

## Gabinete de Promoção dos Programa Quadro ID&I

## **European Research Council (ERC): Challenges and Opportunities**

Instituto Politécnico de Bragança

Bragança 16 Setembro 2015

## **European Research Council**



## ERC - Since 2007... A success story!

- √ Highly recognized by the research community
- **✓** Over 5000 top researchers funded (celebration on 16 Jun)
- **✓** Growing number of articles in scientific journals and prizes
- √ Highly competitive (success rate ~10%)
- **✓ Efficient and fast grant management**



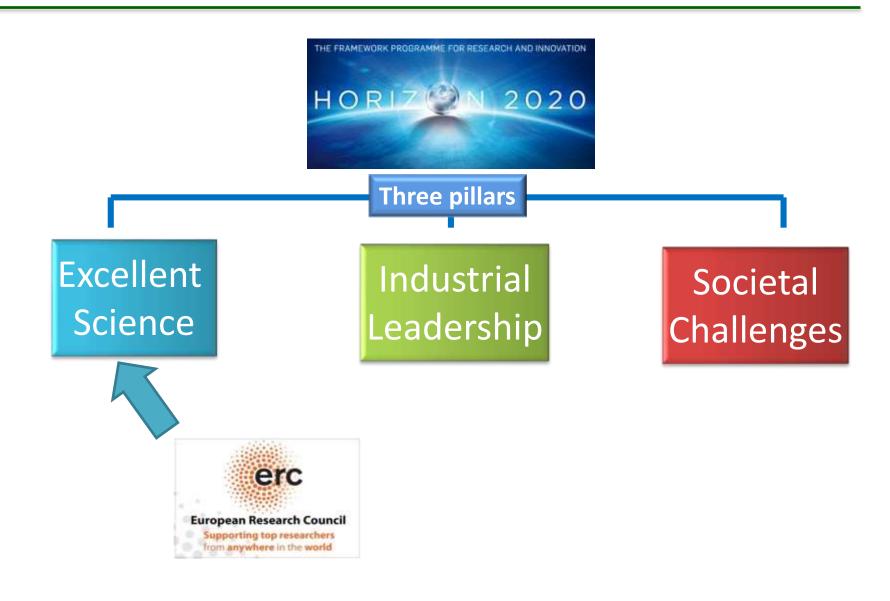
**✓ Eleven Nobel Prize Laureates** 







#### **HORIZON 2020**



### **ERC** - Grant schemes

#### **Starting Grants**

(2-7 years after PhD) up to € 2.0 Mio for 5 years

#### **Consolidator Grants**

(7-12 years after PhD) up to € 2.75 Mio for 5 years

#### **Advanced Grants**

track-record of significant research achievements in the last 10 years up to € 3.5 Mio for 5 years

## **General aspects**

The PI may be of any age and nationality and may reside in any country in the world at the time of the application

Research must be conducted in a public or private research organization (Host Institution/HI) located in one of the EU Member States or Associate Countries

**Portability**: It is expected that the PI establishes and concludes the funded research project in association with the original host. However, the ERC grants allow PIs to transfer their projects from one host to another in the course of the project.

Research teams are headed by **a single Principal Investigator (PI)** + additional team members (6 members average) - it is <u>neither a network</u>, <u>nor a 'research consortium'</u>

### What kind of research can be funded?

<u>Any field of research</u> with particular emphasis on the frontiers of science, scholarship and engineering

#### **ERC** encourages:

- Proposals of an <u>interdisciplinary nature</u> which cross the boundaries between different fields of research
- Pioneering proposals addressing <u>new and emerging fields of</u> <u>research</u>
- Proposals introducing <u>unconventional, innovative approaches and</u> <u>scientific inventions</u>

### What kind of research can be funded?

Any field of research with particular emphasis on the frontiers of science, scholarship and engineering

#### Research with a high-gain/high-risk pioneering projects

If successful, the payoffs will be very significant, but there is a higher-thannormal risk that the research project does not entirely fulfil its aims

