

## **H2020 Programme**

# Marie Skłodowska-Curie Actions Guide for Applicants

Individual Fellowships (IF)

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#### Disclaimer

This guide aims to facilitate potential applicants. It is provided for information purposes only and is not intended to replace consultation of any applicable legal sources. Neither the European Commission nor the Research Executive Agency (or any person acting on their behalf) can be held responsible for the use made of this guidance document. The guidance provided in the Annotated Model Grant Agreement shall prevail in case of discrepancies.

## **History of changes**

| Version | Date       | Change   | Page |
|---------|------------|--|------|
| 1.0     | 12.04.2016 | Initial version  |      |
| 1.1     | 10.06.2016 | <ul> <li>clarification in the definition of mobility for Global<br/>Fellowships</li> </ul> | 1    |
|         |            | deleted references to the Unique Registration Facilities                                   | 8    |
|         |            | definition has been added and example deleted for SE Panel                                 | 13   |
|         |            | <ul> <li>added paragraph in section 1.4 (reference to CV)</li> </ul>                       |      |
|         |            | hyperlinks have been embedded in the text (where relevant)                                 |      |

#### Note:

National Contact Points (**NCP**s) have been set up across Europe by the national governments to provide information and personalised support to H2020 applicants in their native language. The mission of the NCPs is to raise awareness, inform and advise on H2020 funding opportunities as well as to support potential applicants in the *preparation, submission and follow-up* of the grant applications. For details on the NCP in your country please consult the <u>National Contact Points page</u>. Additionally, you may also consult the website of the <u>EU-funded Network of MSCA NCPs</u>.

#### The Marie Skłodowska-Curie Actions in Horizon 2020

The Marie Skłodowska-Curie actions (MSCA) aim to support the career development and training of researchers – with a focus on innovation skills – in all scientific disciplines through international and intersectoral mobility.

The MSCA are expected to finance around 65,000 researchers between 2014 and 2020, including 25,000 doctoral candidates. The MSCA will address several objectives of the Europe 2020 strategy, including the Innovation Union flagship initiative. This states that the EU will need at least one million new research jobs if it is to reach the target of spending 3% of EU GDP on research and development by 2020.

By funding excellent research and providing attractive working conditions, the MSCA offer high quality professional opportunities open to researchers of any age, nationality or discipline.

#### The 2016 Marie Skłodowska-Curie Actions are:

- Innovative Training Networks (ITN)
  - Innovative doctoral-level training providing a range of skills in order to maximise employability
- Individual Fellowships (IF)
  - Support for Experienced Researchers undertaking mobility between countries, optionally to the non-academic sector
- Research and Innovation Staff Exchange (RISE)
   International and intersectoral collaboration through the exchange of research and innovation staff
- Co-funding of regional, national and international programmes (COFUND)

Co-financing high-quality fellowship or doctoral programmes with transnational mobility

The Coordination and Support Action **European Researchers' Night (NIGHT)**, funded under the MSCA, is a Europe-wide public event to stimulate interest in research careers, especially among young people.

The Guides for Applicants for the MSCA calls are available at the <u>Call for Proposals dedicated pages.</u>

This Guide is based on the rules and conditions contained in the legal documents relating to Horizon 2020 (in particular the Horizon 2020 Framework Programme and Specific Programme, Rules for Participation, and the Work Programme), all of which can be consulted via the Participant Portal.

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## **Definitions used throughout this Guide**

Associated Country (AC) means a third country which is party to an international agreement with the Union, as identified in Article 7 of Regulation (EU) No 1291/2013<sup>1</sup>.

The **academic sector** means public or private higher education establishments awarding academic degrees, public or private non-profit research institutes whose primary mission is to pursue research and international European interest organisations as they are defined in Article 2.1(12) of the Horizon 2020 Rules for Participation Regulation No. 1290/2013.

The **beneficiary** is the legal entity that signs the Grant Agreement and has the complete responsibility for the proper implementation of the action. It contributes directly to the implementation of the research, transfer of knowledge and training activities by recruiting, supervising, hosting or training a MSCA-funded researcher.

**Europe**: EU Member States **(MS)** and their overseas departments (including Overseas Countries and Territories **(OCT)** linked to MS) and Associated Countries **(AC)**.

**Experienced Researcher (ER)** must, at the date of the call deadline, be in possession of a doctoral degree or have at least four years of full-time equivalent research experience. Any parental leave periods do not count towards the time of research experience.

**Full-Time Equivalent Research Experience** is measured from the date when a researcher obtained the degree entitling him/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.

**Long-term residence** means a period of full-time research activity in the EU Member States or Horizon 2020 Associated Countries of at least 5 consecutive years.

#### Mobility rule:

For <u>Standard European Fellowships (ST)</u> the researcher must not have resided or carried out his/her main activity (work, studies, etc.) in the country of the beneficiary for more than 12 months in the 3 years immediately before the call deadline, unless as part of a procedure for obtaining refugee status under the Geneva Convention<sup>2</sup> (see Section 5). Compulsory national service and/or short stays such as holidays are not taken into account. As for beneficiaries that are international European interest organisations (IEIO) or international organisations located in a MS or an AC, the experienced researcher must not have spent more than 12 months in the 3 years immediately before the call deadline in the same appointing organisation.

In the <u>Career Restart Panel (CAR)</u>, <u>Reintegration Panel (RI)</u>, or <u>Society & Enterprise Panel (SE)</u>, the researcher must not have resided or carried out the main activity (work, studies, etc.) in the country of the beneficiary for more than 36 months in the 5 years immediately before the call deadline. As for beneficiaries that are IEIOs or international organisations located in a MS or an AC, the experienced researcher must not have spent more than 36 months in the 5 years immediately before the call deadline in the same appointing organisation.

In the <u>Global Fellowships (GF)</u> the researcher must not have resided or carried out the main activity (work, studies, etc.) in the country of the\_TC partner organisation <u>where the initial outgoing phase takes place</u> for more than 12 months in the 3 years immediately before the call deadline, unless as part of a procedure for obtaining refugee status under the Geneva Convention<sup>3</sup> (see Section 5). Compulsory national service and/or short stays such as holidays are not taken into account. As far as international organisations located in the TCs are

<sup>&</sup>lt;sup>1</sup> Please note that Tunisia, Georgia, and Armenia are considered Associated Countries in the IF 2016 call. However, Grant Agreements with entities in these countries will only be signed when the proper legal framework is in place.

<sup>&</sup>lt;sup>2</sup> 1951 Refugee Convention and the 1967 Protocol.

<sup>&</sup>lt;sup>3</sup> 1951 Refugee Convention and the 1967 Protocol.

concerned, the experienced researcher must not have spent more than 12 months in the 3 years immediately before the call deadline at the same partner organisation.

**Non-academic sector** means any socio-economic actor not included in the academic sector and fulfilling the requirements of the Horizon 2020 Rules for Participation Regulation No. 1290/2013.

**Non-associated Third Countries (TC)** are countries which are neither EU Member States (MS) nor associated to Horizon 2020 (AC).

**Partner organisations** contribute to the implementation of the action, but do not sign the Grant Agreement.

The **main Supervisor** (or **Primary Coordinator Contact**) is the scientist appointed at the beneficiary to supervise the researcher throughout the whole duration of the action. S/he will be the main contact person for the Research Executive Agency (REA) between the submission of the proposal and the conclusion of the Grant Agreement.

**Work Programme:** Part 3 of the Horizon 2020 Work Programme 2016-2017 (Marie Skłodowska-Curie Actions), European Commission Decision C(2016)1349 of 9 March 2016. Applicants should also refer to the General Introduction and the General Annexes.

# 1. Marie Skłodowska-Curie "Individual Fellowships" – Purpose and examples

Marie Skłodowska-Curie **Individual Fellowships (IF)** aim to enhance the creative and innovative potential of experienced researchers, wishing to diversify their individual competence in terms of skill acquisition through advanced training, international and intersectoral mobility. Individual Fellowships provide opportunities to acquire and transfer new knowledge and to work on research and innovation in a European context (EU Member States and Associated Countries) or outside Europe. They develop the careers of individual researchers who show great potential, considering their experience, and include a specific opportunity for those returning to the profession. The action also includes a mechanism for the return and reintegration of researchers from outside Europe who have previously worked here.

Support is foreseen for individual, transnational fellowships awarded to the best or most promising researchers of any nationality for employment in EU Member States or Associated Countries. It is based on an application made jointly by the researcher and the beneficiary in the academic or non-academic sectors.

This action provides financial support for <u>individual experienced researchers</u> of any age who wish to work in <u>organisations</u> established <u>in EU Member States (MS) or Associated Countries (AC)</u>. Global Fellowships start with a significant outgoing period spent at a partner organisation outside of Europe, and conclude with a mandatory return phase in Europe. All Individual Fellowships are expected to strengthen the contact network of both the researcher and the host organisation(s), to catalyse the development of researcher's career, and to enhance and maximise their contribution to the knowledge-based economy and society.

The following **example** is given purely to illustrate how the concept of an IF might be applied in reality:

## An IF action in practice

IF offers appropriate funding for experienced researchers who move to another country for research, innovation, training and networking activities.

The proposal is built around a concrete plan of training-through-research (Career Development Plan) at the host organisation. In addition to research objectives, this plan comprises the researcher's training and career needs, including training on transferable skills, planning for publications, and participation in conferences.

The researcher is therefore expected to implement the research/innovation activities also by means of organising/taking part in training courses, workshops, summer schools, seminars, conferences, etc. aimed at sharing knowledge, acquiring new skills and developing careers.

Appropriate supervision and support is provided to researchers by the host organisation through the supervisor(s). Regular meetings between the supervisor and the researcher will be the backbone for the planning and the implementation of the research and innovation action.

Proposals should consider these elements and provide a convincing concept and workplan.

## 2. Participating Organisations

## 2.1 Beneficiary

The Beneficiary is the **host organisation located in a MS or AC** that recruits the experienced researcher and ensures, through appointment of a supervisor, the necessary training of the researcher. The Beneficiary signs the Grant Agreement, receives funding, claims costs, and takes complete responsibility for the proper implementation of the action.

## 2.2 Partner Organisations

Partner organisations are either:

a) organisations in MS or AC that host the researcher during secondments and provide additional training;

or, uniquely in the case of Global Fellowships,

b) organisations in TC that host the researcher during the initial outgoing period and provide training.

Partner organisations <u>do not sign the Grant Agreement</u>. As such, partner organisations <u>cannot directly claim any costs from the action</u>. Nevertheless, their costs for activities in the research training are covered by the unit costs paid to the beneficiary.

Please note that partner organisations involved in secondments and located in MS or AC are NOT requested to provide any supporting documents (e.g. letter of commitment). However, it is strongly recommended that the beneficiary concludes a partnership agreement with all partner organisations involved in the action.

FOR GLOBAL FELLOWSHIPS ONLY: partner organisations located in TC and involved in a Global Fellowship must include (in Part B of the proposal) an up-to-date letter of commitment<sup>4</sup> to ensure their real and active participation in the proposed action; their precise role should also be clearly described in the proposal. During the evaluation of proposals, experts are instructed to disregard the contribution of any partner organisation for which such evidence of commitment is required, but not submitted. Thus, for Global Fellowships, if the letter of commitment of the TC partner organisation is not provided, the proposal will be considered incomplete and therefore will be declared inadmissible.

## 2.3 Eligible Applicants

Before applying, each applicant organisation has to register on the Horizon 2020 Participant Portal and is automatically classified in one of two sectors, academic or non-academic (see under <u>Definitions</u>). This classification may affect eligibility (see section below on <u>Eligibility Conditions</u>). Academic or non-academic status is determined on the basis of the Participant Identification Code (PIC) assigned during

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<sup>&</sup>lt;sup>4</sup> For further information please see <u>Section 7</u> in Annex 5 of the Guide (Part B Template)

the validation process<sup>5</sup>. Each applicant has to register only once through the Participant Portal.

# International European Interest Organisations (IEIO) and International Organisations (IO):

An "International European Interest Organisation" (IEIO) is defined in Article 2.1(12) of the <u>Horizon 2020 Rules for Participation Regulation</u> as "an international organisation, the majority of whose members are Member States or Associated Countries, and whose principal objective is to promote scientific and technological cooperation in Europe".

For the purpose of the IF actions, IEIOs are considered as legal entities established in a MS or AC.

The IEIO rules also apply to the European Commission Joint Research Centre (JRC) or to an 'entity created under Union law' (see Article 9(2) of the Horizon 2020 Rules for Participation Regulation).

In exceptional cases, an **international organisation** located in a MS or AC may be entitled to participate as a beneficiary. The expert evaluators must verify that at least one of the following conditions is fulfilled:

- the participation is deemed essential for carrying out the action by the Commission or the relevant funding body;
- such funding is provided for under a bilateral scientific and technological agreement or any other arrangement between the Union and the international organisation.

