

European Research Council

Executive Agency

Established by the European Commission



European Research Council (ERC) Frontier Research Grants

Information for Applicants to the Synergy Grant 2018 Call

> Version 2.0 10 August 2017

This document is published by the ERC Scientific Council on the ERC website. It can also be downloaded from the Research and Innovation Participant Portal.

Purpose of this document

This document provides practical information to potential applicants in preparing and submitting an application for an ERC Synergy Grant.

The document is divided into two parts:

- 1: Applying for an ERC Synergy Grant
- 2: Annexes

The present document is based on the legal documents setting the rules and conditions for the ERC frontier research grants, in particular the ERC Work Programme 2018¹, the revised ERC Rules for Submission of proposals and the related evaluation, selection and award procedures relevant to the specific programme of H2020 – the Framework programme for Research and Innovation (2014-2020)² (hereinafter ERC Rules for Submission), and the ERC Model Grant Agreement. This document does not supersede the afore-mentioned documents, which are legally binding. Should there be any discrepancies between the aforementioned legal documents and this document, the former will prevail. The European Commission, the ERC Executive Agency or any person or body acting on their behalf cannot be held responsible for the use made of this document.

The <u>Guide for ERC Peer Reviewers</u> – applicable to Synergy Grants, provides practical information on the evaluation process.

Note: As with other parts of the EU's Horizon 2020 Framework Programme, National Contact Points (ERC NCPs) have been set up across Europe³ by the national governments to provide information and personalised support to ERC applicants in their native language. The mission of the ERC NCPs is to raise awareness, inform and advise on ERC funding opportunities as well as to support potential applicants in the preparation, submission and follow-up of ERC grant applications. For details on the ERC NCP in your country please consult the ERC website at http://erc.europa.eu/national-contact-points or the Participant Portal at:

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

	HISTORY OF CHANGES		
Version	Publication date	Changes	
1.0	3 August 2017	Initial version	
2.0	10 August 2017	Correction of the text related to VAT exclusion from being an eligible cost (p.12, section 3)	

Abbreviations used in this document:

ERCEA - European Research Council Executive Agency

cHI - corresponding Host Institution

cPI - corresponding Principal Investigator

HI - Host Institution

PI - Principal Investigator

PP- Participant Portal

PPSS - Participant Portal Submission System

WP - Work Programme

¹ European Commission decision C(2017) 5307/2 of 2 August 2017.

² European Commission decision C(2017) 4750 of 12 July 2017.

³ This applies to EU Member States and Associated Countries. Some other countries also provide this service.

TABLE OF CONTENTS

PURPOSE OF	THIS DOCUMENT	2	
1: APPLYIN	G FOR AN ERC SYNERGY GRANT	4	
1.1 Pre	paring and submitting an ERC Synergy Grant application	5	
1.1.1	1.1.1 Objectives and distinctive features of ERC Synergy Grants 2018		
1.1.2	How to complete the grant application	12	
1.1.	2.1 Completing the online administrative Proposal Submission Forms	12	
1.1.	2.2 Instructions for completing 'Part B' of the proposal	22	
1.1.	2.3 Supporting documentation	27	
1.1.3	How to submit the grant application	29	
1.1.	3.1 Modifying or withdrawing a proposal	36	
1.2 Eva	luation and selection of grant proposals	38	
1.2.1	Eligibility Check	38	
1.2.2	Peer review evaluation of proposals	38	
1.2.3	Ethics Review	41	
1.2.4	Evaluation criteria	42	
1.2.5	Outcome of evaluation	43	
1.2.6	Feedback to applicants	44	
1.2.	1.2.6.1 Evaluation review (or redress) procedure4		
2: ANNEXES	5	46	
Annex 1:	ERC Keywords	47	
Social	Sciences and Humanities	47	
Physical Sciences and Engineering49			
Life Sciences53			
Annex 2: corresponding Host Institution support letter57			
Annex 3:	Annex 3: Specific Guidance Related to Ethics60		