Evaluators will pay particular attention to the **ground-breaking** nature of the research project and the **feasibility** of the outlined scientific approach

## **Starting and Consolidator Grants**

Starting Grant	Consolidator Grant	
The PI must have been awarded his/her first PhD at least 2 and up to 7 years prior to the publication date of the call for proposals	The PI must have been awarded his/her first PhD at least 7 and up to 12 years prior to the publication date of the call for proposals	
Extensions to this period may be allowed in case of eligible career breaks		

Up to € 1.5 million	up to <b>€ 2 million</b>
(in some circumstances up to € 2 million)	(in some circumstances up to € 2.75 million)
(100% direct costs + 25% indirect costs)	(100% direct costs + 25% indirect costs)

Duration: up to 5 years

PIs expected to spend a minimum **50%** of their total working time on the ERC project and a minimum of **50%** of their total working time in an EU Member State or Associated Country

- Maternity (18 months for each child born <u>before or after</u> the PhD award); NO LIMITS!!!!
- Paternity (documented amount of paternity leave actually taken for each child born <u>before or after</u> the PhD award);
- **Long-term illness, clinical training or national service** (the effective elapsed time since the award of the first PhD documented of leave actually taken by the PI for each incident which occurred <u>after</u> the PhD)

## What makes a competitive candidate?

#### **Competitive Starting Grant**

#### Must have already shown the potential for Must have already shown research research independence and evidence of maturity. e.g.: at least one important publication without the participation of their PhD supervisor

#### **Competitive Consolidator Grant**

Independence and evidence of research maturity.

e.g.: **several** important publications without the participation of their PhD supervisor

Promising track-record of early achievements appropriate to their research field and career stage.

e.g.: significant publications (main author) in major international peer-reviewed multidisciplinary scientific journals, or in the leading international peer-reviewed journals of their respective field; invited presentations in well-established international conferences, granted patents, awards, prizes etc.

"Applicants are encouraged to evaluate their track-record and leadership potential against the above-mentioned benchmarks that have been adopted by the Scientific Council, in order to decide for themselves their likelihood for success, thus avoiding to invest effort in proposals that are very unlikely to succeed."

Application Form		
Part A To be filled out online	Administrative information about the project and the Principal Investigator	
Part B – Section 1 PDF to be uploaded To be evaluated in step 1	Extended Synopsis 5 pages	Concise presentation of the scientific proposal, with particular attention to the ground-breaking nature of the research project and the feasibility of the outlined scientific approach.
	Curriculum Vitae 2 pages	Standard academic and research record and succinct 'funding ID'
	Early achievements track-record 2 pages	publications; invited presentations in well- established international conferences, granted patents, awards, prizes etc
Part B - Section 2 PDF to be uploaded To be evaluated in step 2	Scientific Proposal 15 pages	<ul><li>a. State of the art and objectives</li><li>b. Methodology</li><li>c. Resources (incl. project costs)</li><li>d. Ethical and Security sensitivity Issues</li></ul>

#### **Advanced Grants**

#### **Advanced Grant**

Applicants must be **scientifically independent** and have a recent research track-record and profile which identifies them as **leaders in their respective field(s) of research** 

up to € 2.5 million per grant
(in some circumstances up to € 3.5 million per grant)
(100% direct costs + 25% indirect costs)

Duration: up to 5 years

PIs expected to spend a minimum **30%** of their total working time on the ERC project and a minimum of **50%** of their total working time in an EU Member State or Associated Country

#### **Application Form**

#### Similar to Starting and Consolidator, except:

## Part B – Section 1 10-year track-record 2 pages

Activity over the past 10 years (dated from the deadline of the call):

- 1. Highlight ten representative publications, as senior author
- 2.3 major research monographs, chapters in collective volumes and any translations thereof
- 3.5 granted patents (if applicable)
- 4.10 invited presentations to peer-reviewed, internationally established conferences and/or international advanced schools (if applicable)
- 5.3 research expeditions that the applicant has led (if applicable)
- 6.3 organisation of International conferences in the field of the applicant (membership in the steering and/or programme committee) (if applicable)
- 7.International Prizes/Awards/Academy memberships (if applicable)
- 8. Major contributions to early careers of excellent researchers (if applicable)
- 9. Examples of leadership in industrial innovation (if applicable)