## 2.4 Obligations of Participating Organisations

Important aspects of European Commission policy towards researchers are the improvement of their working and living conditions and the promotion of mobility in order to open up new perspectives for research careers in Europe. The MSCA aim to act as a catalyst in this respect. The host organisations will therefore be required to meet certain working conditions relating to the researcher, which should be in line with the principles set out in <a href="the European Charter for Researchers">the European Charter for Researchers and in the Code of Conduct for the Recruitment of Researchers</a> (Charter and Code).

The Beneficiary must make its best effort to implement the principles set out in the Charter and the Code of Conduct. Some of these principles are also reflected in the core of the Grant Agreement (for instance, the obligation for the beneficiary to ensure that the researcher is adequately supervised) and are therefore contractually binding.

Legal entities having a valid PIC number under FP7 maintain their PIC in H2020. The details of all validated organisations are stored in the <u>Beneficiary Register</u> of the Participant Portal. For the confirmation and, if necessary, revision of the data stored, the Validation Services ask each organisation to nominate a Legal Entity Appointed Representative (LEAR). The LEARs can view their organisations' legal and financial data online and ask for corrections and changes in the <u>Beneficiary Register</u>. Note that under Horizon 2020, it will be necessary for each participating organisation to submit proof documents regarding the nomination of the LEAR before a Grant Agreement can be signed. More information can be found on the H2020 Online Manual and the User Guide.

## 2.5 Eligible Countries and their roles

For the purposes of the Individual Fellowships action, three main categories of countries can be distinguished:

- EU Member States (MS);
- Associated Countries (AC);
- Non-associated Third Countries (TC).

## Minimum country participation in an IF

|                      | Beneficiaries                         | Partner organisations  |
|----------------------|---------------------------------------|--|
| European Fellowships | Obligatory: 1 beneficiary in MS or AC | Optional (secondments):<br>partner organisation(s) in<br>MS or AC                                    |
| Global Fellowships   | Obligatory: 1 beneficiary in MS or AC | Obligatory: 1 partner organisation in TC Optional (secondments): partner organisation(s) in MS or AC |

# 3. Structure of Individual Fellowships and Eligibility Conditions

Proposals for IF involve a *single* beneficiary established in a MS or AC. The proposal should be prepared by the researcher <u>in liaison</u> with the **applicant organisation**, which is represented by the **main supervisor**. It is important to note that the experienced researcher and the supervisor must be two different people.

The **submission of the proposal** falls under the **full responsibility** of the applicant organisation represented by the main supervisor (and any other action that follows this procedure such as withdrawal or request for evaluation review). Technically it is possible for both the researcher and the main supervisor to create, modify and submit the proposal in the electronic submission system, SEP. However, it is emphasised that the submission by the researcher must be made with the agreement of the main supervisor.

Only one proposal per individual researcher will be evaluated under this call for proposals. In the event of multiple submissions, the REA contacts the applicants, who choose the proposal to be evaluated. In case no reply is received, or in case of doubts, the first submitted proposals will be evaluated. In any case, the other proposals submitted by the same researcher and not evaluated will be declared inadmissible.

IF proposals have one of the following types:

- 3.1 European Fellowships (EF)
- 3.2 Global Fellowships (GF)

Applicants have to indicate at submission stage in which of the 8 scientific areas their proposal best fits, according to the research topic. These areas are: Chemistry (CHE), Social Sciences and Humanities (SOC), Economic Sciences (ECO), Information Science and Engineering (ENG), Environment and Geosciences (ENV), Life Sciences (LIF), Mathematics (MAT) and Physics (PHY).

Proposals will be evaluated in the selected scientific area, in order to have optimal expert allocation.

In EF-Standard and GF, the selection of the scientific area will also determine the list in which the proposal will be ranked.

### 3.1 European Fellowships (EF)

European Fellowships are held in EU Member States or Associated Countries and are open to researchers either coming to Europe from any country in the world or moving within Europe.

#### 3.1.a Standard European Fellowships (EF-ST)

EF-ST proposals are submitted in one of the 8 scientific areas. <u>Each area has a separate ranking list</u>. The funding available for each area depends on the number of proposals submitted to it.

#### **ELIGIBILITY CONDITIONS** for researchers in standard EFs:

- **1.** The researcher must be an **experienced researcher** as described under Definitions.
- 2. The researcher may be of **any nationality**. No age restrictions apply.
- 3. The researcher must move or have moved (transnational mobility) from any country to the MS or AC where the beneficiary is located.

The researcher must comply with the **mobility rule** as described under Definitions.

For refugees covered by the 1951 Refugee Convention (<u>Geneva Convention</u>), the refugee procedure (i.e. before refugee status is conferred) will not be counted as 'period of residence/activity in the country of the beneficiary'. This is regardless of whether he/she was active in research at that time.

In case of doubts about the eligibility of the researcher, submission of documentary evidence may be requested, after the call deadline.

### 3.1.b Career Restart Panel (EF-CAR)

The <u>Career Restart Panel</u> (CAR) is a multidisciplinary panel of the EF which provides financial support to individual researchers who wish to resume research in Europe after a career break (e.g. after parental leave, working outside research, etc.).

Following evaluation there will be <u>one ranking list</u> for all CAR proposals. The funding available for the CAR panel depends on the number of proposals submitted to it.

#### **ELIGIBILITY CONDITIONS** for researchers under the CAR panel:

- **1.** The researcher must be **an experienced researcher** as described under <u>Definitions</u>.
- 2. The researcher may be of **any nationality**. No age restrictions apply.
- 3. The researcher must move or have moved (transnational mobility) from any country to the MS or AC where the beneficiary is located.

The researcher must comply with the **CAR mobility rule** as described under Definitions.

For refugees covered by the 1951 Refugee Convention (<u>Geneva Convention</u>), the refugee procedure (i.e. before refugee status is conferred) will not be counted as 'period of residence/activity in the country of the beneficiary'. This is regardless of whether he/she was active in research at that time.

**4.** The experienced researcher must have undertaken a **career break in research**, i.e. he/she **must not have been active in research** for at least 12 months immediately prior to the deadline for submission of proposals (corresponding to the period 15 September 2015 to 14 September 2016).

Whether or not the researcher has been active in research is determined on the basis of fellowships or employment contracts in the domain of research.

The professional status confirming the eligibility (e.g. unemployment, parental or sick leave, no fellowship or no employment contract in the domain of research) of the researcher during the period 15 September 2015 to 14 September 2016 must

be clearly explained in the proposal, both in part  $A^6$  and  $B^7$ .

In case of doubts about the eligibility of the researcher, submission of documentary evidence may be requested, after the call deadline.

## 3.1.c Reintegration Panel (EF-RI)

The <u>Reintegration Panel</u> is a multidisciplinary panel of the European Fellowships dedicated to researchers who wish to return and reintegrate in a longer term research position in Europe.

Following evaluation there will be <u>one ranking list</u> for all Reintegration Panel proposals. The funding available for the RI panel depends on the number of proposals submitted to it.

### **ELIGIBILITY CONDITIONS** for researchers under the RI panel:

- **1.** The researcher must be an **experienced researcher** as described under Definitions.
- **2.** The researcher must be a **national or long-term resident of a MS or AC** as described under <u>Definitions</u>. No age restrictions apply.
- 3. The researcher must move or have moved (transnational mobility) from a TC directly (excluding compulsory national service and/or short stays such as holidays) to the MS or AC where the beneficiary is located.

Example

A Portuguese researcher resided from 01/09/11 to 31/07/16 in Canada, where her PhD was obtained. Since 01/08/16 the researcher has resided in Portugal. The proposed host institution is in Portugal.

The researcher must comply with the **RI mobility rule** as described under <u>Definitions</u>.

For refugees covered by the 1951 Refugee Convention (<u>Geneva Convention</u>), the refugee procedure (i.e. before refugee status is conferred) will not be counted as 'period of residence/activity in the country of the beneficiary'. This is regardless of whether he/she was active in research at that time.

In case of doubts about the eligibility of the researchers, submission of documentary evidence may be requested, after the call deadline.

## 3.1.d Society & Enterprise Panel (EF-SE)

The <u>Society & Enterprise Panel</u> is a multidisciplinary panel of the European Fellowships dedicated to career opportunities for researchers seeking to work on research and innovation projects in an organisation from the non-academic sector.

Following evaluation there will be <u>one ranking list with an earmarked budget of</u> EUR 10 million for all Society & Enterprise proposals.

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<sup>&</sup>lt;sup>6</sup> Section 5 - Call specific questions, question 2: Were you out of research for a certain period until the call deadline?

<sup>&</sup>lt;sup>7</sup> Section 4 - CV OF EXPERIENCED RESEARCHER

**ELIGIBILITY CONDITIONS** for applicant organisations and researchers under the SE panel:

- **1.** The researcher must be **an experienced researcher** as described under Definitions.
- **2.** The researcher may be of **any nationality**. No age restrictions apply.
- 3. The researcher must move or have moved (transnational mobility) from any country to the MS or AC where the beneficiary is located.

The researcher must comply with the **SE mobility rule** as described under Definitions.

For refugees covered by the 1951 Refugee Convention (<u>Geneva Convention</u>), the refugee procedure (i.e. before refugee status is conferred) will not be counted as 'period of residence/activity in the country of the beneficiary'. This is regardless of whether he/she was active in research at that time.

In case of doubts about the eligibility of the researcher, submission of documentary evidence may be requested, after the call deadline.

**4. The beneficiary** must be an entity from the **non-academic sector** as described under **Definitions**.

The **non-academic sector** includes all non-academic workplaces of researchers, from industry to business (including SMEs), government, civil society organisations (NGOs, trusts, foundations, etc.), some cultural institutions, museums, hospitals, international organisations (like the UN or WHO), etc.

Please note that the status of an organisation is ultimately determined by the legal validation of the entity (PIC number) at the time of the Grant Agreement Preparation.

The non-academic status is assigned to entities not having the academic status, i.e. which are not:

- 1. public or private higher education establishments awarding academic degrees,
- 2. public or private non-profit research institutes whose primary mission is to pursue research,
- 3. international European interest organisations.

After the call closure, EF-SE proposals with beneficiaries having an academic status (proven by a PIC number) will be automatically allocated to the EF-ST Panel. Conversely, EF-ST proposals with beneficiaries having a non-academic status (proven by a PIC number) may be, upon agreement of the coordinator, automatically allocated to the EF-SE Panel.

Please verify the status of your organisation in light of the definitions provided in the *Guide on beneficiary registration, validation and financial viability check* available on the Participant Portal (see Other Useful Reference Documents).

## 3.2 Global Fellowships (GF)

Global Fellowships are composed of an **outgoing phase** during which the researcher first undertakes mobility to a **partner organisation** in a **Third Country for an uninterrupted period of between 12 and 24 months,** followed by a **mandatory 12-month return period** to **the single beneficiary** located in a **Member State or Associated Country.** 

All GF proposals are submitted in one of the 8 scientific areas, the same as for the standard European Fellowships. <u>Each area has a separate ranking list</u>. The funding available for each area depends on the number of proposals submitted to it.

**ELIGIBILITY CONDITIONS** for applicant organisations and researchers under the GFs:

- The researcher must be an experienced researcher as described under <u>Definitions</u>.
- **2.** The researcher must be **national or long-term resident of a MS or AC** as described under <u>Definitions</u>. No age restrictions apply.
- **3.** The researcher must **move or have moved** (transnational mobility) **from any country** to the partner organisation located in the **TC**.

The researcher must comply with the GF mobility rule as described under Definitions.

In case of doubts about the eligibility of the researcher, submission of documentary evidence may be requested, after the call deadline.

- **4.a** The beneficiary must be located in an MS or AC.
- **4.b** The partner organisation for the initial outgoing phase must be situated in a **TC** and is the entity where the initial compulsory outgoing phase takes place.

The partner organisation in a TC must **include a valid and up-to-date letter of commitment in Part B of the proposal**<sup>8</sup> to ensure its real and active participation in the proposed action, and its precise role should also be clearly described in the proposal.

A mandatory return phase for the experienced researcher in the European host organisation (the beneficiary) is essential for the successful achievement of the objectives of this action.

In case of <u>non-fulfilment</u> of this condition by the beneficiary, the REA may ask the beneficiary to reimburse the total amount received for the benefit of the researcher under the Grant Agreement.

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For all types of action the beneficiary must check the information regarding the eligibility of the experienced researcher at the call deadline (i.e. diploma, research experience, career break, residency, mobility, family status (see section 7.3 below), etc.) before signing the Grant Agreement.

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<sup>&</sup>lt;sup>8</sup> See Annex 5 "Part B template", section 7, at the very end of the Guide for Applicants.

