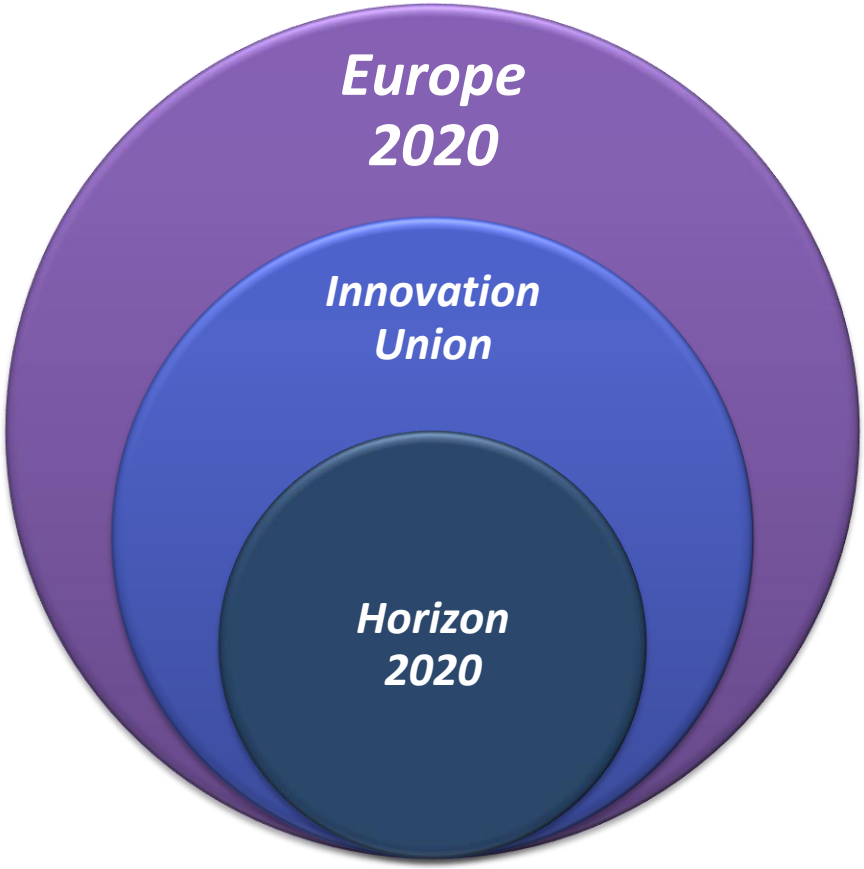
GPPQ/FCT

Contexto do HORIZONTE 2020

Estratégia Europa 2020 | 7 Iniciativas emblemáticas

http://ec.europa.eu/europe2020/index_en.htm



HORIZON 2020
THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

Principal instrumento de financiamento para implementar a Europa da Inovação

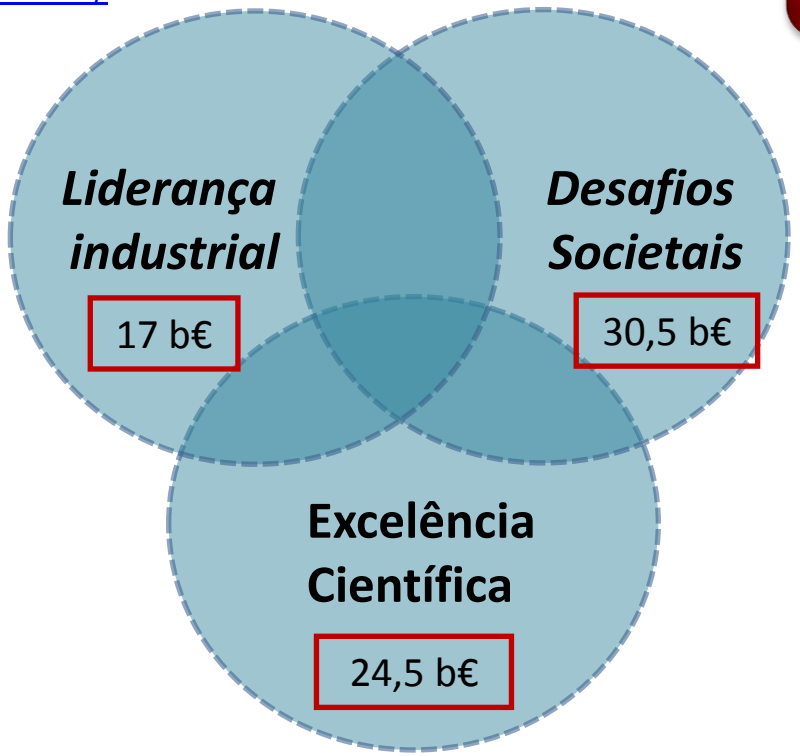
Fundamental no desenvolvimento da iniciativa emblemática "União pela inovação", direcionada para melhorar, no quadro da estratégia Europa 2020, a competitividade mundial da Europa.

HORIZONTE 2020: 3 pilares que se reforçam mutuamente

Meta: ~20% orçamento dos pilares "Desafios Societais" e "Liderança Industrial" para PME

http://ec.europa.eu/programmes/horizon2020/

Reforçar a liderança industrial em inovação. Inclui grande investimento em tecnologias-chave (KET), e um melhor acesso ao capital e apoio às PME



Reflete as prioridades da Estratégia UE 2020, abordando as principais preocupações partilhadas por todos os europeus