#### **Evaluation**

#### **Excellence** is the sole criterion for selection

#### **Evaluation Panels**

**25 peer review evaluation panels** (ERC panels), subdivided in to three main research domains:

**Under revision** 

- ✓ Physical Sciences and Engineering (10 Panels)
- ✓ Life Sciences (9 Panels)
- ✓ Social Sciences and Humanities (6 Panels)

Panel chair and members chosen by the Scientific Council

## **Ações Marie Slodowska-Curie**

Oportunidades de financiamento no Horizonte 2020 16 Setembro 2015 Instituto Politécnico de Bragança









## Marie Skłodowska-Curie actions for every step of your career

Considering a doctoral degree?

Experienced researcher looking for international experience to boost your career?

Looking for partnerships between academic and non-academic organisations or staff exchanges?

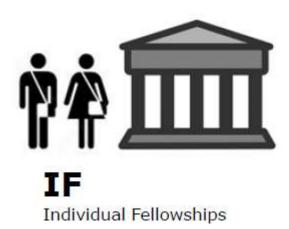
Keen on outreach activities?

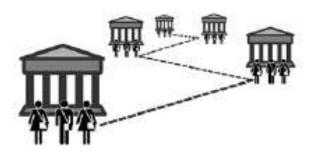


### There is a Marie Skłodowska-Curie action for you!

#### **Post-doctoral Fellowships**

#### **Staff Exchange (managerial, technical)**





RISE
Research and Innovation
Staff Exchange

#### **Doctoral degrees**







**COFUND**Also for post-doctoral progammes

#### Marie Skłodowska-Curie actions

**Support** the research career

Mobility, cross-border and cross-sector

- Opportunities to work and train with the best researchers in Europe and worldwide
- Exchanges between academia/industry (staff exchange)

**Charter & Code** - European Charter for Researchers & Code of Conduct for the Recruitment of Researchers

## **Horizon 2020**

European Union programme for research and innovation 2014-2020



- responding to the economic crisis to invest in jobs and growth
- addressing people's concerns about their livelihoods, safety and environment
- strengthening the EU's global position in research, innovation and technology

#### Marie Skłodowska-Curie actions

Aim: develop new knowledge / enhance skills of people behind research and innovation

Operate in a 'bottom-up' basis, covering all scientific domains

Level of involvement is proportional to the participant's needs

Strong accent on participation of industry, SMEs and non-academia overall

## What can be funded?

1) Organisational costs

Research, networking and training costs

Management and indirect costs

2) Costs of researchers and seconded staff

Living allowance or Top-up allowance

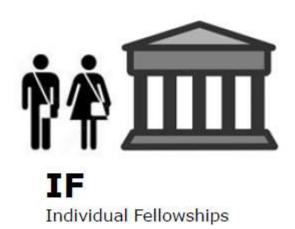
Mobility allowance

Family allowance

- √ 100% in ITN, IF and RISE
- √ 50% in Co-funding for doctoral and fellowship programmes