### 4. Duration

The duration for **European Fellowships** (standard EFs, CAR, RI, and SE) is **between 12 and 24 months**.

For the <u>Global Fellowships</u> there is a first outgoing phase between 12 and 24 months, and an additional mandatory 12 months return phase, so the <u>total duration</u> of this type of fellowship is <u>between 24 and 36 months</u>.

## 5. Mobility - key factor

Mobility between organisations is considered by the European Commission as an asset for the personal and career development of researchers. It allows the enhancement of collaboration, and the acquisition of new skills and knowledge which contribute to increased creativity, efficacy and performance.

Mobility of the researcher to another country is an eligibility criterion for receiving MSCA funding, while mobility between the academic and non-academic sector is also encouraged where this would further advance research or innovation.

Please note that the MSCA mobility rules do not necessarily relate to the location(s) stated in the current or previous employment contract(s) of the researcher. The two determining elements are place of residence and place of main activity.

For researchers with refugee status, as defined by the Geneva Convention:

- The time needed to process the application for refugee status (i.e. before refugee status is conferred) will not be counted as 'period of residence/activity in the country of the beneficiary'.
- Concerning only the Reintegration Panel of the European Fellowships or any Global Fellowship, researchers who have held refugee status in a MS or AC for at least 5 consecutive years qualify as long-term residents and therefore may apply.

In case of doubts about the eligibility of the researcher, submission of documentary evidence may be requested, after the call deadline.

#### **5.1 Secondments**

<u>During the implementation</u> of the IF the experienced researcher may be seconded to an additional partner organisation, but <u>only in Europe (MS or AC)</u>. Such secondments must significantly contribute to the impact of the fellowship. The applicants should therefore consider carefully whether the research would be advanced by a secondment, and whether it should take place in the academic or non-academic sector.

If the partner organisation where the secondment takes place is not identified at the proposal stage, it is essential that Part B of the proposal contains as much information as possible on the sector, place, timing and duration, and its overall purpose.

The secondments must be clearly specified in Section 5 of Part B of the proposal, and justified elsewhere in the Part B. However, no Letter of Commitment is required.

The maximum duration of secondments is defined according to the total duration of the fellowship:

| Duration of the fellowship | Maximum duration of secondment |
|----------------------------|--------------------------------|
| ≤ 18 months                | 3 months                       |
| > 18 months                | 6 months                       |

The secondment phase can be a single period or divided into shorter mobility periods. It can take place at one or more organisations, which can be located in the same country as the beneficiary. Secondments can take place within the same sector. However, for certain fields of research, intersectoral secondments may increase the impact of the proposal.

The quality and degree of involvement of partner organisations and the impact of the secondments will be assessed by the expert evaluators according to the evaluation criteria. In all cases the secondment must be meaningful and appropriate to the type of fellowship and research field.

It is essential for the applicants to clearly **distinguish "secondments" from short visits (for example for field work)** since they have a different nature and pursue different objectives. A short visit is not a "secondment", and therefore the country where a short visit takes place can be chosen freely.

- Secondments are planned before, and are an integral part of the research proposal.
- Secondments imply mobility to a partner organisation in a MS or AC with specific supervision arrangements. Short visits imply mobility to another location outside the physical premises of the beneficiary. However, the work done is supervised directly by the beneficiary.
- Short visits can only represent a small part of the action.
- When a short visit takes place to a TC, the beneficiary shall ensure compliance with the applicable Horizon 2020 ethical framework and the corresponding provisions of the Grant Agreement.

## 6. Typical Activities of an Individual Fellowship

## 6.1 Research and training activities

#### 6.1.a Topics, Ethics

All Marie Skłodowska-Curie actions have **a bottom-up approach**, i.e. research fields are chosen freely by the applicants. All domains of research and technological development are eligible for funding (except areas of research covered by the EURATOM Treaty).

All research activities supported by Horizon 2020 must respect fundamental ethical principles and legislation (see Annex 5 - Part B Template, Chapter 6).

### 6.1.b Research, Training and Career Development

In the proposal, the applicant organisation should briefly describe a concrete plan of training-through-research at the host organisations' premises (Career Development **Plan**). This Plan should not be included in the proposal, but it is part of implementing the action. It should aim at reaching a realistic and well-defined objective in terms of career advancement (by attaining a leading independent position for example) or resuming a research career after a break. The plan should be devised with the final outcome to develop and significantly widen the competences of the experienced researcher, particularly in terms of multi/interdisciplinary expertise, intersectoral experience and transferable skills.

In addition to research objectives, this plan comprises the researcher's training and career needs, including training on transferable skills, planning for publications and participation in conferences.

This dedicated and high-level plan will act as a reference for the experienced researcher to monitor for her/himself the progress of work, training and publications, and to take corrective measures if deviations and delays are observed in order to attain the professional development targets.

Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development **strategy** for researchers at all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and quidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements.

## Typical **training activities** in IF may include:

- Primarily, training-through-research by the means of an individual personalised project, under the guidance of the supervisor and other members of the research staff<sup>9</sup> of the host organisation(s);
- Hands-on training activities for developing scientific (new techniques, instruments, research integrity, 'big data'/'open science') and transferable skills (entrepreneurship, proposal preparation to request funding, patent applications, management of IPR, project management, task coordination, supervising and monitoring, take up and exploitation of research results);
- Intersectoral or interdisciplinary transfer of knowledge (e.g. through secondments);
- Taking part in the research and financial management of the action;
- Organisation of scientific/training/dissemination events;
- Communication, outreach activities and horizontal skills;
- Training dedicated to gender issues.

<sup>&</sup>lt;sup>9</sup> Please indicate these persons in Part B of the proposal.

#### 6.2 Dissemination and Communication

<u>Dissemination promotes the results of the action to influence policy-making or ensure follow-up by industry and the research community. Forms of dissemination include publications and patents.</u>

Communication about the action should aim to demonstrate the ways in which this research is contributing to advancing society. It should also account for public spending by providing tangible evidence that the funded research adds value by:

- showing how the creative and innovative potential of experienced researchers is better achieved through international and intersectoral training, which contributes also notably to competitiveness, achieving research excellence, and where relevant, addressing societal challenges;
- showing how the outcomes are relevant to our everyday lives, by creating jobs, introducing novel technologies, or by making our lives more comfortable in other ways.

#### Open Science under Horizon 2020

Open Science refers to the Horizon 2020 objective of increasing openness at all stages of the research life cycle and thus ensuring that science serves innovation and growth. Open Science guarantees open access to publicly-funded research results and promotes a range of facilities for knowledge sharing. It provides researchers with tools and workflows for transparency, networking, collaboration, dissemination and transfer of new knowledge. Moreover, Open Science is an inclusive process aimed at promoting diversity in science across the European Union and opening it to the general public, in order to better address the H2020 societal challenges and ensure that science becomes more responsive both to socio-economic demands and to those of European citizens.

Horizon 2020 also includes a pilot on **Open Research Data**. The goal of the pilot is to improve and maximise access to and re-use of research data generated by Horizon 2020 funded actions. There is no obligation on IF actions to participate in the pilot, but applicants who wish to join the pilot can choose to opt-in by indicating so in the proposal. Opting-in implies that a Data Management Plan will have to be submitted as a deliverable during the implementation of the project. However, information related to Open Research Data provided in the proposal will not be taken into account for evaluation purposes (in other words, proposals will not be evaluated more favourably because they are part of the pilot on Open Research Data).

Further information on Open Access, the Data Management Plan and the pilot can be found in the documents section of the <u>Participant Portal</u>. During the submission process, applicants will be asked to specify whether they wish to participate in the <u>Open Research Data pilot</u>.

## 6.3 Public Engagement

In the Marie Skłodowska-Curie actions, the primary goal of public engagement activities is to create awareness among the general public of the research work performed and its implications for citizens and society. The type of outreach activities could range from press articles and participating in European Researchers' Night events to presenting science, research and innovation activities to students from primary and secondary schools or universities in order to develop their interest in

research careers. Other possibilities might include 'open days' or videos, which would enable the public to see where and how the research is undertaken. **The frequency and nature of outreach activities should be outlined in the proposal**.

For further information, please refer to the <u>Guidelines on Outreach and</u> Communication Activities in the MSCA.

#### 6.4 Gender Issues

Marie Skłodowska-Curie actions pay particular attention to gender equality. In line with the <u>Charter and Code</u>, all MSCA proposals are encouraged to take appropriate measures to facilitate mobility and to counteract gender-related barriers to it. Equal opportunities are to be ensured, both at the level of supported researchers and that of decision-making/supervision.

In research activities where human beings are involved as subjects or end-users, gender differences may exist. Findings may affect women and men or groups of women and men differently. In these cases, the <u>gender dimension in the research content</u> has to be addressed as an integral part of the proposal to ensure the highest level of scientific quality.

As training researchers on gender issues serves the policy objectives of Horizon 2020 and may be necessary for the implementation of the particular action, applicants are encouraged to include such activity in their proposals, as appropriate.

### 6.5 Refugees

The integration of refugees is a key priority for the EU, and the Marie Skłodowska-Curie actions are fully committed to ensuring that the equal opportunities are provided to researchers whose scientific careers have been interrupted.

## 7. Financial Aspects

The financial support for Marie Skłodowska-Curie IF takes the form of a grant covering 100% of the action's eligible costs. Funding is calculated exclusively based on the fixed unit costs set out in the Work Programme.

What types of expenses are covered?

The European Union contribution and rates under this action are set out in Part 3 of the Work Programme 2016-2017 and cover:

- the allowances for the researcher;
- research, training and networking costs;
- management and indirect costs.

One unit is defined as one person-month. The unit costs are divided into two groups: researcher unit costs and institutional unit costs.

|                           | Researcher unit cost in EUR |                       |                     | Institutional unit cost in EUR          |                                     |  |
|---------------------------|-----------------------------|-----------------------|---------------------|---|-------------------------------------|--|
|                           | person/month                |                       |                     | person/month                            |                                     |  |
|                           | Living<br>Allowance         | Mobility<br>Allowance | Family<br>Allowance | Research, training and networking costs | Management<br>and indirect<br>costs |  |
| Individual<br>Fellowships | 4,650                       | 600                   | 500                 | 800                                     | 650                                 |  |

Researcher unit costs

## 7.1 Living allowance

This refers to the *basic, gross amount* for the benefit of the researcher to be paid to the researcher in monthly instalments:

#### • €4,650\* / month

\*This amount is then adjusted through the application of a country correction coefficient for the cost of living according to the country in which the beneficiary is located. For the outgoing phase of the Global Fellowship, the country correction coefficient of the destination TC partner organisation will be applied. However, the adjusted amount will not change in case of secondments to a partner organisation in another MS or AC. The country correction coefficients that will be applied are indicated in Table 1 in Part 3 of the Work Programme (Marie Skłodowska-Curie actions).

The beneficiary must appoint the eligible experienced researcher under an employment contract or other direct contract with equivalent benefits, including social security coverage, for the duration of the action.

In the case of secondments to the partner organisations, the social security provision should also cover the researcher during these periods. The <u>Charter and Code</u> offer a reference framework for the employment of researchers.

Only in cases when national law prohibits full employment contracts/equivalent direct contracts are fixed amount fellowships permitted, and then only with the prior approval of the Research Executive Agency. The required minimum is that the researcher is covered under a social security scheme providing at least sickness and parental benefits, cover for invalidity and accidents at work and occupational diseases, and covering the researcher in every place of implementation of the IF activities. For fixed amount fellowships, the Living Allowance is 50% of the amount foreseen for the contract of employment. Other cost categories are not affected by this reduction.

#### Important notice: Living allowance

NOTE: The living allowance is a **gross EU contribution** to the salary costs of the researcher. Consequently, the net salary results from deducting all compulsory (employer/employee) social security contributions as well as direct taxes (e.g. income tax) from the gross amounts. The host beneficiary **may pay a top-up** to the eligible researchers from another budget source in order to complement this contribution.

The rate indicated above is for researchers devoting themselves to the action on a <u>full-time basis</u>. <u>Part-time</u> employment for personal or family reasons can be accepted. In this case costs will be reported as pro-rata of the fulltime (30 days/month) unit cost.

## 7.2 Mobility allowance

In addition to the living allowance, a mobility allowance will be paid to recruited researchers:

• €600 / month

## 7.3 Family allowance

A family allowance will be paid in case the supported researcher has family obligations. In this context, family is defined as persons linked to the researcher (i) by marriage, or (ii) a relationship with equivalent status to a marriage recognised by the legislation of the country or region where this relationship was formalised; or (iii) as dependent children who are actually being maintained by the researcher. This allowance amounts to:

#### • €500 / month

The family status of a researcher will be determined at the deadline of the call (i.e. 14 September 2016) and will not be revised during the lifetime of the action.

## NB:

The mobility and family allowances are fixed amounts, regardless of the country of recruitment, and may be taxable depending on the country in question.