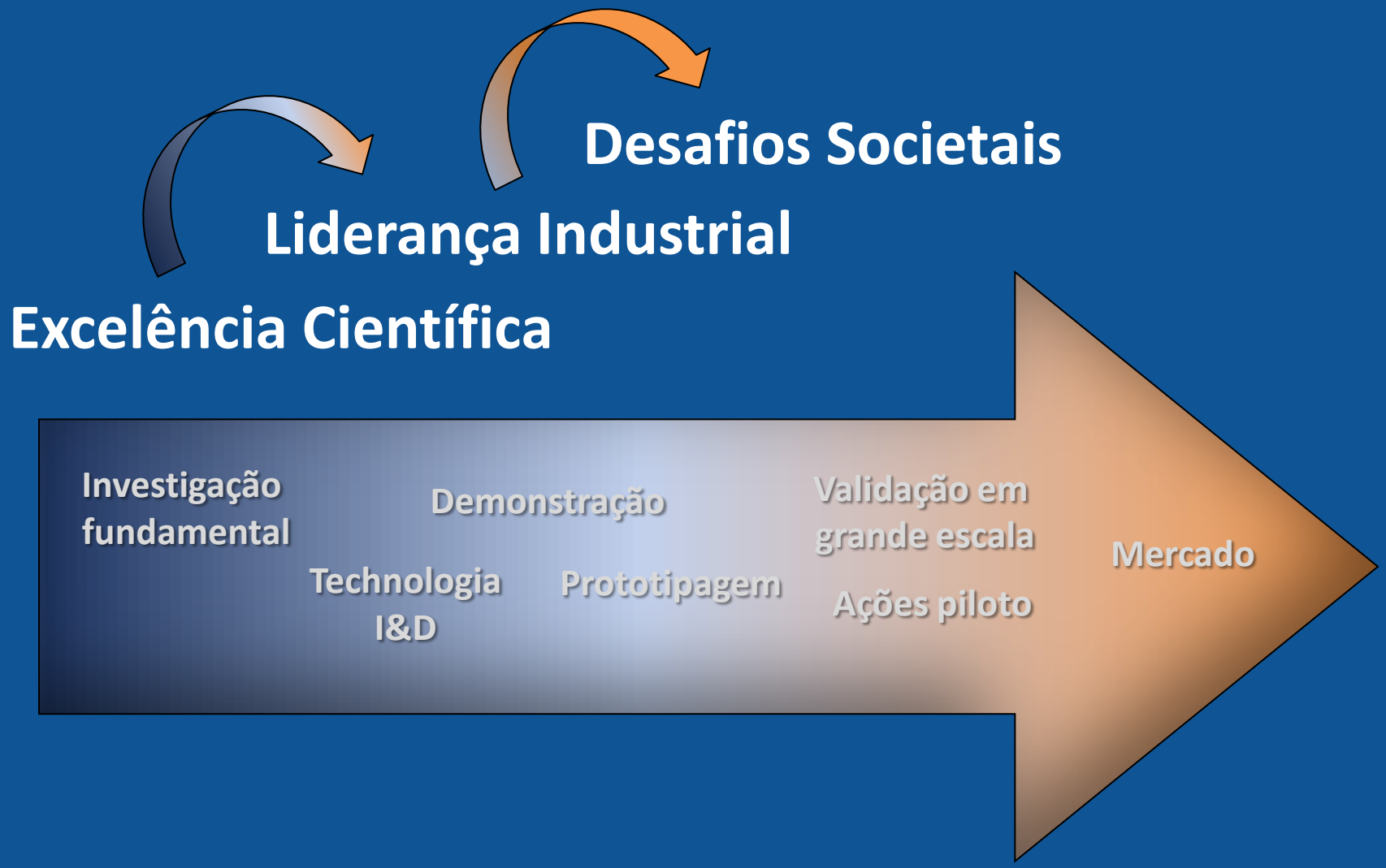
Apoiar a posição da UE como líder mundial em ciência, com um aumento do financiamento para o Conselho Europeu de Investigação (ERC)

***EURATOM* 1,5 b€**

EIT 2,7 b€

***Alargar a Participação* 0,8 b€**

HORIZONTE 2020 | Abordagem integrada – >cobertura de todo o ciclo de inovação



HORIZONTE 2020 | Estrutura

Europe 2020 priorities

International cooperation

Shared objectives and principles

European Research Area

Societal Challenges

- Health, demographic change and well being
- 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

Industrial Leadership

- Leadership in enabling and industrial technologies
  - ICT
  - Nanotechnologies
  - Advanced materials
  - Biotechnologies
  - Advanced manufacturing and processing
  - Space
- Access to risk finance
- Innovation in SMEs