1: Applying for an ERC Synergy Grant

1.1 Preparing and submitting an ERC Synergy Grant application

1.1.1 Objectives and distinctive features of ERC Synergy Grants 2018

The <u>ERC Work Programme 2018</u> sets out the Objectives and Principles of ERC funding. ERC Synergy Grants are intended to enable minimum two to maximum four Principal Investigators (PIs) and their teams to bring together complementary skills, knowledge, and resources in new ways, in order to jointly address ambitious research questions. Independent researchers of any age and career stage can apply for up to six years funding. No specific eligibility criteria regarding the academic training are foreseen for PIs applying for ERC Synergy Grants.

Applications can be made in any field of research with an emphasis on the frontiers of science, scholarship and engineering. In particular, proposals of an interdisciplinary nature which cross the boundaries between different fields of research, pioneering proposals addressing new and emerging fields of research or proposals introducing unconventional, innovative approaches and scientific inventions are encouraged. This should enable transformative research not only at the forefront of European science but also to become a benchmark on a global scale.

Applicant PIs must demonstrate the synergies, complementarities and added value that could lead to breakthroughs that would not be possible by the individual PIs working alone.

As in every ERC frontier research call, the funding decision is based on the sole criterion of scientific excellence; of both the PIs and the research proposal. However, in the ERC Synergy Grant, scientific excellence takes on an additional meaning: its intrinsic synergetic effect. 'Synergy' must not be perceived as similar to mere cooperation or networking, but rather as a unique combination of knowledge and skills in tackling those research problems that require precisely this novel and unique combination. It is therefore of utmost importance not to confuse the term 'synergy' and its requirements with the concepts and the terminology of other parts of the H2020 Framework Programme. It might come with novel multi- or trans-disciplinary approaches or with the boldness of combining knowledge and skills in a single discipline or research field. Consequently, each proposal must demonstrate that its objectives can only be achieved through the specific combination of knowledge and skills brought together by the participating PIs. In other words, each proposal must make clear its synergetic effect.

True to its bottom-up approach the Scientific Council remains open to what applicants choose as the best ways of working together. When defining the principles underlying the ERC Synergy Grant scheme, the Scientific Council, in fact, deliberately abstained from defining what the required or most appropriate working arrangement should be. Nevertheless, the applicants are expected to explain the **feasibility and appropriateness of the working arrangements** by coming up with ideas on how to spend time together in ways that best suit the aims and goals of their research in order to convince the reviewing panels (or reviewers) about the outstanding and exceptional work together.

As with any other frontier research funded by the ERC, research proposals are expected to be **risky**. It remains important, however, that the risk and how it will be managed is well thought through and explained in the proposal.

The peer reviewers are asked to look at these distinct features – quality of the science proposed, synergy, working arrangements and risk – when assessing the excellence of the proposal.

This action is open to researchers of any nationality who intend to conduct their research activity in any EU Member State⁴ or Associated Country⁵.

One of the PIs has to be designated as corresponding Principal Investigator (cPI), who will be the administrative contact point on behalf of the corresponding Host Institution (cHI), other PIs as well as other HIs. The constitution of the research teams is flexible. Depending on the nature of a project, the research team may involve team members from other research organisations situated in the same or a different country.

In the case of Synergy Grants, where the different Principal Investigators may be hosted by more than one Host Institution, each of the Host Institutions shall offer their support to the Principal Investigator(s) hosted by them for the duration of the grant. At submission stage, however, only the corresponding Host Institution must provide the host support letter for the corresponding Principal Investigator. The Host Institutions must engage the Principal Investigators for at least the duration of the grant.

The call 'ERC-2018-SYG' consists of one call with a single deadline applying to any field of science, engineering or scholarship. The guiding principles of the ERC Synergy Grants are highlighted in Box 1.