## Who applies?

#### **Individual with organisation**

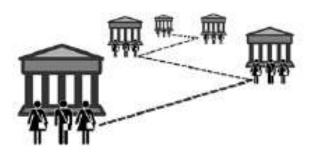


### **Hosts (consortium)**



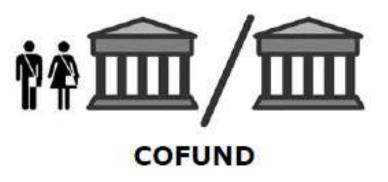
ITN
Innovative Training Networks

#### **Hosts (consortium)**



## RISE Research and Innovation Staff Exchange

#### **Funder**

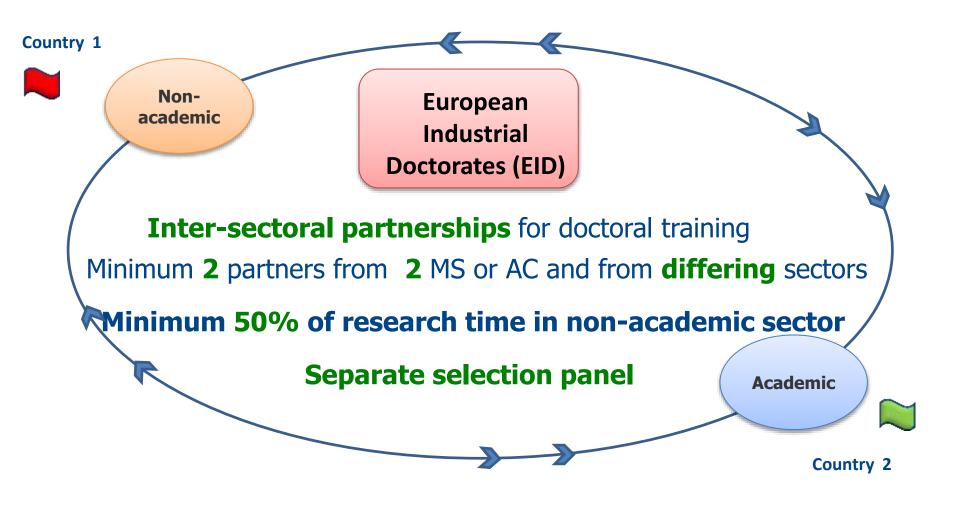


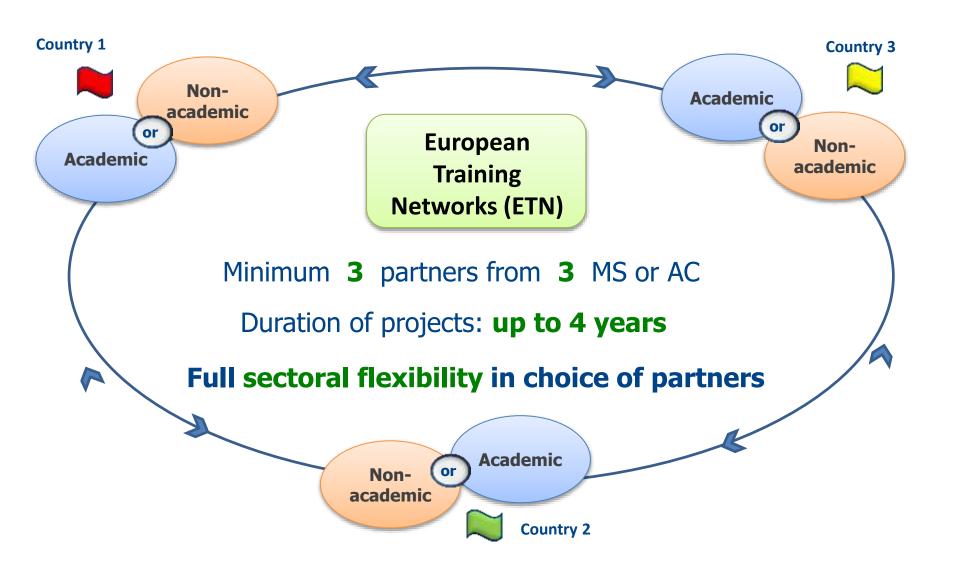
- ✓ Raise excellence and structure research and doctoral training
- ✓ Train a new generation of creative, entrepreneurial and innovative early-stage researchers
- ✓ Trigger cooperation and exchange of best practice among participants
- Enhance researchers' employability and provide them with new career perspectives
- ✓ Triple 'i' dimension of mobility and particular focus on innovation skills
- ✓ **Budget: € 370 Million** in 2015 (EID: 25 Mio, EJD 28 Mio)