EIT

JRC

Excellence in the Science Base

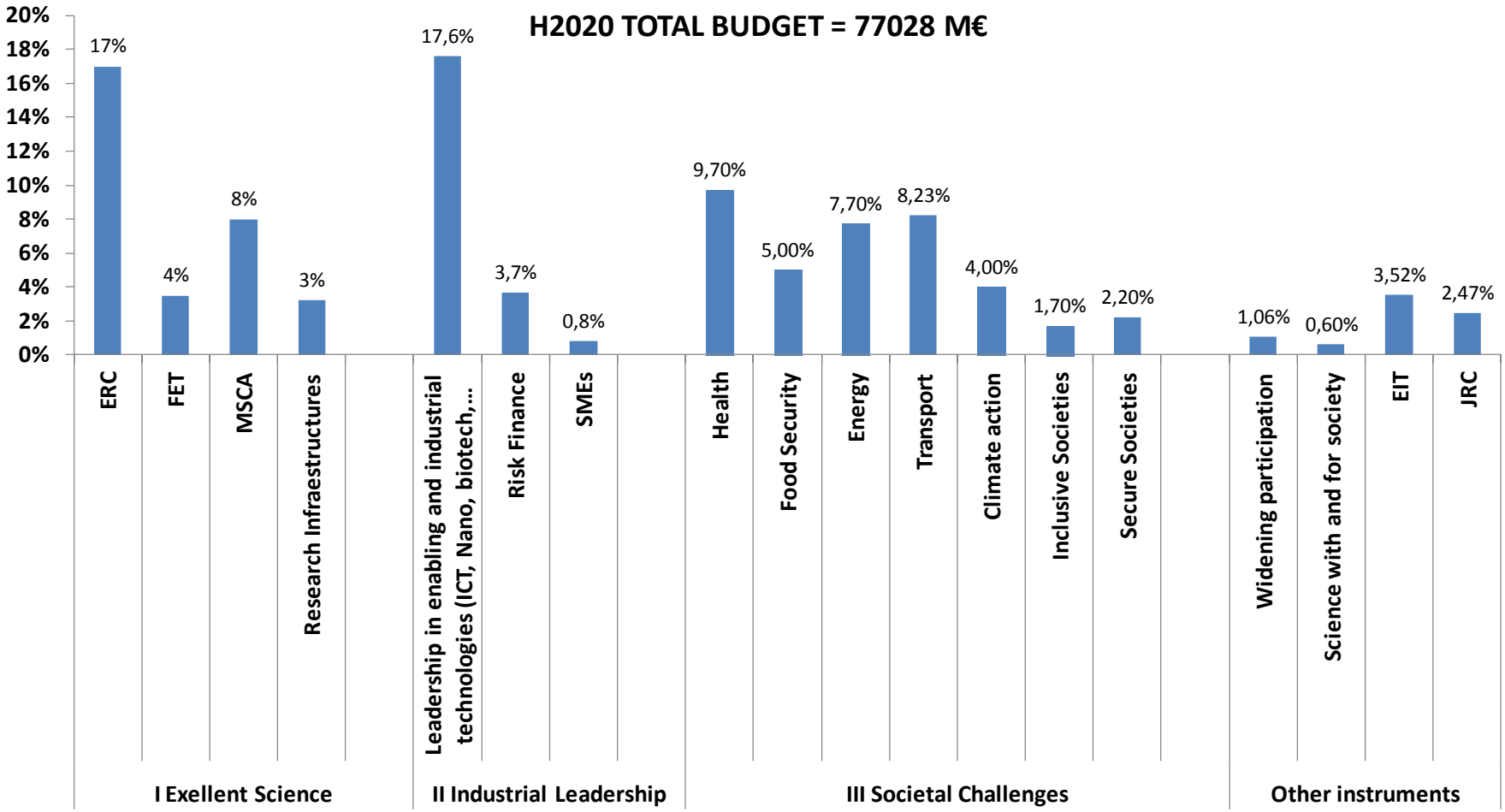
- Frontier research (ERC)
- Future and Emerging Technologies (FET)
- Skills and career development (Marie Curie)
- Research infrastructures

Simplified access

Dissemination and knowledge transfer

Common rules, toolkit of funding schemes

HORIZONTE 2020 | Orçamento



HORIZONTE 2020 | Abordagem baseada em desafios

Programas de Trabalho mais estratégicos

- → Concentração em áreas onde a ação a nível europeu tem maior impacto
- → Com um conjunto coerente de ações de investigação para a inovação
- → Maior integração entre as diferentes partes do Horizonte 2020, em particular entre os desafios societais e as tecnologias facilitadoras essenciais

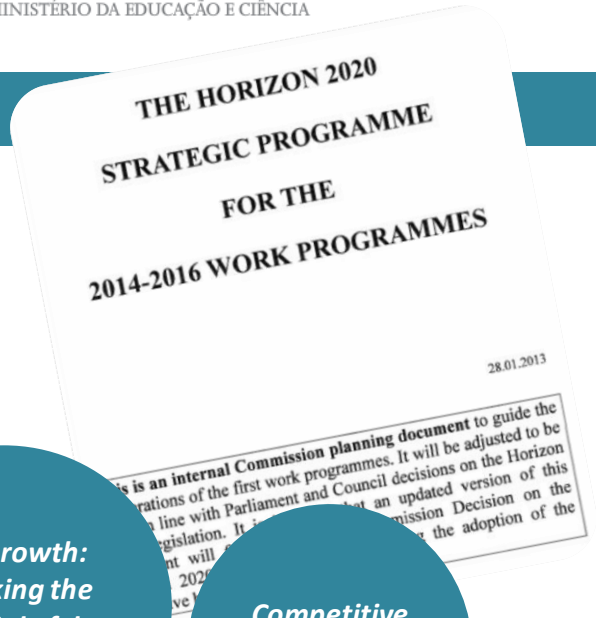
Concursos menos focalizados

- → É dada maior liberdade aos candidatos para proporem soluções inovadoras
- → Maior ênfase no impacto
- → Estímulo aos projetos multi-disciplinares, incluindo as ciências sociais e humanas
- → Menos tópicos mas definidos de uma forma mais ampla, com possibilidade de financiamento de vários projetos
- → Relevante para uma vasta gama de diferentes tipos de participantes e facilmente acessíveis para os utilizadores

Programas bi-anuais

- → Maior envolvimento na definição dos programas de trabalho
- → Informação antecipada para os participantes

HORIZONTE 2020 | Programação estratégica – 12 *Focus areas*


THE HORIZON 2020
STRATEGIC PROGRAMME
FOR THE
2014-2016 WORK PROGRAMMES

28.01.2013

is an internal Commission planning document to guide the rations of the first work programmes. It will be adjusted to be line with Parliament and Council decisions on the Horizon egislation. It an updated version of this mission Decision on the the adoption of the

As **áreas de enfoque** são as áreas base que **orientam a definição dos programas de trabalho de cada tema entre 2014 e 2016**, nos diversos desafios societais e nas áreas temáticas do pilar Liderança Industrial.

- *Waste: a resource to recycle, reuse and recover raw materials*
- *Personalising health and care*
- *Blue growth: unlocking the potential of the oceans*
- *Competitive low-carbon energy*
- *Water innovation: boosting its value for Europe*
- *Energy efficiency*
- *Overcoming the crisis: new ideas, strategies and governance structures for Europe*
- *Disaster-resilience: safeguarding and securing society, including adapting to climate change*
- *Digital security*
- *Smart cities and communities*
- *Sustainable food security*
- *Mobility for growth*

http://www.earpa.eu/ENGINE/FILES/EARPA/WEBSITE/UPLOAD/FILE/news/Strategic%20Programme%20Horizon%202020%20(2014-2016).pdf

HORIZONTE 2020 | Preparação dos programas de trabalho (*WP*)

Plataformas Tecnológicas Europeias (*ETPs*)

- *Water supply and sanitation technology - WssTP*
- *Food for Life – Food4Life*
- *Plants for the Future*
- *Sustainable Chemistry - SusChem*
- *Forest-based*
- *Biofuels*
- *Global Animal Health - ETPGAH*