### **Institutional unit costs**

The beneficiary may elect to pass some or all of this funding to partner organisations in the action, please see the Annotated Grant Agreement for further details.

### 7.4 Research, training and networking costs

This unit cost amounts to €800 per person/month and is managed by the beneficiary to contribute to expenses related to, for example:

- the participation of researchers in training activities;
- expenses related to research costs;

## 7.5 Management and indirect costs

This refers to a unit cost of **€650** *per person/month* that is to be used for the management and indirect costs of the action.

## 7.6 Budget Calculations

Applicants are not required to indicate the amount of the estimated EU contribution in the proposal. This will be automatically calculated from the information provided in Part A of the proposal using the rates, allowances and coefficients given in Table 2 of Annex 3 to the Work Programme.

It is crucial that the information given in Part A about the participating organisations and researcher is correct and up-to date and that it is identical to the information given in Part B and its Annexes.

Before signing the Grant Agreement the beneficiary is responsible for checking the family status of the researcher at the call deadline.

## 7.7 Contractual Obligations

Complete details regarding contractual obligations that bind all beneficiaries can be found in the <u>model Grant Agreement</u> and its <u>annotated version</u>, both available on the Participant Portal.

## 8. Examples of Individual Fellowships

#### 8.1 Standard EF

A French researcher without family obligations who obtained her PhD in France on 15 June 2014 in Chemistry applies jointly with a university in Germany for a 24-month fellowship in the CHE scientific area. In the last 3 years she was in Germany for 5 months. Part B provides for a secondment split in 2 periods of each 2 months at an industrial partner in Ireland.

The budget calculation would be like this:

Total duration = 24 months (person-months) Country of the beneficiary = Germany

1. Living allowance =  $\emptyset$  4,650 x 24 x DE Country Correction Coefficient (CCC)

=€ 4,650 x 24 x 98.8%

**=€ 110,260.80** 

2. Mobility allowance =€ 600 x 24=€ 14,400

3. Family allowance = N/A

4. Research, training and networking costs =€ 800 x 24=€ 19,200

5. Management and indirect costs =€ 650 x 24=€ 15,600

Maximum EU contribution =€ 110,260.80 + 14,400 + 19,200 + 15,600=€ 159,460.80

## 8.2 CAR panel

A Slovenian researcher has lived in the UK since 1 May 2014 and has worked outside research since 1 January 2014. He has a PhD in Geology, family obligations and applies in liaison with a museum in UK for an 18-month fellowship in the ENV scientific area. There are no secondments foreseen in Part B.

The budget calculation would be like this:

Total duration = 18 months (person-months) Country of the beneficiary = United Kingdom

1. Living allowance =€ 4,650 x 18 x UK CCC

=€ 4,650 x 18 x 120.3%

**=€ 100,691.10** 

2. Mobility allowance = € 600 x 18=€ 10,800

3. Family allowance =€ 500 x 18=€ 9,000

4. Research, training and networking costs = € 800 x 18 = € 14,400

5. Management and indirect costs =  $\in 650 \times 18 =$   $\in 11,700$ 

**Maximum EU contribution** = 100,691.10 + 10,800 + 9,000 + 14,400 + 11,700 = € 146,591.10

## 8.3 RI panel

A Swedish researcher obtained her master degree in Biology in 15 June 2011 in her home country. From 1 September 2012 until 10 September 2016 she has been a researcher at a University in Japan and applies for a 12-month fellowship in the LIF scientific area in liaison with a host institution in Sweden. In Part B a 1.5-month secondment to a University in Netherlands is mentioned. The experienced researcher is without family obligations at the call deadline.

The budget calculation would be like this:

Total duration = 12 months (person-months)

Country of the beneficiary = Sweden

1. Living allowance = € 4,650 x 12 x SE CCC

= € 4,650 x 12 x 111.7%

**= € 62,328.60** 

2. Mobility allowance = € 600 x 12= € 7,200

3. Family allowance = N/A

4. Research, training and networking costs =€ 800 x 12=€ 9,600

5. Management and indirect costs =€ 650 x 12=€ 7,800

**Maximum EU contribution** = € 62,328.60 + 7,200 + 9,600 + 7,800

**=**€ 86,928.60

## 8.4 SE panel

An Indian researcher obtained her PhD in Ethnography her home country in August 2016. The researcher applies for an 18-month SE fellowship in the SOC scientific area with a host institution in France. The host institution is an international organisation active in promoting cultural reforms. In Part B a 2-month secondment to a University in Italy is mentioned. The experienced researcher is without family obligations at the call deadline.

The budget calculation would be like this:

Total duration = 18 months (person-months)

Country of the beneficiary = France

1. Living allowance = € 4,650 x 18 x FR CCC

= € 4,650 x 18 x 111.0%

**= € 92,907** 

2. Mobility allowance =€ 600 x 18=€ 10,800

3. Family allowance = N/A

4. Research, training and networking costs = € 800 x 18=€ 14,400

5. Management and indirect costs =€ 650 x 18=€ 11,700

**Maximum EU contribution** = € 92,907 + 10,800 + 14,400 + 11,700

**=**€ 129,807

#### 8.5 GF

A Chinese researcher obtained her PhD in Physics on 15 May 2008 in France and was employed in research full time since 16 May 2008 at a Polish University. The researcher applies for a Global Fellowship in the PHY scientific area with a 24-month outgoing phase to a university in the USA and a 12-month mandatory return period in Spain. A 3-month secondment at a SME in Portugal is foreseen during the return phase. The experienced researcher has family obligations.

The budget calculation would be like this:

Outgoing phase= 24 months in USA Return phase= 12 months in Spain

Total duration = 36 months (person-months)

1. Living allowance =€  $(4,650 \times 24 \times US CCC) + (4,650 \times 12 \times ES CCC)$ 

= (4,650 x 24 x 99.4%) + (4,650 x 12 x 97.6%)

**=€ 165,391.2** 

2. Mobility allowance = € 600 x 36=€ 21,600

3. Family allowance = € 500 x 36=€ 18,000

4. Research, training and networking costs = € 800 x 36=€ 28,800

5. Management and indirect costs  $= 650 \times 36 = 23,400$ 

**Maximum EU contribution** =€ 165,391.2 + 21,600 + 18,000 + 28,800 + 23,400=€ 257,191.2

## 9. Overview of the Individual Fellowships

| INDIVIDUAL FELLOWSHIPS         |                             | EUROPEAN                              |  |   |                                       | GLOBAL   |
|--------------------------------|-----------------------------|---------------------------------------|--|---|---------------------------------------|--|
|                                |                             | Standard EF                           | CAR                                      | RI  | SE                                    | GF   |
|                                | Nationality                 | ANY                                   | ANY                                      | MS, AC or long-<br>term residents         | ANY                                   | MS, AC or long-<br>term residents                    |
| EXPERIENCED                    | Mobility                    | From ANY<br>country<br>to MS or AC    | From ANY<br>country<br>to MS or AC       | From TC<br><b>directly</b><br>to MS or AC | From ANY<br>country<br>to MS or AC    | From ANY<br>country<br>to TC<br>then to <i>MS/AC</i> |
| RESEARCHERS                    |                             | < 12 months in the last 3 years       | < 36 months in<br>the last 5 years       | < 36 months in<br>the last 5 years        | < 36 months in the last 5 years       | < 12 months in the last 3 years                      |
|                                | Career break<br>in research | -                                     | ≥ 12 months<br>prior to call<br>deadline | -   | -                                     | -  |
|                                | Beneficiary                 | MS or AC                              | MS or AC                                 | MS or AC                                  | MS or AC Non-academic only            | MS or AC   |
| PARTICIPANTS                   | Partner<br>Organisation     | MS or AC<br>(optional<br>secondments) | MS or AC<br>(optional<br>secondments)    | MS or AC<br>(optional<br>secondments)     | MS or AC<br>(optional<br>secondments) | TC (outgoing phase) MS or AC (optional secondments)  |
| DURATION (months)              |                             | 12 - 24                               | 12 - 24                                  | 12 - 24                                   | 12 - 24                               | 12 to 24 + <b>12</b>                                 |
| SCIENTIFIC AREAS               |                             | 8                                     | 8  | 8   | 8                                     | 8  |
| NUMBER OF RANKING LISTS        |                             | 8                                     | 1  | 1   | 1                                     | 8  |
| BUDGET (total € 218.5 million) |                             | € 179.5 million                       |  |   | €10 million                           | € 29 million   |

## **Annexes**

| Annex 1 | Timetable and Specific Information for this Call              |
|---------|---|
| Annex 2 | Evaluation Criteria and Procedure to be applied for this Call |
| Annex 3 | Instructions for Completing Part A of the Proposal            |
| Annex 4 | Instructions for Drafting Part B of the Proposal              |
| Annex 5 | Part B Template   |

#### **Proposals submission**

Proposals must be submitted electronically, using the **European Commission's Online Submission Service (SEP)**, by the main supervisor at the applicant organisation.

Proposals must be submitted on or before Wednesday 14 September 2016, 17:00:00 Brussels time. It is your responsibility to ensure the timely submission of your proposal.

To avoid being late and miss the deadline, **you should submit your proposal in SEP as soon as possible** since any other successive submission overwrites the previous version. The latest version will be evaluated.

Leaving your first submission attempt to the last few minutes of the call will give you no time to overcome even the smallest technical difficulties, proposal verification problems or communications delays which may arise. Such events are never accepted as extenuating circumstances; your proposal will be regarded as not having been submitted.

In the very unlikely event of a failure of the SEP service during the last 24 hours of this call, the deadline can be extended by a further 24 hours. Such a failure is extremely rare and exceptional. Therefore, do not assume that there will be an extension to this call if you have difficulty in submitting your proposal at the last moment.

The procedure for lodging complaints about failed submissions is available on the <u>H2020 Online manual</u>.

## Annex 1 - Timetable and Specific Information for this Call

**The Marie Skłodowska-Curie Actions Work Programme** provides the legal background for submitting a proposal to this call. It describes the content of the topics to be addressed, and details on how the call will be implemented. The Work Programme together with the part giving the basic data on the call implementation (deadline, budget, additional conditions, etc.) posted as a separate document are available on the Participant Portal call page.

#### Indicative timetable for this call

| Publication of call                                 | 12 April 2016   |  |
|---|---|--|
| Deadline for submission of proposals                | 14 September 2016 at 17:00:00,<br>Brussels local time |  |
| Evaluation of proposals                             | October - December 2016                               |  |
| Information on the outcome of the evaluation        | February 2017   |  |
| Indicative date for the signing of Grant Agreements | May 2017  |  |

**Indicative 2016 call budget:** €218.5 million. Of this amount, €29 million is allocated to Global Fellowships, and of the €189.5 million for the European Fellowships, €10 million is reserved for the Society & Enterprise panel. The call budget will be distributed between the panels based on the proportion of eligible proposals received in each panel, except in the case of the Society and Enterprise panel.

## Further information and help

The Participant Portal call page contains links to other sources that you may find useful in preparing and submitting your proposal. Direct links are also given where applicable.

#### **Call Information**

- Participant Portal call page
- MSCA Work Programme 2016 17

### **General Sources of Help**

- Marie Skłodowska-Curie actions website
- EURAXESS
- European Commission Horizon 2020 Enquiry service
- National Contact Points

### **Specialised and Technical Assistance**

<u>Submission Service Help Desk</u> (also by <u>email</u>)
 IPR Help desk

#### **Other Useful Reference Documents**

- Horizon 2020 Work Programme 2016-2017: General Introduction
- Horizon 2020 Work Programme: General Annexes
- <u>List of countries and applicable rules for funding</u>
- Horizon 2020: Reference Documents in the Participant Portal
- Horizon 2020: Rules for Participation
- Horizon 2020: How to Complete Your Ethics Self-Assessment
- Horizon 2020: Guidelines on Data Management in Horizon 2020
- Guide on beneficiary registration, validation and financial viability check
- European Charter and Code for Researchers
- List of associated countries
- Fact Sheet IP management in Horizon 2020 Marie Skłodowska-Curie Actions
- <u>Proposal evaluation forms</u>

## Annex 2 - Evaluation Criteria and procedure to be applied for this Call

#### 1. General

The evaluation of proposals is carried out by the Research Executive Agency with the assistance of independent experts.

REA staff ensures that the process is fair and in line with the principles contained in the Commission's <u>rules on Proposal submission and evaluation</u> and the relevant sections of the MSCA Work Programme.

Experts perform evaluations on a personal basis, not as representatives of their employer, their country or any other entity. They are required to be independent, impartial and objective, and to behave throughout in a professional manner. They sign an expert contract, including a declaration of confidentiality and absence of conflict of interest, before beginning their work. Confidentiality rules must be adhered to at all times before, during and after the evaluation.