Box 1 Guiding principles of the ERC Synergy Grants

- A small group of PIs (2 to 4) with a designated corresponding PI (cPI) can apply for funding.
- Scientific excellence is the sole criterion on the basis of which ERC frontier research grants are awarded synergetic aspects enrich this criterion.
- Applications must demonstrate that the proposed research cannot be carried out by a single PI working alone.
- Synergy grants aims to tackle truly bold scientific challenges through a unique combination of skills and knowledge of the PIs.
- Applications can be made in any field of research.
- PIs from anywhere in the world can apply for an ERC grant.
- HIs must be established in an EU Member State⁴ or Associated Country⁵.
- Grants are awarded to the corresponding HI (cHI) that engages and hosts the cPI. The cPI will be employed by the cHI, while other applicant PIs may be engaged by different Host Institutions.
- Grants are awarded for up to 6 years, with a normal grant size of up to EUR 10 000 000, with an additional up to EUR 4 000 000 in special cases as specified below.
- HIs must provide conditions for the PI's independence to direct the research and manage its funding.

⁴ The EU Member States are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom.

⁵-Please consult the link for the list of <u>Associated Countries</u>. Please also check the <u>online manual</u> for up-to-date information on the current position for Associated Countries.

Expected time commitment of the Synergy Grant Pls

With the support of the HI, successful PIs will be expected to lead their individual teams. The question of whether each of the PIs is strongly committed to the project and demonstrates the willingness to devote a significant amount of time to the project forms a key part of the evaluation. Each of the PIs funded through a ERC Synergy Grant shall spend a minimum of 50% of their total working time in an EU Member State or Associated Country⁶.and a minimum of 30% of their total working time on the ERC project.

Pls shall ensure a sufficient time commitment and presence throughout the course of the project to guarantee its proper execution. The time commitment will be monitored, and in cases where the actual commitment is below the minimum levels set out above, or the levels indicated in the proposal (see proposal description below), appropriate measures may be taken, up to and including reduction of the grant and suspension or termination of grants in accordance with the grant agreement.

It is also expected that PIs will be able to start their project within six months of receiving an invitation letter from the ERC.

Size of ERC Synergy Grants

Synergy Grants can be up to a maximum of **EUR 10 000 000** for a period of **6 years** (*pro rata* for projects of shorter duration).

However, an additional up to EUR 4 000 000 can be requested in the proposal in total to cover:

- (a) eligible "start-up" costs for Principal Investigators moving to the EU or an Associated Country from elsewhere as a consequence of receiving the ERC grant and/or
- (b) the purchase of major equipment and/or
- (c) access to large facilities.

The total requested grant should reflect a **realistic estimation of the project needs and should not be unnecessarily inflated to reach the maximum grant level.** The evaluation panels will review the requested grant and recommend the total amount to be granted on the basis of the needs of the project, using rounded figures. The panels may also suggest a modification to the indicative budgetary breakdown in the application but the PIs have the freedom to re-budget during the course of the project.

The European Union financial contribution will take the form of the reimbursement of up to 100% of the total eligible and approved direct costs and of a flat-rate financing of indirect costs corresponding to 25% of the total eligible direct costs.

The actual project costs claimed should be presented in line with the usual management practices and accounting rules of the cHI and the other additional HI(s).

Profile of the ERC Synergy Grant Principal Investigators

⁶ A specification about the PI's commitment must be provided in the administrative form (form A) section 5 Call specific questions and in Part B2 of the research proposal.

⁷ As any additional funding is to cover major one-off costs it is not subject to pro-rata reduction for projects of shorter duration. All funding requested is assessed during evaluation.

⁸ In H2020 the indirect costs are fixed to exactly 25%.

⁹ Excluding the direct costs for subcontracting and the costs of resources made available by third parties, which are not used on the premises of the HI.

Applicant PIs may be at any career stage. Applications are expected from a group of innovative and active PIs and must present an early achievement track-record or a ten-year track-record, whichever is most appropriate for their career stage (see Starting, Consolidator and Advanced Grant profiles sections in the ERC Work Programme 2018). There is little prospect of an application succeeding in the absence of such a record.