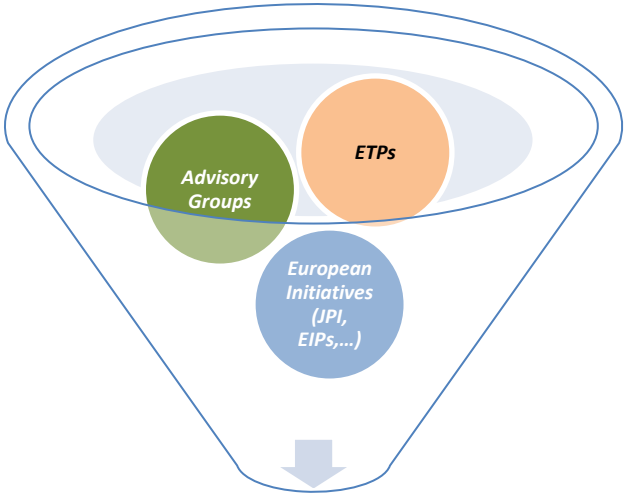
Origem dos tópicos de I&I?

Advisory Groups e outros Grupos Consultivos

- Representação PT no Desafio Societal 2 (P-BIO)
- Representação PT no Desafio Societal 5 (Ana Neves)
- Representação PT no Painel Europeu de Bioeconomia (Cristina S.L. Silva)

Iniciativas Europeias

- *Joint Programming Initiatives (JPIs)*
  FACCE, Water, Climate, Oceans, Urban,…
- *European Innovation Partnerships (EIPs)*
  EIP Water, EIP-AGRI, EIP Raw Materials,…
- *Joint Technology Initiatives (JTI) – BBI*
- *SCAR*



Draft Work Programmes

DGs Políticas (AGRI, SANCO, ENERG, MARE, ENV, ENTR,…)

Apoio a estratégias e políticas da UE

Continuidade/complementaridade com estudos/projetos anteriores

Identificação de lacunas ou necessidades de investigação; *inputs* de *stakeholders*

Acordos de cooperação bilateral/internacional

HORIZONTE 2020 & Parcerias
European Innovation Partnerhips (EIPs)

EIPs

- **Não são instrumentos de financiamento**, mas servem p/ fazer a coordenação c/ políticas e programas
- **Reunem todos os atores relevantes ao longo da cadeia de I&I** com o objetivo de racionalizar, simplificar e melhor coordenar todos os instrumentos e iniciativas

- ✓ *Active and Healthy Ageing (Pilot)*
- ✓ ***Agricultural Productivity and Sustainability***
- ✓ *Raw Materials*
- ✓ *Water*
- ✓ *Smart Cities and Communities*

} Grande influência nos Programas de Trabalho do H2020

http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=eip

HORIZONTE 2020 | Regras de participação

Orçamento: pagamento por tipo de atividade e não por tipo de entidade participante

- ***Research and Innovation Actions (RIA)***: ...*may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment…*
  - 100% dos custos diretos + 25% de custos indiretos em projetos de investigação
- ***Innovation Actions* (IA)**: ...*may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication…*
  - 70% dos custos diretos + 25% de custos indiretos em projetos de demonstração próximos do mercado, mas instituições sem fins lucrativos receberão sempre 100%;
- **Pela 1ª vez, o IVA (não recuperável) será um custo elegível**
- Possibilidade de as entidades públicas e privadas sem fins lucrativos atribuírem aos investigadores um complemento salarial até 8000 €/ano (mas não apenas no H2020… tem de ser regra geral para todos os projetos)

HORIZONTE 2020 | Como participar

Participant *Portal*”–> nova imagem e novas funcionalidades

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

Participant Portal -> online manual

European Commission

RESEARCH & INNOVATION

Participant Portal H2020 Online Manual

- H2020 Online Manual
  - Your user account & roles
    - Login with ECAS
    - Roles & access rights
  - Grants
    - Applying for funding
      - Find a call
        - Horizon 2020 structure and budget
        - What you need to know about Horizon 2020 calls
      - Find partners or apply as individual
      - Register an organisation
        - Registration of organisation
        - LEAR appointment
        - Validation of organisation
        - Financial viability self-check
        - Data update
      - Submit a proposal
    - From evaluation to grant signature
      - Evaluation of proposals
      - Grant preparation
      - Grant signature
    - Grant management