In addition, an independent expert will be appointed by the REA to observe and report on the evaluation process. The observer gives independent advice to the REA on the conduct and fairness of the evaluation sessions, on the way in which the experts apply the evaluation criteria, and on ways in which the procedures could be improved. The observer will not express views on the proposals under examination or on the experts' opinions on the proposals.

Proposals are submitted in a single stage and evaluated in one step by the experts against all evaluation criteria.

**Conflicts of interest:** under the terms of the expert contract, all experts must declare beforehand any known conflicts of interest, and must immediately inform the responsible REA staff member if they detect a conflict of interest during the course of the evaluation.

**Confidentiality:** the expert contract also requires experts to maintain strict confidentiality with respect to the whole evaluation process. They must follow any instruction given by the REA to ensure this. Under no circumstance may an expert attempt to contact an applicant on his/her own account, either during the evaluation or afterwards.

#### 2. Before the Evaluation

On receipt by the REA, proposals are registered and acknowledged and their contents entered into a database to support the evaluation process. Admissibility and eligibility criteria for each proposal are also checked by REA staff before the evaluation begins. Proposals which do not fulfil these criteria will not be included in the evaluation.

For this call a proposal will only be considered admissible if it meets all of the following conditions:

- It is submitted before 14 September 2016, 17:00:00 Brussels time through the electronic submission system; documents received later or via fax, email, letters, etc. will not be taken into account;
- It is readable, accessible and printable.

Incomplete proposals may be considered inadmissible. Therefore, the proposal must include both the requested administrative forms in Part A and the proposal description in Part B with all sections.

**Sections 1 to 3 of part B of the proposals** have a <u>maximum length of 10 pages</u> (excluding the elements in sections  $4^{10}$  to 7 of Part B). Expert evaluators will be instructed to disregard any excess pages or information that is not in the correct section and in the given format.

A proposal will only be considered eligible if its content corresponds to the topics and funding schemes, including the specific conditions set out in the relevant parts of the work programme.

## NEW! Part B must be submitted as two separate documents:

**Document 1** must include the Start Page, the Table of Contents, the List of Participating Organisations and sections 1-3. The maximum total length for this document is 13 pages (1 page for the Start Page, 1 page for the Table of Contents, 1 page for the List of Participating Organisations, and 10 pages for sections 1 to 3: section 1 must start on page 4). The page limits will be strictly applied. Experts will be instructed to disregard any excess pages.

**Document 2** must consist of sections 4-7 of Part B. No overall page limit is applicable to this document, but applicants should respect the instructions given per section (e.g. in section 4, maximum five pages).

(see also Annex 4 below)

## 3. Evaluation of Proposals

Each proposal will be assessed independently by at least three experts chosen by the REA from the pool of experts taking part in this evaluation. An expert will be designated as the proposal "rapporteur" and will assume additional responsibilities in the evaluation phase.

#### Selection criteria

Proposals will be verified for their compliance with the **operational capacity** of the beneficiary, which is assessed at the proposal stage. Operational capacity shows whether an applicant has the basic operational resources and capacity to implement the action, and, in particular, the parts in the proposal for which it is responsible. This assessment is based on the following information to be provided in the proposal:

- A Curriculum Vitae or description of the profile of the main supervisor;
- A list of up to five relevant publications or other achievements of the supervisor of the applicant organisation;
- A list of up to five relevant previous actions or activities of the applicant organisation, connected to the subject of this proposal;
- A description of any significant infrastructure and/or any major items of technical equipment of the applicant organisation, relevant to the proposed work;

Marie Skłodowska-Curie Actions, Guide for Applicants Individual Fellowships (IF) 2016

 $<sup>^{10}</sup>$  Please pay particular attention to the Additional admissibility conditions given in section 1 of Annex 4 of this Guide.

• For GF only, a description of the partner organisation in the Third Country which will contribute to the action.

If the experts evaluating the proposal reach a consensus that the beneficiary lacks sufficient operational capacity, then the proposal would be rejected.

#### **Award criteria**

The proposals will be evaluated against the IF award criteria applying weighting factors, both set out in the Work Programme. Proposals will not be evaluated anonymously. Proposals may be evaluated remotely.

Evaluation scores will be awarded for each of the three criteria (see table below). All of the separate elements of each criterion will be considered by the experts in their assessment.

An example of the evaluation forms that will be used by the experts in this call will be made available on the Participant Portal.

| IF - Marie Skłodowska-Curie Individual Fellowships   |   |   |  |  |
|--|---|---|--|--|
| Excellence   | Impact  | Quality and efficiency of the implementation  |  |  |
| Quality and credibility of<br>the research/innovation<br>project; level of novelty,<br>appropriate consideration of<br>inter/multidisciplinary and<br>gender aspects | Enhancing the potential<br>and future career<br>prospects of the<br>researcher                              | Coherence and effectiveness of <b>the work plan</b>                                   |  |  |
| Quality and appropriateness of the training and of the two way transfer of knowledge between the researcher and the host   | Quality of the proposed measures to exploit and <b>disseminate</b> the project results                      | Appropriateness of the allocation of tasks and resources                              |  |  |
| Quality of the supervision and of the integration in the team/institution  | Quality of the proposed measures to <b>communicate</b> the project activities to different target audiences | Appropriateness of the management structure and procedures, including risk management |  |  |
| Capacity of the researcher to reach or re-<br>enforce a position of professional maturity/independence   |   | Appropriateness of the institutional environment (infrastructure)                     |  |  |

| 50%  | 30% | 20% |  |  |  |
|--|-----|-----|--|--|--|
| Weighting  |     |     |  |  |  |
| 1  | 2   | 3   |  |  |  |
| Priority in case of ex aequo   |     |     |  |  |  |
| NB: An overall threshold of 70% will be applied to the total weighted score. |     |     |  |  |  |

Each criterion will be scored out of 5. Decimal points may be given. The scores indicate the following with respect to the criterion under examination:

- 0 Proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.
- 1 Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.
- 2 Fair. Proposal broadly addresses the criterion, but there are significant weaknesses.
- 3 Good. Proposal addresses the criterion well, but a number of shortcomings are present.
- 4 Very Good. Proposal addresses the criterion very well, but a small number of shortcomings are present.
- 5 Excellent. Proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

## **Annex 3 – Instructions for completing Part A of the Proposal**

Proposals in this call must be submitted exclusively electronically, using the electronic submission service of the Commission accessible from the call page on the Participant Portal.

In Part A you will be asked for certain administrative details that will be used in the evaluation and further processing of your proposal. Part A constitutes an integral part of your proposal, and has a number of mandatory fields (like name of the supervisor(s), researcher, etc.) which, if not completed, will not allow the submission of the proposal. Details of the work you intend to carry out will be described in Part B (see Annexes 4 and 5 of this guide).

The Electronic Submission Service provides guidance on how to complete the Part A, which includes the following sections:

**Section 1 – General Information** requests information about the proposal, including an abstract of the action proposal.

### Section 2 - Administrative data of participating organisations

- requests information about the main supervisor and the supervisor's host institution (the beneficiary); and
- requests information about the supervisor in the TC and the partner organisation (for Global Fellowships).

**Section 3 – Budget** requests information on the duration (person-months) to calculate the total requested EU contribution.

**Section 4 – Ethics** identifies any ethical aspects of the proposed work. Even if there are no issues, you must simply confirm that none of the ethical issues apply to the proposal.

**Section 5 – Call specific questions** request declarations related to eligibility and personal data, together with questions on any secondment in Europe.

# 1. The Concept of Scientific Areas and selection of Descriptors (Keywords)

All eligible proposals will be evaluated under eight major areas of research: Chemistry (CHE); Social Sciences and Humanities (SOC); Economic Sciences (ECO), Information Science and Engineering (ENG); Environment and Geosciences (ENV); Life Sciences (LIF); Mathematics (MAT), and Physics (PHY). Experts will evaluate proposals under one of these areas as indicated in the proposal part A.

The standard European Fellowships and Global Fellowships will have a ranking list for each of these eight (8) areas. For the CAR, RI, and SE panels, one multidisciplinary ranking list for each will be created. The SE panel has its own earmarked budget of  $\[ \in \]$ 10 million.

In the electronic submission system (SEP) the applicants should choose the scientific area and descriptors (keywords) carefully since this will guide the REA in the selection of the most appropriate experts for the proposal evaluation. The number of descriptors will range from three (3) to five (5) as explained below. Applicants must:

- 1) Select one of the 5 types of fellowship (EF-ST, EF-CAR, EF-RI, EF-SE, GF) for which their proposal is submitted.
- 2) Select the area of research (e.g.: CHE) in which the proposal best fits, in section 1 of the proposal submission forms. This should be considered as the core discipline of the proposal.
- 3) Within the most relevant sub-area of research (e.g.: C1-Synthetic Chemistry and Materials), select the first descriptor that best characterises the subject of the proposal (e.g. Colloid Chemistry).
- 4) The second descriptor that best characterises the subject of the proposal must be selected within the area of research (e.g.: CHE) that has been selected in step 2.
- 5) Third descriptor: it is mandatory to select at least one (1) additional descriptor which can be chosen from any of the eight (8) areas of research.
- 6) If needed you may add further two (2) additional descriptors chosen freely.

Please note that you should select the descriptors in order of importance, the first being the most important.

To help you select the most relevant area for your proposal, a document providing a breakdown of each scientific area into a number of descriptors can be found in Annex 6 of this guide.

## 2. How to complete the Part A forms

## Beneficiary

The beneficiary fills in the sections 1 (general information), 2 (specific data), 3 (budget), 4 (ethics) and 5 (data on partner organisations for secondments in Europe). Numbers and information listed in section 3 (budget) should be the same as those reported in Part B of the proposal. In case of discrepancies, values from the Part A will prevail.

#### Partner organisations

Information on partner organisations in TC (for Global Fellowships) is provided by the beneficiary under section 2 of Part A.

Information on partner organisations in Europe (secondments) is provided by the beneficiary under section 5 of Part A.

When you complete part A, please make sure that numbers are always rounded. Person-months are always full months.

#### Resubmission

If you have submitted your proposal (or a very similar one<sup>11</sup>) to the IF Calls for Proposals MSCA-IF-2014 or MSCA-IF-2015, the evaluators will receive a copy of

<sup>&</sup>lt;sup>11</sup> If it differs from the current one in minor ways from the scientific point of view.

the previous Evaluation Summary Report at the start of the consensus building process" 12.

Proposals are only considered as resubmitted if Supervisor, Researcher and Host Organisation are the same as in the previously submitted proposal

# 3. Budget

The applicants must enter the duration of their action and the system will automatically calculate the budget based on the number of months (for GF, separate values for each phase), country of the beneficiary (and country of partner organisation for GF) and the family situation of the experienced researcher at the call deadline.

Care should be taken when entering the data for the budget. <u>Experts will not comment on the budget but will evaluate the planned duration of each element of the fellowship</u> under the *Quality and efficiency of the implementation* criterion.

Marie Skłodowska-Curie Actions, Guide for Applicants Individual Fellowships (IF) 2016

<sup>&</sup>lt;sup>12</sup> See section 4.2 in page 15 of the "<u>Grants Manual - Section on: Proposal submission and</u> evaluation"

# Annex 4 - Instructions for drafting Part B of the Proposal

#### 1. General information

Part B of the proposal contains the details of the proposed research and training activities along with the practical arrangements planned to implement them.

Applicants must structure their proposal according to the headings indicated in the Part B proposal template.

They will be used by the independent experts to undertake their assessment. Therefore, please address each of the award criteria as outlined in the following sections. Please note that the explanatory notes below serve to explain the award criteria without being exhaustive.

A <u>Word version of part B</u> can be <u>downloaded</u> from the electronic submission services. Applicants <u>must</u> ensure that their proposals conform to this layout and to the instructions given in this Guide for Applicants.

# NEW: For the 2016 call, applicants must submit Part B of their proposal as two separate documents:

<u>Document 1:</u> must include the Start Page, the Table of Contents, the List of Participating Organisations and then Part B sections 1-3. The maximum total length for this document is 13 pages. The Start Page must consist of 1 whole page. The Table of Contents as well must consist of 1 whole page. The List of Participating Organisations must consist of 1 whole page. Section 1 must start on page 4 of the document. Of the maximum 10 pages applied to sections 1, 2 and 3, applicants are free to decide on the allocation of pages between the sections. However, the overall page limit will be strictly applied and applicants must keep the proposal within the limits. Experts will be strictly instructed to disregard any excess pages above the 13 page limit. Such excess pages will be watermarked.

**<u>Document 2:</u>** must consist of Part B sections 4-7. No overall page limit will be applied to this document, but applicants should respect the instructions given per section (e.g. in section 5, a maximum of one page should be used per beneficiary and one page per partner organisation).

Note that applicants will not be able to submit their proposals in the submission system unless both documents 1 and 2 are provided.