Applicants are encouraged to evaluate their track-record and leadership potential (for an Advanced Grant type of applicant) against the benchmarks listed in the <u>ERC Work Programme 2018</u> to **decide for themselves their likelihood for success**, thus avoiding investing effort in proposals that are very unlikely to succeed.

It is expected that in most cases ERC Synergy groups will be interdisciplinary, often using multidisciplinary approaches; the description of the innovative ways of working together will be evaluated by peer reviewers. The applicant PIs do not need to be based in the same Host Institution; any group which can demonstrate the synergies, complementarities and added value that will make the 'whole' greater than the sum of the individual parts in promoting substantial advances in the frontiers of knowledge, will be considered. This also means that ERC Synergy groups may be of either national or trans-national character.

Eligible Host Institutions

In a Synergy Grant **up to four Host Institutions** could engage the PIs and their teams. Neither the corresponding PI nor the other PIs necessarily need to be employed by the corresponding HI or by the participating HI(s) at the time of submission of the proposal. In any case, the PIs must be engaged by their HI(s) at least for the duration of the grant 10 .

The ERC Synergy grant is awarded to the corresponding Host Institution that engages and hosts the corresponding PI for at least the duration of the grant. The cHI must provide a commitment letter offering appropriate conditions for the cPI and the other PI(s) supported by it to independently direct the proposed research and manage the project's funding for its duration (see Annex 2). These conditions, including the 'portability' of the project, are the subject of an agreement between any PI and their related HI (Supplementary Agreement) and are described in the H2020 ERC Model Grant Agreement. The ERC Grant Agreement itself will be concluded between the ERCEA and the corresponding HI, the latter becoming hereby the principal beneficiary of the ERC grant. In case of more than one HI, the other HI(s) of the other PI(s) will be beneficiary(ies) upon the definitions of the H2020 ERC Model Grant Agreement. In such a case, the principal beneficiary and the other beneficiary(ies) shall make appropriate internal arrangements consistent with the provisions of the grant agreement to ensure the efficient implementation of the project.

It is a requirement of any ERC awarded grant that the HI(s) commits to the following conditions of independence, ensuring that each PI it/they engage may:

apply for funding independently;

¹⁰ Normally the PIs will be employed by their respective HI, but cases where, for duly justified reasons, the PI's employer cannot become the HI, or where the PI is self-employed, the specific conditions of engagement will be subject to clarification and approval during the granting procedure or during the amendment procedure for a change of HI.

- manage their part of the research and the funding for the project and make appropriate related resource allocation decisions;
- publish independently as senior author and include as co-authors only those who have contributed substantially to the reported work;
- supervise team members, including research students, doctoral students or others;
- have access to reasonable space and facilities for conducting the research.

The support letter of the corresponding HI subscribing its association and support to the research group project, does not commit the corresponding HI to engage and guarantee contractual conditions to those PIs who are engaged by other HI(s).

A Host Institution must either be established in an EU Member State or Associated Country as a legal entity created under national law, or it may be an International European Interest Organisation (such as CERN, EMBL, etc.), the European Commission's Joint Research Centre (JRC) or any other entity created under EU law. Any type of legal entity, public or private, including universities, research organisations and undertakings, can host PIs and their teams. The ERC welcomes applications from PIs hosted by private for-profit research centres, including industrial laboratories.

The composition of the individual research teams is flexible and may involve, for instance, senior researchers, postdocs, graduate students, PhD researchers and administrative assistants. Depending on the nature of a project these researchers can be from the Pl's research group and/or from the same institution, or may be from other research institutions situated in the same country or may be hosted by other institutions that can be located in any country, including countries other than EU Member States and Associated Countries. Team members can be of any age, nationality and country of residence. Team members operate under the leadership of the Pls. The legal entities hosting/engaging these additional team members shall also become beneficiaries (i.e. additional participating beneficiaries of a multi-beneficiary grant agreement) in case funding is requested for their participation. Legal entities established outside the European Union or Associated Countries shall be eligible for funding provided that their participation is deemed essential for carrying out the action.