Your user account & roles

Grants

Applying for funding

Find a call | Find partners | Register an organisation | Submit a proposal

Evaluation & Grant signature

Evaluation of proposals | Grant preparation | Grant signature

Grant management

Reports | Dissemination of results | Amendments | Audits & certifications

Working as an expert

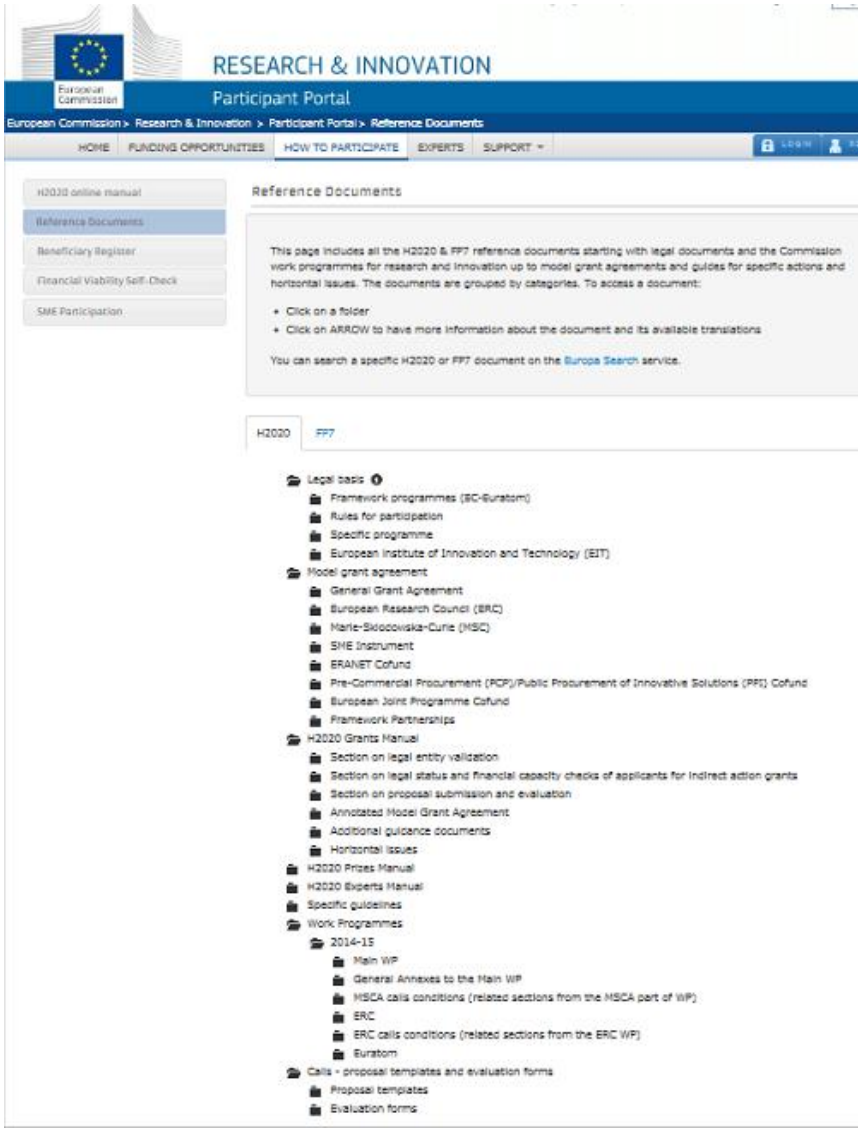
Expert registration | Contracting & payment | Expert roles & tasks

Cross-cutting issues

International cooperation | Regional aspects | Ethics

Intellectual property | Gender | SMEs

Participant Portal -> documentos de referência



- Legal basis
  - Framework programmes (EC-Euratom)
  - Rules for participation
  - Specific programme
  - European institute of Innovation and Technology (EIT)
- Model grant agreement
  - General Grant Agreement
  - European Research Council (ERC)
  - Marie-Sklodowska-Curie (MSC)
  - SME Instrument
  - ERANET Cofund
  - Pre-Commercial Procurement (PCP)/Public Procurement of Innovative Solutions (PPI) Cofund
  - European Joint Programme Cofund
  - Framework Partnerships
- H2020 Grants Manual
  - Section on legal entity validation
  - Section on legal status and financial capacity checks of applicants for indirect action grants
  - Section on proposal submission and evaluation
  - Annotated Model Grant Agreement
  - Additional guidance documents
  - Horizontal issues
- H2020 Prizes Manual
- H2020 Experts Manual
- Specific guidelines
- Work Programmes
  - 2014-15
    - Main WP
    - General Annexes to the Main WP
    - MSCA calls conditions (related sections from the MSCA part of WP)
    - ERC
    - ERC calls conditions (related sections from the ERC WP)
    - Euratom
- Calls - proposal templates and evaluation forms
  - Proposal templates
  - Evaluation forms

http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html#h2020-work-programmes-2014-15-main-wp

Participant Portal –> onde procurar oportunidades de financiamento

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European Commission

RESEARCH & INNOVATION

Participant Portal

European Commission > Research & Innovation > Participant Portal > Funding Opportunities

HOME | FUNDING OPPORTUNITIES | O PARTICIPATE | EXPERTS | SUPPORT | LOGIN | REGISTER

Horizon 2020
- Calls
- Search Topics
- Call Updates

FP7 & CIP Programmes
- Calls
- Call Updates

- COSME
- Other Funding Opportunities

Funding Opportunities

H2020 ONLINE MANUAL

Find the European Union funding opportunities and search for new or closed calls, grouped by the following programmes:

- **Horizon 2020 - EU research funding from 2014**
- **Seventh Framework Programme (FP7)**
- **Competitiveness and Innovation Framework Programme (CIP)**
- **other research and innovation programmes**

Horizon 2020

Horizon 2020 is the new EU funding programme for research and innovation running from 2014 to 2020 with a €70 billion budget. The first calls for proposals for Horizon 2020 are envisaged for **December 2013**. Its simplified rules and submission and grant management tools should facilitate participants' tasks. For practical guidance, see the H2020 online manual.