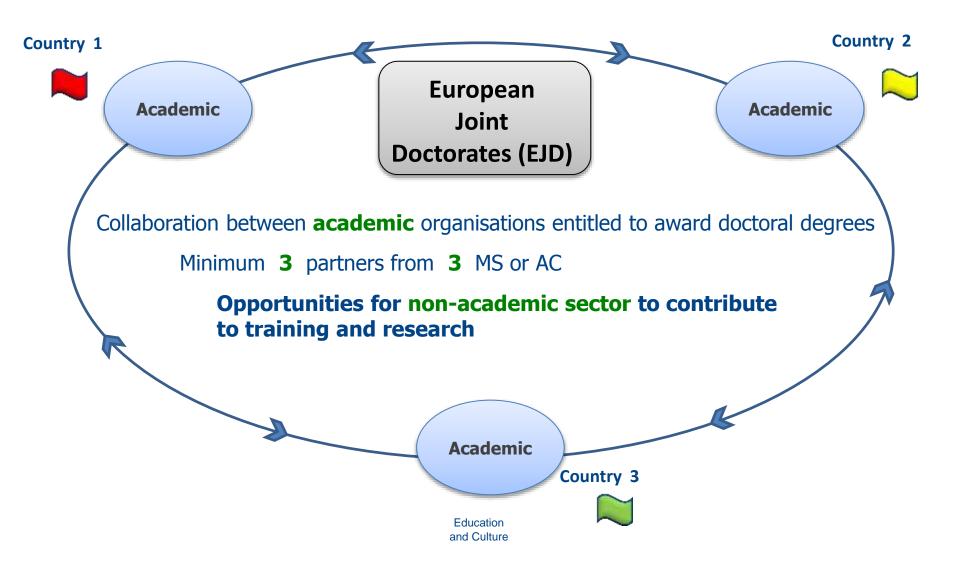
European
Industrial
Doctorates (EID)

European
Training
Networks (ETN)

Joint Doctorates (EJD)







### **ITN** – Financial Dimension



Unit costs expressed in person-months

ITN
Innovative Training Networks

Research, networking,	1800 € 1200 €	Living allowance*	3110§ €
training costs		<b>Mobility allowance</b>	600§ €
Management and indirect costs		Family allowance	500§ €

- The living allowance base rate is multiplied by Country Correction Coefficient
- § Amount quoted is gross amount before deductions

## **Individual Fellowships (IF)**

- enhance the creative and innovative potential of experienced researchers
- provide opportunities to acquire new knowledge, work on research projects in a European context or outside Europe
- ✓ catalyse significant development in their careers in both sectors
- ✓ strengthen the network of the researcher and the host organisation.
- ✓ Budget: € 215 Million in 2015 (Global Fellowships: 27 Mio)



## IF - Financial Dimension



Individual Fellowships

Unit costs expressed in person-months

Research, networking, training costs	800€	Living allowance*	4650§ €
		<b>Mobility allowance</b>	600§ €
Management and indirect costs		Family allowance	500§ €

- The living allowance base rate is multiplied by Country Correction Coefficient
- § Amount quoted is gross amount before deductions

### **COFUND**

- ✓ by co-funding new or existing regional, national, and international programmes
- ✓ Promote international, intersectoral and interdicisplinary research training, as well as transnational and cross-sector mobility of researchers at all stages of their career
- Mono-beneficiary: organisation funding or managing doctoral or post- doctoral programmes
- ✓ Leverage funding and combat fragmentation (possible synergies with ESIF)
- ✓ Spread MSCA best practices
- ✓ Budget: € 80 Million in 2015 (Doctoral Programmes: 30 Mio)

Doctoral Programmes

**ESR** 

Fellowship Programmes

ER

PP MIND

## **COFUND – Financial Dimension**

Unit costs expressed in person-months (co-funding rate of 50%)