Please remember that it is your responsibility to verify that you conform to page limits.

<u>Part B</u> must then be <u>uploaded</u> exclusively as a <u>PDF</u> ("Portable Document Format", compatible with Adobe version 3 or higher, with embedded fonts). Other file formats will not be accepted by the electronic submission system.

In order for the proposal to be **admissible**:

- The **minimum font size** must be **11 points**, except for the Gantt chart and tables where the minimum font size is **8 points**,
- the line spacing must be single,
- the page size must be A4,
- all **margins** (top, bottom, left, right) must be at least **15 mm** (not including any footers or headers) and

• applicants must ensure that the font chosen is clearly readable (e.g. Arial or Times New Roman).

**Literature references should be listed in footnotes**, font size 8 or 9. However, regardless of the format used, all footnotes <u>will count</u> towards the page limit. The expert evaluators will be instructed to disregard any other information included in the footnote except the literature references.

Please make sure that the Part B of your proposal carries as a header on each page the proposal acronym and the fellowship type to which you are applying (i.e. Standard EF, CAR, RI, SE, or GF). All pages should be numbered in a single series on the footer of the page to prevent errors during handling. It is recommended to use the numbering format "Part B - Page X of Y".

#### 2. Letters of Commitment

Letters of Commitment are <u>only</u> required and taken into account for <u>GF</u> proposals. For the GF, **the partner organisations in TC** must include a **letter of commitment** in the proposal to ensure their real and active participation. These letters should be included in Section 7. The expert evaluators are instructed to disregard the contribution of any partner organisations for which such evidence of commitment is required and not included in the proposal. Thus, if the letter of commitment of the TC partner organisation is not provided, the proposal will be considered incomplete and will therefore be declared inadmissible.

These letters should be signed by the organisation's legal representative. Please note that no template for these letters is provided.

<u>Letters of commitment must be included within the PDF file of part B</u> of the proposal; these should not be attached in a separate PDF file or as an embedded file since this makes them invisible.

#### 3. Scientific Misconduct and Research Integrity

Please note that **the issues of scientific misconduct and research integrity are taken very seriously.** In line with the Horizon 2020 Rules for Participation, appropriate action such as termination of the Grant Agreement Preparation phase or, if the Grant Agreement has been signed, implementation of liquidated damages and financial penalties, suspension of payments, recoveries and termination of the Grant Agreement, will be taken against any applicants/beneficiaries found to have misrepresented, fabricated or plagiarised any part of their proposal. The applicants will also be required to make a "declaration on honour" in Part A of the proposal.

It is also expected that procedures for promoting research integrity and managing scientific misconduct will be addressed in the proposal. For example, applicants are encouraged to describe clear procedures for dealing with cases of misconduct (e.g. data fabrication, falsification, plagiarism, misuse of funds, double-funding, etc.) should they arise during action implementation. Principles of research integrity – as set out, for instance, in the <u>European Code of Conduct for Research Integrity</u> – will apply throughout all MSCA actions.

# **Annex 5 – Part B Template**

# **DOCUMENT 1**

# **START PAGE**

# MARIE SKŁODOWSKA-CURIE ACTIONS

Individual Fellowships (IF) Call: H2020-MSCA-IF-2016

# PART B

"PROPOSAL ACRONYM"

This proposal is to be evaluated as:

[Standard EF] [CAR] [RI] [SE] [GF] [Delete as appropriate]

Part B - Page X of Y

#### **TABLE OF CONTENTS**

In drafting PART B of the proposal, applicants <u>must follow</u> the structure outlined below.

#### **DOCUMENT 1 (13-PAGE LIMIT APPLIED)**

START PAGE (1 page)

#### LIST OF PARTICIPATING ORGANISATIONS

**START PAGE COUNT (MAX 10 PAGES SECTIONS 1-3)** 

- 1. EXCELLENCE
- 2. IMPACT
- 3. QUALITY AND EFFICIENCY OF THE IMPLEMENTATION

**STOP PAGE COUNT (MAX 10 PAGES SECTIONS 1-3)** 

#### **DOCUMENT 2 (NO OVERALL PAGE LIMIT APPLIED)**

- 4. CV OF THE EXPERIENCED RESEARCHER
- 5. CAPACITIES OF THE PARTICIPATING ORGANISATIONS
- 6. ETHICAL ASPECTS
- 7. LETTER OF COMMITMENT OF PARTNER ORGANISATION (GF ONLY)

#### Please note that:

- Applicants must ensure that document 1 does not exceed the total page limit
  of 13 pages. The Start Page must consist of 1 whole page. The Table of
  Contents must consist of 1 whole page. The List of Participating Organisations
  must consist of 1 whole page. Section 1 must start on page 4 of the
  document. Expert evaluators will be instructed to disregard any excess pages
  above the 10 page limit. Such excess pages will be watermarked.
- No reference to the outcome of previous evaluations of a similar proposal should be included in the text. Experts will be strictly instructed to disregard any such references.

# **List of Participating Organisations**

Please provide a list of all participating organisations (both beneficiaries and, where applicable, partner organisations<sup>13</sup>) indicating the legal entity, the department carrying out the work and the supervisor.

If a secondment in Europe is planned but the partner organisation is not yet known, as a minimum the type of organisation foreseen (academic/non-academic) must be stated.

For non-academic beneficiaries, please provide additional data as indicated in the table below.

| Participating organisations | Legal<br>Entity<br>Short<br>Name | Academic<br>(tick) | Non-<br>academic<br>(tick) | Country | Dept./<br>Division /<br>Laboratory | Supervisor | Role of<br>Partner<br>Organisation |
|-----------------------------|----------------------------------|--------------------|----------------------------|---------|------------------------------------|------------|------------------------------------|
| Beneficiary                 |                                  |                    |                            |         |                                    |            |                                    |
| - NAME                      |                                  |                    |                            |         |                                    |            |                                    |
| Partner<br>Organisation     |                                  |                    |                            |         |                                    |            |                                    |
| - NAME                      |                                  |                    |                            |         |                                    |            |                                    |

#### **Data for non-academic beneficiaries**

| Name | Location of research premises (city / country) | No. of full -<br>time<br>employees | No. of<br>employees in<br>R&D | Web site | Annual<br>turnover<br>(approx. in<br>Euro) | Enterprise<br>status<br>(Yes/No) | SME status <sup>15</sup><br>(Yes/No) |
|------|--|------------------------------------|-------------------------------|----------|--|----------------------------------|--------------------------------------|
|      |  |                                    |                               |          |  |                                  |                                      |

#### Please note that:

- Any inter-relationship between the participating organisation(s) or individuals and other entities/persons (e.g. family ties, shared premises or facilities, joint ownership, financial interest, overlapping staff or directors, etc.) must be declared and justified in this part of the proposal;
- The information in the table for non-academic beneficiaries **must be based** on current data, not projections.

<sup>&</sup>lt;sup>13</sup> All partner organisations should be listed here, including secondments

<sup>&</sup>lt;sup>14</sup> For example hosting secondments, for GF hosting the outgoing phase, etc.

<sup>&</sup>lt;sup>15</sup> As defined in <u>Commission Recommendation 2003/361/EC.</u>

## 1. Excellence<sup>16</sup>

# 1.1 Quality and credibility of the research/innovation action (level of novelty, appropriate consideration of inter/multidisciplinary and gender aspects)

You should develop your proposal according to the following lines:

- Introduction, state-of-the-art, objectives and overview of the action
- Research methodology and approach: highlight the type of research / innovation activities proposed
- Originality and innovative aspects of the research programme: explain the
  contribution that the action is expected to make to advancements within
  the action field. Describe any novel concepts, approaches or methods that
  will be employed.
- The gender dimension in the research content (if relevant)
- The interdisciplinary aspects of the action (if relevant)
- Explain how the high-quality, novel research is the most likely to open up the best career possibilities for the *experienced researcher* and new collaboration opportunities for the host organisation(s).

# 1.2 Quality and appropriateness of the training and of the two way transfer of knowledge between the researcher and the host

Describe the training that will be offered.

Outline how a two way transfer of knowledge will occur between the researcher and the host institution(s):

- Explain how the *experienced researcher* will gain new knowledge during the fellowship at the hosting organisation(s)
- Outline the previously acquired knowledge and skills that the researcher will transfer to the host organisation(s).

For Global Fellowships explain how the newly acquired skills and knowledge in the Third Country will be transferred back to the host institution in Europe (the beneficiary) during the incoming phase.

# 1.3 Quality of the supervision and of the integration in the team/institution

Qualifications and experience of the supervisor(s)

Provide information regarding the supervisor(s): the level of experience on the research topic proposed and their track record of work, including main international collaborations, as well as the level of experience in supervising researchers. Information provided should include participation in projects, publications, patents and any other relevant results.

<sup>&</sup>lt;sup>16</sup> Literature should be listed in footnotes, font size 8 or 9. All literature references <u>will count</u> towards the page limit.

# • Hosting arrangements<sup>17</sup>

The application must show that the experienced researcher will be well integrated within the team/institution in order that all parties gain the maximum knowledge and skills from the fellowship. The nature and the quality of the research group/environment as a whole should be outlined, together with the measures taken to integrate the researcher in the different areas of expertise, disciplines, and international networking opportunities that the host could offer.

For GF both phases should be described - for the outgoing phase, specify the practical arrangements in place to host a researcher coming from another country, and for the incoming phase specify the measures planned for the successful (re-)integration of the researcher.

# 1.4 Capacity of the researcher to reach or re-enforce a position of professional maturity/independence

Applicants should demonstrate how the proposed research and training will contribute to the further professional development as an independent/mature researcher.

Describe **briefly** how the host will contribute to the advancement of the researcher's career.

Please keep in mind that the fellowships will be awarded to the most talented researchers as shown by the proposed research and their track record (Curriculum Vitae, section 4), in relation to their level of experience.

A complete Career Development Plan should not be included in the proposal, but it is part of implementing the action in line with the European Charter for Researchers.

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 $<sup>^{17}</sup>$  The hosting arrangements refer to the integration of the researcher to his new environment in the premises of the host. It does not refer to the infrastructure of the host as described in the Quality and efficiency of the implementation criterion.

# 2. Impact

# 2.1 Enhancing the potential and future career prospects of the researcher

Explain the expected <u>impact of the planned research and training</u> on the career prospects of the experienced researcher after the fellowship. Which <u>new competences</u> will be acquired?

# 2.2 Quality of the proposed measures to exploit and disseminate the action results

Describe how the new knowledge generated by the action will be disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised.

What is the dissemination strategy - targeted at scientists, potential users and to the wider research and innovation community - to achieve the potential impact of the action?

Please make also reference to the "Dissemination & exploitation" section of the H2020 Online Manual.

The following section of the European Charter for Researchers refers specifically to dissemination:

# Dissemination, exploitation of results

All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises.

Concrete planning for section 2.2 must be included in the Gantt Chart (see point 3.1).

# 2.3. Quality of the proposed measures to communicate the action activities to different target audiences

Please make also reference to the guidelines <u>Communicating EU research and innovation guidance for project participants</u> as well as to the <u>"communication"</u> section of the H2020 Online Manual.

Concrete planning for section 2.3 must be included in the Gantt Chart (see point 3.1).

The following section of the European Charter for Researchers refers specifically to public engagement:

#### **Public engagement**

Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns.

# 3. Quality and Efficiency of the Implementation

# 3.1 Coherence and effectiveness of the work plan

The proposal should be designed in such a way to achieve the desired impact. A Gantt Chart should be included in the text listing the following:

- Work Packages titles (for EF there should be at least 1 WP);
- List of major deliverables, if applicable; 18
- List of major milestones, if applicable; <sup>19</sup>
- Secondments, if applicable.

The schedule should be in terms of number of months elapsed from the start of the action.

Marie Skłodowska-Curie Actions, Guide for Applicants Individual Fellowships (IF) 2016

<sup>&</sup>lt;sup>18</sup> A deliverable is a distinct output of the action, meaningful in terms of the action's overall objectives and may be a report, a document, a technical diagram, a software, etc. Should the applicants wish to participate in the pilot on Open Research Data, the Data Management Plan should be indicated here.

Deliverable numbers ordered according to delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.

Milestones are control points in the action that help to chart progress. Milestones may correspond to the completion of a key deliverable, allowing the next phase of the work to begin. They may also be needed at intermediary points so that, if problems have arisen, corrective measures can be taken. A milestone may be a critical decision point in the action where, for example, the researcher must decide which of several technologies to adopt for further development.