FP7 and CIP - previous programmes

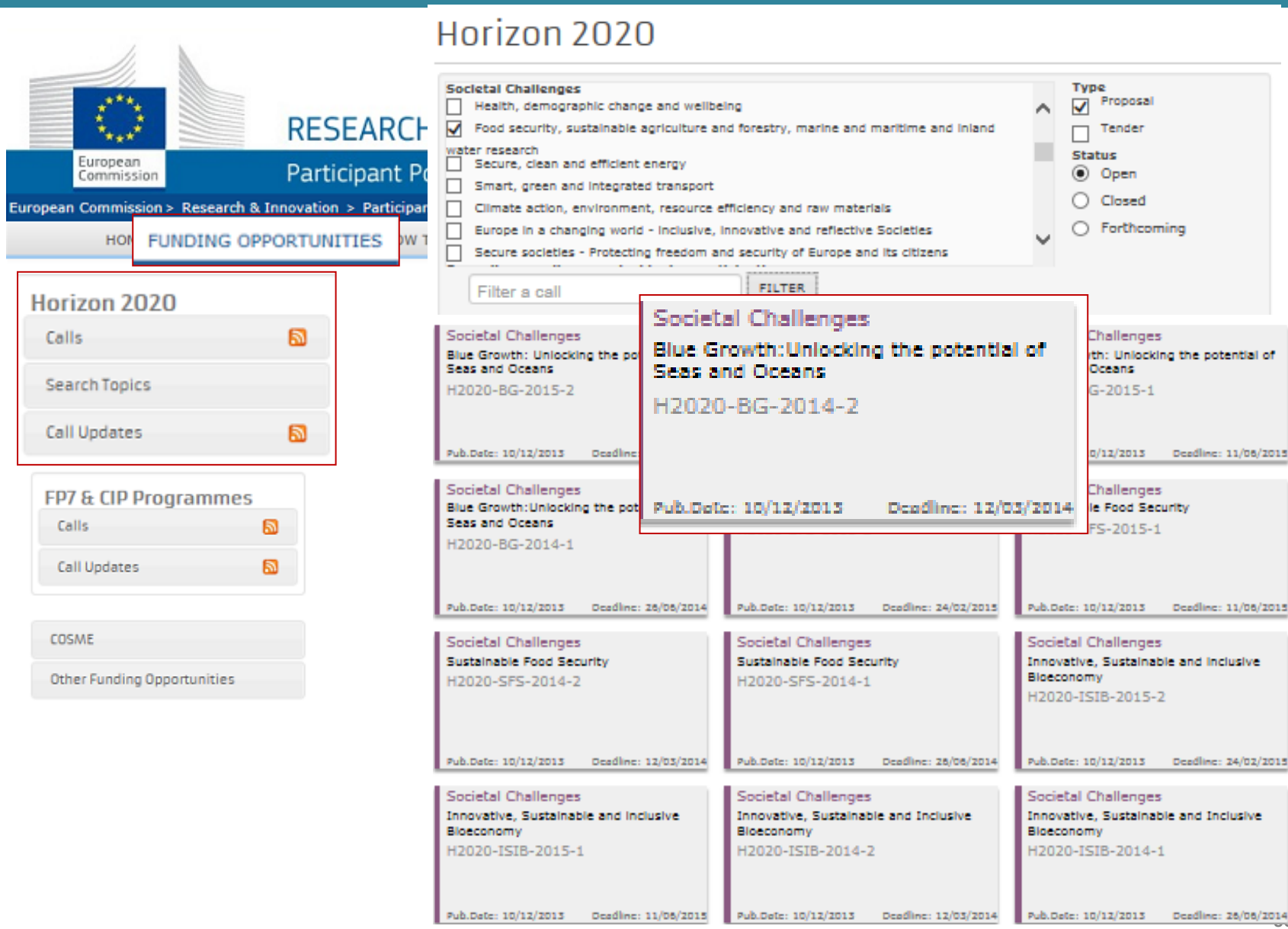
FP7 and CIP are previous instruments to fund research and innovation activities in Europe for the period 2007 to 2013. You can view closed calls information of these programmes.

COSME

Programme for the Competitiveness of Enterprises and SMEs (COSME) will run from 2014 to 2020, with a planned budget of €2.3bn. It will facilitate SME access to finance, create supportive environment for business creation, help small businesses operate outside their home countries and improve their access to markets.

Other Funding Opportunities

Participant Portal –> calls 'Food security, sustainable agriculture an forestry, marine research'



Participant Portal –> call 'H2020-BG-2014-2' -> identificação dos tópicos

RESEARCH & INNOVATION

European Commission

Participant Portal

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Horizon 2020
- Calls
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FP7 & CIP Programmes
- Calls
- Call Updates

COSME

Other Funding Opportunities

BLUE GROWTH:UNLOCKING THE POTENTIAL OF SEAS AND OCEANS

H2020-BG-2014-2 — Sub call of: H2020-BG-2014-2015

Publication date	2013-12-11	**Deadline Date**	2014-03-12 +17:00:00 (Brussels local time)
		Stage 2	2014-06-26 +17:00:00 (Brussels local time)
Budget	€82,000,000	**Main Pillar**	Societal Challenges
Status	Open	**OJ reference**	OJ C361 of 11 December 2013

Call description | Call documents | Get support | Subscribe to Notifications

Call updates

- 2013-12-20 16:50:15

The submission session is now available for: BG-03-2014(RIA), BG-04-2014(IA), BG-06-2014(RIA), BG-08-2014(RIA), BG-09-2014(RIA), BG-10-2014(RIA)

Topics and submission service

- **BG-04-2014: Enhancing the industrial exploitation potential of marine-derived enzymes**
  - BG-09-2014: Acoustic and imaging technologies
  - BG-10-2014: Consolidating the economic sustainability and competitiveness of European fisheries and aquaculture sectors to reap the potential of seafood markets
  - BG-03-2014: Novel marine derived biomolecules and industrial biomaterials
  - BG-08-2014: Developing in-situ Atlantic Ocean Observations for a better management and sustainable exploitation of the maritime resources

Participant Portal –> call 'H2020-BG-2014-2' -> descrição do tópico

RESEARCH & INNOVATIO

European Commission

Participant Portal

European Commission > Research & Innovation > Participant Portal > Opportunit

HOME | FUNDING OPPORTUNITIES | HOW TO PARTICIPATE

Horizon 2020
- Calls
- Search Topics
- Call Updates

FP7 & CIP Programmes
- Calls
- Call Updates

BLUE GROWTH:UNLOCKING

H2020-BG-2014-2

Publication date	2013-12-11
Budget	€82,000,000
Status	Open

Call description | Call documents

Topic: Enhancing the industrial exploitation potential of marine-derived enzymes BG-04-2014

Topic Description | Topic Conditions & Documents | Submission Service

Specific challenge: If we consider the vast reservoir of enzymes identified through the latest large-scale marine genomics and metagenomic sequencing projects, the potential to unveil novel interesting enzymes from marine sources remains very high. However, this potential does not automatically guarantee novel commercial products. The challenge at hand is posed by both current limitations in screening and expression technologies as well as by issues of property rights and intellectual property. Both are still limiting factors that require further attention.