Living allowance

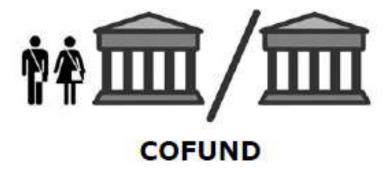
Early-stage
researchers

Living allowance
and allowance
Living allowance
researchers

5250\* €

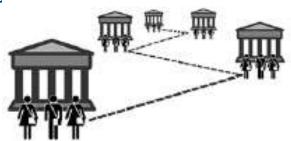
Living allowance
researchers

co-funding rate of 50%



## RISE – Research and Innovation Staff Exchange

- ✓ Strengthen the interaction between academic and non-academic organisations, and between Europe and third countries, through research and innovation staff exchanges
- International and inter-sector transfer of knowledge and sharing of ideas and of R&I culture
- ✓ At least 3 independent participants in 3 different countries
  - At least 2 participants from 2 different MS/AC (international)
  - If all in MS/AC: at least 1 academic and 1 non-academic
- ✓ Common research and innovation project
- Highly skilled research and innovation staff



RISE
Research and Innovation
Staff Exchange

## RISE – Financial Dimension

Unit costs expressed in person-months

Seconded staff

Research, networking, training costs

Management and indirect costs

1800\* €

700\* €

**Staff member Top-up allowance** 

2000\* €

Funding rate of 100%



RISE
Research and Innovation
Staff Exchange

## **Responsible Research and Innovation**

Open science (obligation)

**Gender** (always mention in proposal)

**Ethics** (always consider in proposal)

**Public engagement** (iterative and inclusive participatory multi-actor dialogues)

**Science education** 

**Outreach and communication** 

#### Outreach

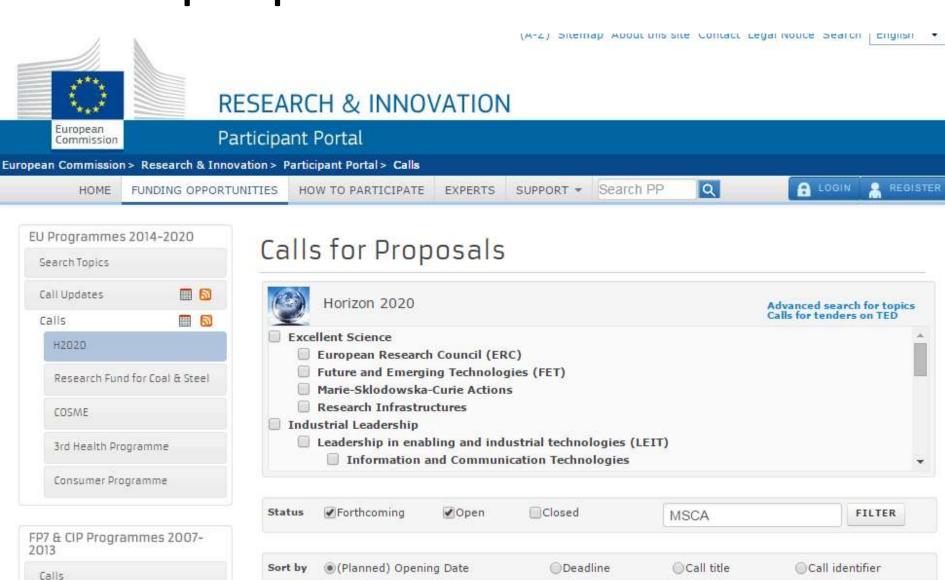
- is an activity of providing information to populations who might not otherwise have access to this information
- explains the benefits of research to a larger public (the tax payers who fund your research) there is an engagement and a two-way communication between the researcher and the public
- includes school presentations, workshops, public talks and lab visits, etc.

#### **Communication**

- refers to articles in mainstream newspapers and magazines, or on TV and radio channels
- requires a clear language and attractive scientific subject with outstanding results that can catch the media's attention

**Dissemination** targets a scientific audience that may be interested in the research results

## **Participant portal**



Excellent Science

Individual Fellowships (IF)

Excellent Science

COFUND - Co-funding of Regional,

## **Participant portal**

Call description

Call documents

Get support

#### Call summary

#### Objective:

The goal of Individual Fellowships is to enhance the creative and innovative potential of experienced researchers

+ More

#### Call updates

. 22-05-2015 16:45:53

Please note that a revised version of the Guide for Applicants has been uploaded.