# **Example Gantt Chart**

# Reflecting work package, secondments, training events and dissemination / public engagement activities

|                   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | Global Fellowship only |    |    |    |    |    |    |    |    |    |    |    |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------------------------|----|----|----|----|----|----|----|----|----|----|----|
| Month             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25                     | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |
| Work<br>package   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Deliverable       |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Milestone         |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Secondment        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Conference        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Workshop          |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Seminar           |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Dissemination     |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Public engagement |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |
| Other             |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                        |    |    |    |    |    |    |    |    |    |    |    |

Delete rows and columns that do not apply.

### 3.2. Appropriateness of the allocation of tasks and resources

Describe how the work planning and the resources mobilised will ensure that the research and training objectives will be reached.

Explain why the amount of person-months is appropriate in relation to the activities proposed.

# 3.3 Appropriateness of the management structure and procedures, including risk management

#### Describe the:

- Organisation and management structure, as well as the progress monitoring mechanisms put in place, to ensure that objectives are reached;
- Research and/or administrative risks that might endanger reaching the action objectives and the contingency plans to be put in place should risk occur.

# 3.4 Appropriateness of the institutional environment (infrastructure)

The active contribution of the beneficiary to the research and training activities should be described. For GF also the role of partner organisations in Third Countries for the outgoing phase should appear.

- <u>Give a description of the main tasks</u> and commitments of the beneficiary and all partner organisations (if applicable).
- Describe the infrastructure, logistics, facilities offered in as far they are necessary for the good implementation of the action.

**STOP PAGE COUNT - MAX 10 PAGES** 

# **DOCUMENT 2**

# 4. CV of the Experienced Researcher

The CV is intrinsic to the evaluation of the whole proposal and is assessed throughout the 3 evaluation criteria by the expert evaluators.

This section should be limited to maximum 5 pages and should include **the standard academic and research record.** Any research career gaps and/or unconventional paths should be clearly explained so that this can be fairly assessed by the independent evaluators.

The *experienced researchers* must provide a list of achievements reflecting their track record, and this <u>may</u> include, <u>if applicable</u>:

- Publications in peer-reviewed scientific journals, peer-reviewed conference proceedings and/or monographs of their respective research fields, indicating also the number of citations (excluding self-citations) they have attracted.
- 2. Granted patent(s).
- 3. **Research monographs, chapters** in collective volumes and any translations thereof.
- 4. **Invited presentations** to peer-reviewed, internationally established conferences and/or international advanced schools.
- 5. **Research expeditions** that the *experienced researcher* has led.
- 6. **Organisation of International conferences** in the field of the researcher (membership in the steering and/or programme committee).
- 7. Examples of participation in industrial innovation.
- 8. Prizes and Awards.
- 9. Funding received so far
- 10. Supervising, mentoring activities, if applicable.

# 5. Capacity of the Participating Organisations

Beneficiaries and partner organisations must complete the appropriate table below.

Complete one table (min font size: 9) of maximum one page per beneficiary and one page per partner organisation. The expert evaluators will be instructed to disregard content above this limit.

| Beneficiary X  |  |
|--|--|
| General Description  |  |
| Role and Commitment of key persons (supervisor)                | (names, title, qualifications of the main supervisor)  |
| Key Research Facilities,<br>Infrastructure and<br>Equipment    | Demonstrate that the beneficiary has sufficient facilities and infrastructure to host and/or offer a suitable environment for training and transfer of knowledge to the recruited experienced researcher |
| Independent research premises?                                 | Please explain the status of the beneficiary's research facilities – i.e. are they owned by the beneficiary or rented by it? Are its research premises wholly independent from other entities?           |
| Previous Involvement in<br>Research and Training<br>Programmes | Detail any (maximum 5) relevant EU, national or international research and training actions/projects in which the beneficiary has previously participated  |
| Current involvement in Research and Training Programmes        | Detail the EU and/or national research and training actions in which the beneficiary is currently participating  |
| Relevant Publications and/or research/innovation products      | (Max 5) Only list items (co-)produced by the supervisor  |

| Partner Organisation Y   |         |
|--|---------|
| General description  |         |
| Key Persons and Expertise (supervisor)                                     |         |
| Key Research facilities, infrastructure and equipment                      |         |
| Previous and Current<br>Involvement in Research<br>and Training Programmes |         |
| Relevant Publications and/or research/innovation product                   | (Max 3) |

#### 6. Ethical Issues

Compliance with the relevant ethics provisions is essential from the beginning to the end of the action and is an integral part of research funded by the European Union within Horizon 2020.

Applicants submitting research proposals for funding within Marie Skłodowska-Curie actions in Horizon 2020 should demonstrate proactively to the REA that they are aware of and will comply with European and national legislation and fundamental ethical principles, including those reflected in the <u>Charter of Fundamental Rights of the European Union</u> and the <u>European Convention on Human Rights and its Supplementary Protocols</u>.

Please be aware that it is the applicants' responsibility to identify any potential ethical issue, to handle the ethical aspects of the proposal and to detail how these aspects will be addressed.

# **The Ethics Review Procedure in Horizon 2020**

All proposals above threshold and considered for funding will undergo an Ethics Review carried out by independent ethics experts. When submitting a proposal to Horizon 2020, all applicants are required to complete an "Ethics Issues Table (EIT)" in the Part A of the proposal. Applicants who flag ethical issues in the EIT have to also complete a more in depth Ethics Self-Assessment in Part B.

The ethics self-assessment will become part of the Grant Agreement and may thus lead to binding obligations that may later on be checked during ethics checks, reviews and audits.

For more details, please refer to the H2020 "How to complete your Ethics Self- Assessment" guide.

#### **Ethics Self-Assessment (Part B)**

The Ethics Self-Assessment must:

1) Describe how the proposal meets the EU and national legal and ethics requirements of the country/countries where the task raising ethical issues is to be carried out.

For more information on how to deal with Third Countries please see Article 34 of the <u>Annotated Model Grant Agreement</u>, as well as the following <u>link</u>.

Please list the documents provided with their expiry date.

Ensure early compliance of the proposed research with EU and national legislation on ethics in research. Should your proposal be selected for funding, you will be required to provide as soon as possible the following documents (if applicable):

- an opinion from an Ethics Committee/Authority, required under national law;
- any other ethics-related documents mandatory under EU or national legislation;

If you have not already applied for/received the ethics approval/required ethics documents when submitting the proposal, please indicate in this section the

approximate date when you will provide the missing approval/any other ethics documents, to the REA (scanned copy). Please state explicitly that you will not proceed with any research with ethical implications before the REA has received a scanned copy of all documents proving compliance with existing EU/national legislation on ethics.

If these documents are not issued in English, you are encouraged to submit also an English summary (containing in particular, if available, the conclusions of the Committee or Ethics Authority concerned).

If you plan to request these ethics documents specifically for your proposed action, your request must contain an explicit reference to the action's title.

# 2) Explain in detail how you intend to address the ethical issues flagged, in particular with regard to:

- the research **objectives** (e.g. study of vulnerable populations, cooperation with a Third Country, etc.);
- the research **methodology** (e.g. clinical trials, involvement of children and related information and consent/assent procedures, data protection and privacy issues related to data collected, etc.);
- the potential **impact** of the research (e.g. dual use issues, environmental damage, malevolent use, etc.).

# 7. Letters of Commitment (GF only)

Please use this section only for the Global Fellowships to insert **scanned copies** of the required **Letters of Commitment from the partner organisations in TC.** Minimum requirements for the letter of commitment:

- heading or stamp from the institution;
- up-to-date (i.e. issued after the call publication date, 12 April 2016);
- the text must demonstrate the will to actively participate in the proposed action and the precise role;
- signed by the legal representative.

Please note that proposals failing to comply with the above-mentioned requirements will be declared inadmissible.

# **ENDPAGE**

# MARIE SKŁODOWSKA-CURIE ACTIONS

Individual Fellowships (IF) Call: H2020-MSCA-IF-2016

# PART B

"PROPOSAL ACRONYM"

This proposal is to be evaluated as:

[Standard EF] [CAR] [RI] [SE] [GF] [Delete as appropriate]

Part B - Page X of Y

# **Annex 6 – List of Descriptors**

#### **Explanatory notice:**

The standard European Fellowships and Global Fellowships will have a ranking list for each of these eight (8) areas. For the CAR, RI, and SE panels, one multidisciplinary ranking list for each will be created. The SE panel has its own earmarked budget of  $\leq 10$  million.

In the electronic submission system (SEP) the applicants should choose the scientific area and descriptors (keywords) carefully since this will guide the REA in the selection of the most appropriate experts for the proposal evaluation. The number of descriptors will range from three (3) to five (5) as explained below. Applicants must:

- 1) <u>Select one of the 5 types of fellowship</u> (EF-ST, EF-CAR, EF-RI, EF-SE, GF) for which their proposal is submitted.
- 2) <u>Select the area of research (e.g.: CHE)</u> in which the proposal best fits, in section 1 of the proposal submission forms. This should be considered as the core discipline of the proposal.
- 3) Within the most relevant sub-area of research (e.g.: C1-Synthetic Chemistry and Materials), **select the first descriptor** that best characterises the subject of the proposal (e.g. Colloid Chemistry).
- 4) **The second descriptor** that best characterises the subject of the proposal can be selected within the area of research (e.g.: CHE) that has been selected in step 2.
- 5) Third descriptor: it is mandatory to select at least one (1) additional descriptor which can be chosen from any of the eight (8) area of research.
- 6) If needed **you may add further two (2) additional descriptors** chosen freely.

Please note that you should select the descriptors in order of importance, the first being the most important.

To help you select the most relevant area for your proposal, the following list provides a breakdown of each scientific area into a number of descriptors.

# **Chemistry (CHE)**

Area of research

**Descriptors** 

# C1 - Synthetic Chemistry and Materials

**Sub-Area of research** 

Biomaterials, Biomaterials synthesis

Chemistry of condensed matter

Colloid chemistry

Combinatorial chemistry

Coordination chemistry

Corrosion

Intelligent materials, self-assembled materials

Ionic liquids

Macromolecular chemistry

Materials for sensors

Molecular chemistry

Nanochemistry

Nano-materials (production and properties)

New materials: oxides, alloys, composite, organic-inorganic hybrid,

nanoparticles

Porous materials

Solid state materials

Structural properties of materials

Supramolecular chemistry

Surface modification

Thin films

#### <u>C2 - Physical and Analytical Chemical Sciences</u> **Sub-Area of research**

**Descriptors** 

Analytical chemistry

Chemical instrumentation

Chemical reactions: mechanisms, dynamics, kinetics and catalytic

Electrochemistry, electro dialysis, microfluidics, sensors

Method development in chemistry

Molecular architecture and structure

Photochemistry

Physical chemistry

Physical chemistry of biological systems

Radiation and nuclear chemistry

Spectroscopic and spectrometric techniques

Surface chemistry

Theoretical and computational chemistry

### C3 - Organic/environmental/food chemistry

**Sub-Area of research** 

**Descriptors** 

Biogeochemistry, biogeochemical cycles, environmental chemistry Environment chemistry

Food chemistry

Forensic chemistry
Heterocyclic chemistry
Medicinal chemistry
Organic chemistry
Peptide chemistry
Polymer chemistry
Translational chemistry

### **Economic Sciences (ECO)**

**Area of research** 

Sub-Area of research

### E1 - Economics, finance and management

Banking & Finance

**Descriptors** 

Behavioural economics

Cluster development

Competitiveness, innovation, research and development

Econometrics, statistical methods

Economic geography

Economic history, development

Entrepreneurship

Financial markets, asset prices, international finance

Human resource management

Industrial economics

Innovation Management

International trade

Labour economics, income distribution and poverty

Macroeconomics

Microeconomics

Natural resources and environmental economics

Organization studies: theory & strategy, industrial organization

Public administration

Public economics

Research management

Social economics

Urban and regional economics

# **Information Science and Engineering (ENG)**

Area of research

#### G1 - Computer science and informatics

Sub-Area of research

### **Descriptors**

Algorithms, distributed, parallel and network algorithms, algorithmic game theory

Artificial intelligence, intelligent systems, multi agent systems Bioinformatics, e-Health, medical informatics

Cognitive science, human computer interaction, natural language processing

Complexity and cryptography, electronic security, privacy, biometrics

Computational geometry, theorem proving, symbolic, algebraic computations

Computer architecture, pervasive computing, ubiquitous computing Computer games, multi-media, augmented and virtual reality Computer graphics, computer vision, multi media, computer games Computer systems, parallel/distributed systems, grid, cloud processing systems

e-commerce, e-business, computational finance

e-learning, user modelling, collaborative systems

Informatics and information systems

Intelligent robotics, cybernetics

Internet and semantic web, database systems and libraries

Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video)

Numerical analysis, simulation, optimisation, modelling tools, data mining

Ontologies, neural networks, genetic programming, fuzzy logic

Scientific computing and data processing

Sensor networks, embedded systems, hardware platforms

Software engineering, operating systems, computer languages

Theoretical computer science, formal methods, quantum computing

#### **Sub-Area of research**

<u>G2 - Systems and Communication Engineering: Electrical, electronic, communication, optical and systems engineering</u>

Control Engineering

**Descriptors** 

Diagnostic and implantable devices, environmental monitoring Electrical and electronic engineering: semiconductors, components, systems

Electronics, photonics

Man-machine-interfaces

Nano engineering

Networks (communication networks, sensor networks, networks of robots, etc.)