Scope: Proposals should address the development and demonstration of innovative technologies for high throughput enzyme screening and/or for the expression of marine enzymes and proteins through dedicated hosts and should focus on respective key research challenges including purification systems and upscaling of the marine enzymes. Screening should take into account industrial technical specifications of the enzymes of interest. Win-win academic and industry cooperation and/or agreements on issues related to property rights and intellectual property should be considered in order to maximise the exploitation potential.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 6 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact:

- Enhance the competitiveness and sustainability of European industry sectors such as consumer products, pharmaceutical, cosmetic, and fine chemicals, through increase efficiency in the enzyme identification-to-market success rate;
- Bring broad societal benefits by facilitating the development of novel, improved or more economic and eco-friendly end-products and processes;
- Contribute to realising the objectives of European policy initiatives, such as the EU Blue Growth Strategy and EU Strategy for Key Enabling Technologies.

Type of action: Innovation actions

Participant Portal –> call 'H2020-BG-2014-2' -> documentos

Topic Descrip | **Topic Conditions & Documents** | ssion Service

Further reference documents for preparing your proposal

Please read carefully all provisions below before the preparation of your application.

1. **List of countries and applicable rules for funding:** described in part A of the General Annexes of the General Work Programme.

2. **Eligibility and admissibility conditions:** described in part B and C of the General Annexes of the General Work Programme.

3. **Evaluation**

   3.1 Evaluation criteria and procedure, scoring and threshold: described in part H of the General Annexes of the General Work Programme.

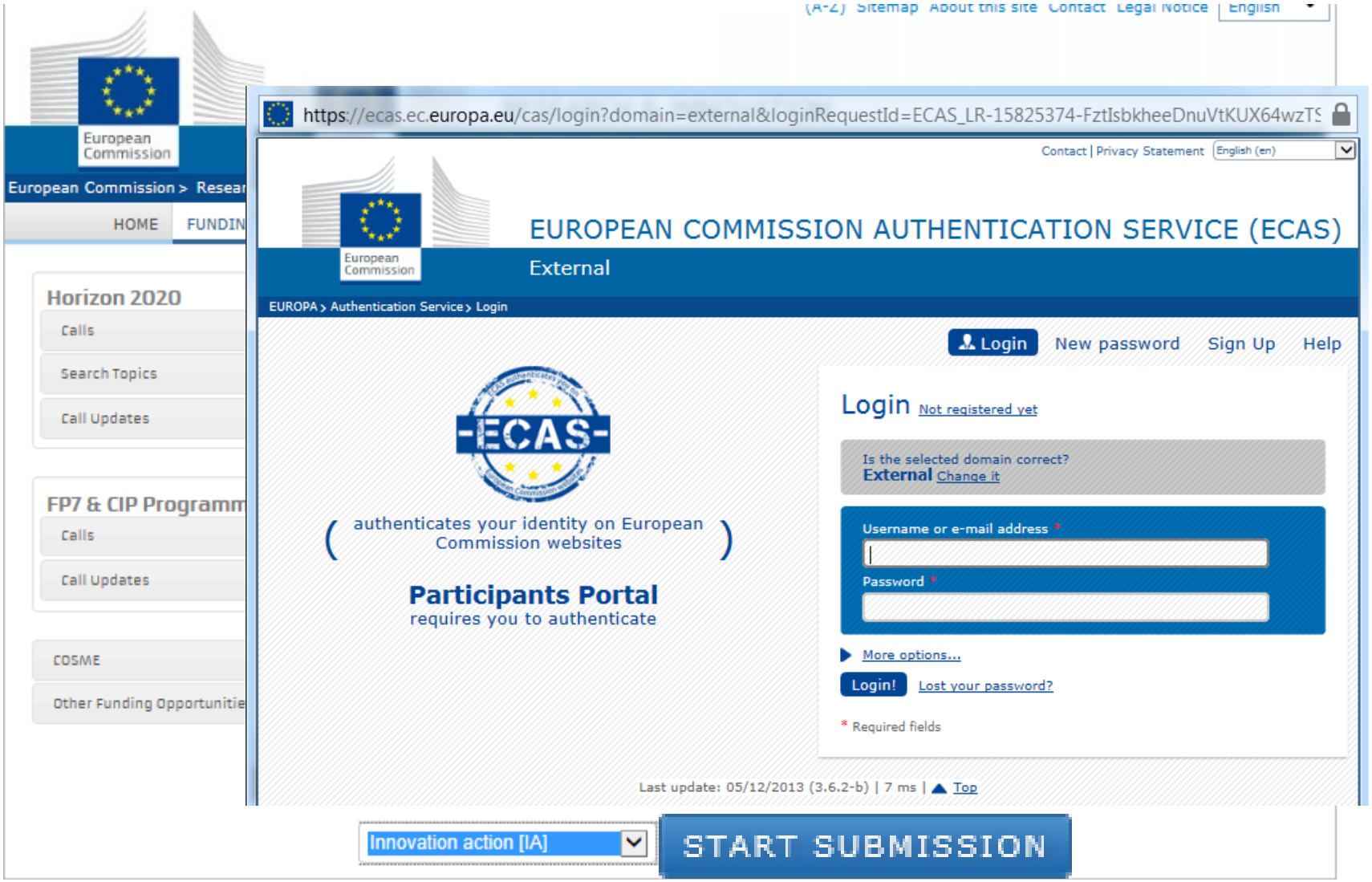
   3.2 Guide to the submission and evaluation process

4. **Proposal page limits and layout:** Please refer to Part B of the standard proposal template.

5. **Indicative timetable for evaluation and grant agreement:**
   Information on the outcome of **one-stage** evaluation: maximum 5 months from the final date for submission.
   Signature of grant agreements: maximum 3 months from the date of informing successful applicants.

   Information on the outcome of **two-stage** evaluation: maximum 5 months from the final date for submission.
   Signature of grant agreements: maximum 3 months from the date of informing successful applicants.

Participant Portal –> call 'H2020-BG-2014-2' -> preparação da proposta



Preparação da proposta –> *'templates'*

Example of administrative forms and template for the technical annex for proposals for

Research and Innovation Actions (RIA)

Innovation Actions (IA)

Version 1.0
11 December 2013

Disclaimer
This document is aimed at informing potential applicants for Horizon 2020 funding. It serves only as an example. The actual Web forms and templates, provided in the online proposal submission system under the Participant Portal, might differ from this example. Proposals must be prepared and submitted via the online proposal submission system under the Participant Portal.