+ More

Topics and submission service

To access the **Submission Service**, please **select the TOPIC** of your interest and then open the Submission Service tab.

To access existing draft proposals, please login to the portal and select My Proposals from the My Area menu.

Topic: MSCA-IF-2015-EF: Marie Skłodowska-Curie Individual Fellowships (IF-EF)

Topic: MSCA-IF-2015-GF: Marie Skłodowska-Curie Individual Fellowships (IF-GF)

## **Participant portal**

Guide for Applicants IF 2015 en

MSCA List of Descriptors IF 2015 en

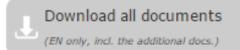
Ethics - Guidance to complete the ethics self-assessment en

Call description

Call documents

Get support

A proposal is submitted to a specific topic. The full set of information for preparing a proposal for a topic (eligibility and evaluation conditions, proposal templates, evaluation forms, etc.) is available on the topic conditions page. Select a topic from the call description page or go to Search Topics.



Legal basis - Specific Programme H2020 en

Legal basis - Framework Programme H2020 en

WP H2020 - 1. Introduction en

WP H2020 - 3. Marie Sklodowska-Curie Actions (MSCA) en

Legal basis - Rules for Participation en

WP H2020 - 19. General Annexes en

Frequently Asked Questions IF 2015 en

Participant Portal FAQ – Submission of proposals

#### National Contact Points (NCP)

Enterprise Europe Network – national contact points' advice to businesses with focus on SMEs. The support includes guidance on the EU research funding.

Research Enquiry Service – ask questions about any aspect of European research and EU R&I programmes

IT Helpdesk – contact the IT helpdesk for questions such as forgotten passwords, access rights and roles, technical aspects of submission of proposals, etc.

Ethics – for compliance with ethical issues, see the Participant Portal and Science and Society Portal

European IPR Helpdesk assists you on intellectual property issues

The European Charter for Researchers and the Code of Conduct for their recruitment

CEN and CENELEC, the European Standards Organisations, advise you how to tackle standardisation in your project proposal. Contact CEN-CENELEC Research Helpdesk at research@cencenelec.eu.

Partner Search Services help you find a partner organisation for your proposal

H2020 Online Manual your online guide on the procedures from proposal submission to managing your grant

## **Award Criteria**

Excellence	Impact	Implementation
Quality, innovative aspects and credibility of the research (including inter/multidisciplinary aspects)	Enhancing research- and innovation-related human resources, skills and working conditions to realise the potential of individuals and to provide new career perspectives	Overall coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources
Clarity and quality of transfer of knowledge/training for the development of researcher in light of the research objectives	Effectiveness of the proposed measures for communication and results dissemination	Appropriateness of the management structures and procedures, including quality management and risk management
Quality of the supervision and the hosting arrangements		Appropriateness of the institutional environment (infrastructure)
Capacity of the researcher to reach or re- enforce a position of professional maturity in research		Competences, experience and complementarity of the participating organisations and institutional commitment
Weighting		
50%	30%	20%
Priority in case of ex aequo		
1	2	3

## MSCA Calls 2016\*

ITN	30/09/2015 – 12/01/2016	EUR 370 million
IF	12/04/2016 - 14/09/2016	EUR 218 million
RISE	16/12/2015 – 28/04/2016	EUR 80 million
COFUND	14/04/2016 – 29/09/2016	EUR 80 million
NIGHT	30/09/2015 – 12/01/2016	EUR 8 million

<sup>\*</sup> To be oficially approved

## **MSCA Workflow**

**Application** 

Find a Call

Find Partners or Apply as Individual Create your account on the Participant Portal

Register your organisation

Submit your proposal







**NCP** 

**Evaluation** 

3 independent experts



**Grant Agreement** 

For successful applicants: TIME-TO-GRANT = 8 MONTHS



**Electronic signature of GA via the Participant Portal** 

New structure of GA: legal provisions all in 1 document

Reporting

Periodic Report: technical and financial

and/or

Final Report: technical and financial

# Start today on your application!

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