Ethical Issues

Some frontier research activities and methodologies may have ethical implications or may raise questions which will require sound ethical assessment in order to ensure that research supported by an ERC grant respects the fundamental ethical principles (see Annex 3 to this document).

Research Integrity

Cases of scientific misconduct such as fabrication, falsification, plagiarism or misrepresentation of data will be considered as breaches of fundamental ethical principles and may result in the rejection of proposals in accordance with section 3.11 of the ERC Rules for Submission. Plagiarism detection software may be used to analyse proposals submitted to the ERC.

No Contact with Peer Reviewers

Please note that in accordance with section 3.2 of the <u>ERC Rules for Submission</u>, any direct or indirect contact about the peer review evaluation of an ERC call between an applicant legal entity or a PI submitting a proposal on behalf of an applicant legal entity, and any independent expert involved in the peer review evaluation under the same call, in view of attempting to influence the evaluation process, is strictly forbidden. Such contact can constitute an exclusion situation and, if this situation is established in accordance with Article 106 of the Financial Regulation, will result in the decision of the ERCEA to reject the proposal concerned from the call in question.

Restrictions on submissions of proposals

The restrictions for submission under the <u>ERC Work Programme 2018</u> are set out below. They may be modified in subsequent years by the Scientific Council in light of experience.

The year of an ERC call for proposals refers to the Work Programme under which the call was made and can be established by its call identifier. A 2018 ERC call for proposals is therefore one that was made under the Work Programme 2018 and will have 2018 in the call identifier (for example ERC-2018-SYG). Ineligible or withdrawn proposals do not count against these restrictions (please consult the ERC Rules for Submission, section 2.2).

A researcher may participate as corresponding Principal Investigator or Principal Investigator in only one ERC frontier research project at any one time. In case a Principal Investigator submits proposals to different ERC frontier research grant calls made under the same Work Programme, only the first eligible proposal will be evaluated. It is not allowed to participate as a Principal Investigator in multiple Synergy Grant applications.

No restrictions apply

Regardless to the score received by a Principal Investigator for a proposal submitted under the 2016 or 2017 ERC Work Programme, they may submit a proposal in conjunction with other Principal Investigators to the Synergy Grant 2018 call.

Restrictions apply

A Principal Investigator whose proposal was rejected on the grounds of a breach of research integrity in the calls for proposals under Work Programmes 2016 or 2017 may <u>not</u> submit a proposal to the calls for proposals made under Work Programme 2018¹¹.

A researcher participating as Principal Investigator in an ERC frontier research project may <u>not</u> submit a proposal for another ERC frontier research grant, <u>unless the existing project ends¹² no more than two years after the call deadline</u> (i.e. the current grant has to end before 14 November 2019).

Restrictions that Scientific Council intends to apply for the 2019 Synergy call

A Principal Investigator whose proposal was evaluated as **category B at step 1 or step 2** in the Synergy Grant call for proposals under Work Programme 2018 may <u>not</u> submit a proposal to the Synergy Grant calls for proposals made under Work Programme 2019.

A Principal Investigator whose proposal was evaluated as **category C at step 1** in the Synergy Grant call for proposals under Work Programme 2018 may <u>not</u> submit a proposal to <u>any</u> ERC research grant calls for proposals made under Work Programme 2019 or for the Synergy Grant call in 2020.

<u>All</u> Principal Investigators whose proposal was rejected on the grounds of a breach of research integrity in the Synergy Grant calls for proposals under Work Programme 2018 may <u>not</u> submit a proposal to the calls for proposals made under Work Programme 2019.

These restrictions are designed to allow unsuccessful Principal Investigators the time to develop a stronger proposal.

-

¹¹ A new frontier research project can only start after the duration of the project fixed in a previous frontier research grant agreement has ended.

Preparing and submitting an ERC Synergy Grant application¹²

Synergy Grant proposals are submitted by a corresponding PI as 'primus inter pares' on behalf of the group. The cPI will be the administrative contact point on behalf of the group. All the PIs have scientific responsibility for the group's project on behalf of the corresponding Host Institution and the other Host Institutions which are the applicant legal entities.