Research and Innovation

European Commission - Research - Participants
Proposal Submission Forms
Directorate-General for Research and Innovation

Proposal template (technical annex)

Research and Innovation actions
Innovation actions

Horizon 2020
Call:
Topic:
Type of action:
Proposal number:
Proposal acronym:

Table of contents

Section	Title	Action
1	General information	
2	Participants & contacts	
3	Budget	
4	Ethics	
5	Call-specific questions	

How to fill in the forms
The administrative forms must be filled in for each proposal using the templates available in the submission system. Some data fields in the administrative forms are pre-filled based on the previous steps in the submission wizard.

Example, not to complete

European Commission - Research - Participants
Proposal Submission Forms
Directorate-General for Research and Innovation

Proposal ID *Acronym*

3 - Budget for the proposal

Participant	Country	(A) Direct personnel costs/€	(B) Other direct costs/€	(C) Direct costs of sub-contracting /€	(D) Direct costs of providing financial support to third parties/€	(E) Costs of inkind contributions not used on the beneficiary's premises/€	(F) Indirect Costs/€ (=0.25(A+B+E))	(G) Special unit costs covering direct & indirect costs	(H) Total, eligible costs/€ (=A+B+C+D+E+F+G)	(I) Reimbursement rate	(J) Max. grant /€ (=H*I)	(K) Requested grant /€
		0	0	0	0	0	0	0	0	100	0	0
Total		0	0	0	0	0	0	0	0		0	0

not to complete

CRITÉRIOS de AVALIAÇÃO: *Research and innovation actions, Innovation actions, SME instrument*

1. Excellence *Note: The following aspects will be taken into account, to the extent that the proposed work corresponds to the topic description in the work programme:* • **Clarity and pertinence of the objectives;** • Credibility of the proposed approach; • **Soundness of the concept, including trans-disciplinary considerations, where relevant;** • **Extent that proposed work is ambitious, has innovation potential, and is beyond the state of the art (e.g. ground-breaking objectives, novel concepts and approaches).** Comments:	**Score 1:** *Threshold 3/5*
2. Impact *Note: The following aspects will be taken into account, to the extent to which the outputs of the project should contribute at the European and/or International level:* • **The expected impacts listed in the work programme under the relevant topic;** • Enhancing innovation capacity and integration of new knowledge; • Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets, and where relevant, by delivering such innovations to the markets; • Any other environmental and socially important impacts; • Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant. Comments:	**Score 2:** *Threshold 3/5*
3. Quality and efficiency of the implementation * *Note: The following aspects will be taken into account:* • Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources; • Complementarity of the participants within the consortium (when relevant); • Appropriateness of the management structures and procedures, including risk and innovation management. Comments:	**Score 3:** *Threshold 3/5*
	Total score (1+2+3) *Threshold 10/15*

GPPQ ->> Apoio à comunidade nacional

Publicação | Deadline | Resultado | Contrato

1º contacto
O que é o Programa Quadro? Como funciona?

Verificação da ideia
A minha ideia integra-se numa *call*? Onde?

Preparação da proposta
Construção do consórcio, escrita da proposta, procura de parceiros, revisão da proposta

Avaliação da proposta
por peritos independentes

Negociação do contrato
Procedimentos administrativos e legais

Gestão do projecto
Relatórios, alterações ao contrato,etc

Relatórios, Exploração dos resultados
Auditorias da CE, etc

GPPQ ->> Ações de Disseminação e Suporte - Eventos nacionais-

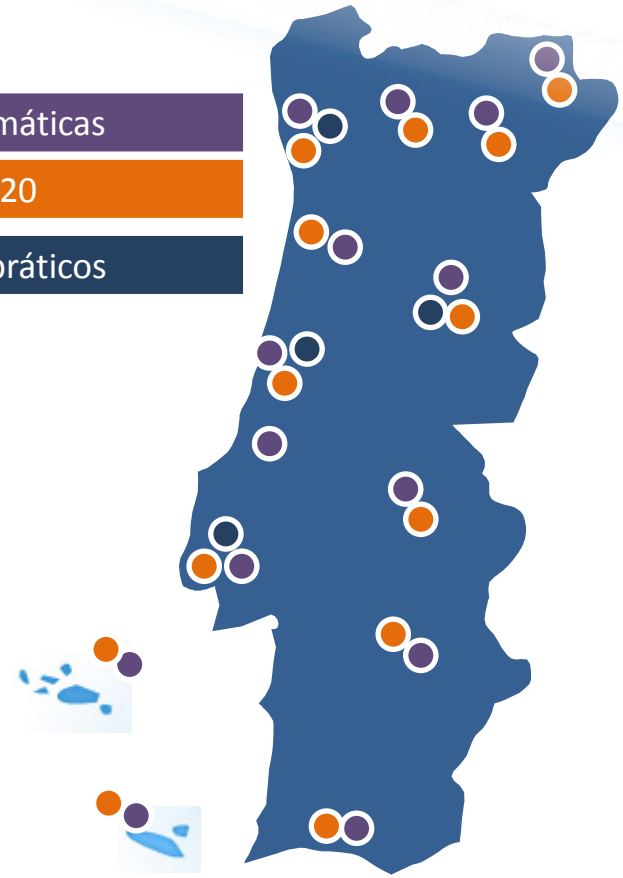
Eventos organizados regularmente e em colaboração com as estruturas locais de apoio à investigação

- **suporte direto** aos investigadores, empresários, associações, ONGs, …
- **apoio continuo às universidades e institutos de investigação :**
  - → analisando áreas de suporte no H2020
  - → apoiando o *networking* e o posicionamento estratégico das instituições
  - → formação às unidades locais de apoio à investigação
- **colaboração com os Polos&Clusters de Competitividades e com a *EEN*** para potenciar a relação indústria-academia
- **Disseminação em conferências temáticas**

Reuniões temáticas

Eventos H2020

Workshops práticos



http://www.gppq.fct.pt/h2020/eventos.php

GPPQ - FCT
Gabinete de Promoção do PQ

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www.gppq.fct.pt