Optical engineering, photonics, lasers

Signal processing

Simulation engineering and modelling

Systems engineering, sensorics, actorics, automation

Wireless communications, communication, high frequency, mobile technology

# **Sub-Area of research**

<u>G3 - Products and Processes Engineering: Product design, process design and control, construction methods, civil engineering, energy processes, material engineering</u>

Aerospace engineering

**Descriptors** 

Architecture, smart buildings, smart cities, urban engineering Chemical engineering, technical chemistry

Civil engineering, maritime/hydraulic engineering, geotechnics, waste treatment

Computational engineering and computer aided design

Energy collection, conversion and storage, renewable energy

Energy systems, smart energy, smart grids, wireless energy transfer

Environmental engineering and geotechnics

Fluid mechanics, hydraulic-, turbo-, and piston engines

Industrial bioengineering

Industrial design (product design, ergonomics, man-machine interfaces, etc.)

Lightweight construction, textile technology

Materials engineering

Mechanical and manufacturing engineering (shaping, mounting, joining, separation)

Production technology, process engineering

Sustainable design (for recycling, for environment, eco-design)

Transport engineering, intelligent transport systems

### **Environmental and Geosciences (ENV)**

Area of research

### V1 - Environment and society

**Sub-Area of research** 

Environmental regulations and climate negotiations **Descriptors** Geographical information systems, cartography

Mobility and transportation

Population dynamics

Social and industrial ecology

Spatial and regional planning

Sustainability sciences, environment and resources

Urbanization and urban planning, cities

#### V2 - Earth system science

Sub-Area of research Descriptors

Atmospheric chemistry, atmospheric composition, air pollution

Climatology and climate change

Earth observations from space/remote sensing

Geochemistry, crystal chemistry, isotope geochemistry,

thermodynamics

Geology, tectonics, volcanology

Geomagnetism, paleomagnetism

Hydrology, water and soil pollution

Meteorology, Atmospheric physics and dynamics

Mineralogy, petrology, igneous petrology, metamorphic petrology

Natural Hazards

Natural Resources Exploration and Exploitation

Oceanography

Ozone, upper atmosphere, ionosphere

Paleoclimatology, paleoecology

Physical geography
Physics of earth's interior, seismology, volcanology
Pollution (water, soil), waste disposal and treatment
Sedimentology, soil science, palaeontology, earth evolution
Terrestrial ecology, land cover change

#### V3 - Evolutionary, population and environmental biology **Sub-Area of research**

Animal behaviour

Water management

**Descriptors** 

Biodiversity, comparative biology

Biogeography, macro-ecology

Conservation biology, ecology, genetics

Environmental and marine biology

Environmental toxicology at the population and ecosystems level

Systems evolution, biological adaptation, phylogenetics,

systematics, comparative biology

Population biology, population dynamics, population genetics Species interactions (e.g. food-webs, symbiosis, parasitism, mutualism)

# V4 - Applied Life Sciences and Non-Medical Biotechnology**Sub-Area of research**

# **Descriptors**

Agriculture related to animal husbandry, dairying, livestock raising Agriculture related to crop production, soil biology and cultivation, applied plant biology

Agroindustry

Applied biotechnology (non-medical), bioreactors, applied microbiology

Aquaculture, fisheries

Biohazards, biological containment, biosafety, biosecurity

**Biomimetics** 

Crop protection and production

Environmental biotechnology, bioremediation, biodegradation

Food sciences

Forestry, biomass production (e.g. for biofuels)

Pest control

Synthetic biology, chemical biology and new bio-engineering Concepts

#### Life Sciences (LIF)

Area of research

#### L1 - Molecular and Structural Biology

Sub-Area of research

Biophysics Descriptors

DNA synthesis, modification, repair, recombination and degradation Metabolism

Molecular biology and interactions Protein synthesis, modification and turnover RNA synthesis, processing, modification and degradation Structural biology

#### Sub-Area of research

# <u>L2 - Genetics, Genomics, Bioinformatics and Systems Biology</u>

#### **Descriptors**

Applied genetic engineering, transgenic organisms, recombinant proteins, biosensors

**Bioinformatics** 

Biological systems analysis, modelling and simulation

**Biostatistics** 

Computational biology

Epigenetics and gene regulation

Genetic epidemiology

Genomics, comparative genomics, functional genomics

Glycomics

Metabolomics

Molecular genetics, reverse genetics and RNAi

**Proteomics** 

Quantitative genetics

Systems biology

**Transcriptomics** 

#### L3 - Cellular and Developmental Biology

#### **Sub-Area of research**

# **Descriptors**

Animal-related development, development genetics, pattern formation and embryology

**Apoptosis** 

Cell biology and molecular transport mechanisms

Cell cycle and division

Cell differentiation, physiology and dynamics

Cell genetics

Cell signalling and cellular interactions

Morphology and functional imaging of cells

Organelle biology

Development, developmental genetics, pattern formation and embryology in plants

Signal transduction

Stem cell biology

### <u>L4 - Physiology, Pathophysiology and Endocrinology</u>

**Sub-Area of research** 

Ageing **Descriptors** 

Cancer and its biological basis

Cardiovascular diseases

Comparative physiology and pathophysiology

Endocrinology

Metabolism, biological basis of metabolism related disorders

Non-communicable diseases (except for neural/psychiatric,
immunity-related, metabolism-related disorders, cancer and
cardiovascular diseases)

Organ physiology and pathophysiology

#### L5 - Neurosciences and neural disorders

#### **Sub-Area of research**

#### **Descriptors**

Behavioural neuroscience (e.g. sleep, consciousness, handedness)

Cognition (e.g. learning, memory, emotions, speech)

Developmental neurobiology

Mechanisms of pain

Molecular and cellular neuroscience

Neuroanatomy and neurophysiology

Neurochemistry and neuropharmacology

Neuroimaging and computational neuroscience

Neurological disorders (e.g. Alzheimer's disease, Huntington's disease, Parkinson's disease)

Psychiatric disorders (e.g. schizophrenia, autism, Tourette's syndrome, obsessive compulsive disorder, depression, bipolar disorder, attention deficit hyperactivity disorder)

Sensory systems (e.g. visual system, auditory system) Systems neuroscience

#### <u>L6 - Immunity and infection</u>

#### **Sub-Area of research**

**Descriptors** 

Adaptive immunity

Bacteriology

Biological basis of immunity related disorders

**Immunogenetics** 

Immunological memory and tolerance

**Immunosignalling** 

Innate immunity and inflammation

Microbiology

Parasitology

Phagocytosis and cellular immunity

Prevention and treatment of infection by pathogens (e.g.

vaccination, antibiotics, fungicide)

Veterinary medicine and infectious diseases in animals

Virology

#### <u>L7 - Diagnostic tools, therapies and public health</u>

**Sub-Area of research** 

Diagnostic tools (e.g. genetic, imaging)
Environment and health risks, occupational medicine
Gene therapy, cell therapy, regenerative medicine

Health services, health care research

Medical engineering and technology

Medical ethics

Medical pathology

Medical physics

Pharmacology, pharmacogenomics, drug discovery and design, drug therapy

Public health and epidemiology

Radiation therapy

Surgery

### **Mathematics (MAT)**

#### Area of research

#### **Sub-Area of research**

M1 - Pure and Applied Mathematics, mathematical foundations of computer science, mathematical physics and statistics

> Algebra **Descriptors**

Algebraic and complex geometry

Algorithms and complexity

**Analysis** 

Application of mathematics in sciences

Control theory and optimization

Discrete mathematics and combinatorics

Geometry

Lie groups, Lie algebras

Logic and foundations

Mathematical aspects of computer science

Mathematical physics

Number theory

Numerical analysis and scientific computing

ODE and dynamical systems

Operator algebras and functional analysis

Probability and statistics

Theoretical aspects of partial differential equations

Topology

#### Physics (PHY)

#### Area of research

**Descriptors** 

#### P1 - Fundamental constituents of matter

Acoustics

Sub-Area of research

Atomic, molecular physics

Classical physics

Electromagnetism

Fundamental interactions and fields

Gas and plasma physics

General physics

Lasers, ultra-short lasers and laser physics

Metrology and measurement

Non-linear physics

Nuclear astrophysics

Particle physics

Quantum optics and quantum information

Relativity

Statistical physics (gases)

Thermodynamics

### P2 - Condensed matter physics

#### **Sub-Area of research**

Electronic properties of materials and transport **Descriptors** 

Fluid dynamics (physics)

Magnetism and strongly correlated systems

Mechanical and acoustical properties of condensed matter, Lattice dynamics

Mesoscopic physics

Molecular electronics

Nanophysics: nanoelectronics, nanophotonics, nanomagnetism,

nanoelectromechanics, etc.

Phase transitions, phase equilibria

Semiconductors

Soft condensed matter

**Spintronics** 

Statistical physics (condensed matter)

Structure of solids and liquids

Superconductivity

Superfluids

Thermal properties of condensed matter

Transport properties of condensed matter

#### P3 - Universe sciences

#### **Sub-Area of research**

Astrobiology **Descriptors** 

Nuclear physics

Clusters of galaxies and large scale structures

Cosmology

Dark matter, dark energy

Formation and evolution of galaxies

Formation of stars and planets

Gravitational astronomy

High energy and particles astronomy - X-rays, cosmic rays, gamma rays, neutrinos

Instrumentation - telescopes, detectors and techniques

Interstellar medium

Planetary systems sciences

Relativistic astrophysics

Solar and interplanetary physics

Space Sciences

Stars and stellar systems
Surface physics
Surface science and nanostructures
The Galaxy

# **Social Sciences and Humanities (SOC)**

Area of research

#### S1 - Sociology, social anthropology

**Sub-Area of research** 

Ageing, work, social policies

**Descriptors** 

Attitudes and beliefs

Ethnography

Globalization, migration, interethnic relations

Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour

Kinship, cultural dimensions of classification and cognition, identity, gender

Myth, ritual, symbolic representations, religious studies

Social influence; power and group behaviour; classroom management

Social integration, exclusion, prosocial behaviour

Social structure, social mobility

Transformation of societies, democratization, social movements

#### S2 - Political science, law, communication

**Sub-Area of research** 

Communication networks, media, information society **Descriptors** Digital social research

Global and transnational governance, international law, human rights

History of science and technology

Human, economic and social geography

Legal systems, constitutions, foundations of law

Political systems and institutions, governance

Private, public and social law

Social studies of science and technology

### **Sub-Area of research**

### S3 - Cognition, psychology, linguistics, philosophy and education

Clinical and experimental psychology

**Descriptors** 

**Education policy** 

Education: systems and institutions, teaching and learning

Epistemology, logic, philosophy of science

Ethics and morality, bioethics

Evolution of mind and cognitive functions, animal communication

Formal, cognitive, functional and computational linguistics

History of philosophy

Human life-span development

Language pathologies, lexicography

Learning, memory; cognition in ageing

Metaphysics, philosophical anthropology; aesthetics

Neuropsychology and cognitive psychology

Psycholinguistics and neurolinguistics: acquisition and knowledge of language, language pathologies

Social and political philosophy

Typological, historical and comparative linguistics

Use of language: pragmatics, sociolinguistics, discourse analysis, second language teaching and learning, lexicography, terminology

#### Sub-Area of research

### S4 - Literature, arts, music, cultural and comparative studies

Classics, ancient Greek and Latin literature and art **Descriptors**Computational Modelling and Digitisation in the Cultural Sphere
Cultural memory, intangible cultural heritage

Cultural studies, cultural diversity

History of art and architecture, arts-based research

History of literature

Literary theory and comparative literature, literary styles

Museums and exhibitions, conservation and restoration

Music and musicology, history of music

Numismatics, epigraphy

Textual philology, palaeography and epigraphy

Visual arts, performing arts, film, design

#### S5 - Archaeology, history and memory

#### **Sub-Area of research**

**Descriptors** 

Ancient history

Classical archaeology, history of archaeology

Collective memories, identities, lieux de mémoire, oral history

Colonial and post-colonial history, global and transnational history, entangled histories

Cultural heritage, cultural memory

Gender history; Cultural History; History of Collective Identities and Memories

General archaeology, archaeometry, landscape archaeology

Historiography, theory and methods in history, including the analysis of digital data

History of ideas, intellectual history, history of science and techniques

Medieval history

Military history

Modern and contemporary history

Prehistory, palaeoanthropology, palaeodemography, protohistory Social, economic, cultural and political history