ERC grant applications can be submitted only in response to a 'call for proposals'. Calls announced in the <u>ERC Work Programme 2018</u> are published on the <u>ERC website</u>¹³, the <u>Research and Innovation Participant Portal</u>¹⁴, and in the <u>Official Journal of the European Union</u>¹⁵.

A single submission deadline is foreseen for all scientific domains:

ERC-2018-SYG: 14 November 2017, 17:00.00 (Brussels local time)

Please note that the foreseen submission deadlines could be modified after the publication of the calls. You are therefore invited to periodically consult the Research and Innovation Participant Portal¹⁸ where any modifications of the submission deadlines are indicated.

Proposal description

Applications should be submitted by the corresponding PI (cPI) on behalf of the corresponding applicant legal entity, the group and their Host Institutions

1. Administrative forms (Part A)

Including an Ethics Review Table

2. Part B1:

Extended Synopsis: 5 pages

Funding ID table: separate table for each PI

Curriculum Vitae: 2 pages for each PI

Track Record: 2 pages for each PI

3. Part B2:

Scientific Proposal: 15 pages, with a resources section in addition to the 15 pages, with budget breakdown for each PI

- 4. Corresponding Host Institution Binding Statement of Support
- 5. If applicable, the ethics self-assessment explaining how the ethics issues will be treated (see Annex 3 to this document)

14 http://ec.europa.eu/research/participants/portal

¹² The working language of the ERC evaluation panels is English. Please note that accordingly, the evaluation reports will be available in English only. If the proposal is not in English, the ERCEA will provide a version of the proposal translated using computer-aided technology. An English translation of the abstract must be included in the proposal.

¹³ https://erc.europa.eu/funding

¹⁵ http://eur-lex.europa.eu/JOIndex.do?ihmlang=en

1.1.2 How to complete the grant application

1.1.2.1 Completing the online administrative Proposal Submission Forms $\frac{16}{1}$

Proposals must be submitted electronically via the web-based <u>Participant Portal Submission Service</u> (<u>PPSS</u>)¹⁷. Please read point <u>1.1.3</u> of this document before starting the pre-registration process. In the submission forms, the cPI is asked to fill the administrative data online that will be used in the evaluation and further processing of the proposal. Details of the scientific project are described in the research proposal, Parts B1 and B2, that are also submitted through the PPSS¹⁸. The administrative forms are an integral part of the proposal and are divided in 5 Sections:

- 1 General Information
- 2 Administrative data of participating organisations
- 3 Budget
- 4 Ethics issues table
- 5 Call specific questions

Section 1 – General Information concerns information about the research proposal, including an abstract in English of the project proposal and the chosen ERC keywords for evaluation. The cPI must indicate a minimum of four ERC keywords to describe the research field(s) of the proposal from a drop-down menu (see Annex 1 to this document for the full list of ERC keywords). There is no hierarchical ordering of the selected keywords and they are not linked to predefined panels i.e. keyword 1 is equally weighted with keywords 2, 3 and 4. The keywords are used to best allocate proposals to experts. It is the corresponding PI's responsibility to choose the most relevant free keywords for the evaluation of the proposed research. Furthermore, section 1 contains general declarations related to the proposal and the participation in H2020.

Section 2 – Administrative data of participating organisations concerns information about the PIs and the PIs' $HI(s)^{19}$.

Section 3 – Budget concerns information about the total estimated project costs and the requested EU contribution. The amount given in the online financial form (section 3) must correspond exactly to the information provided in the research proposal text (Part B2, section c, resources). **Please ensure that all costs are given in whole Euros (integer), not thousands of Euros.**

Section 4 – Ethics issues table serves to identify any ethical aspects of the proposed work. This table has to be completed even if there are no issues (simply confirm that none of the ethical issues apply to the proposal). Please note that, in case you answer YES to any of the questions, you are requested to provide an Ethics Self-Assessment and additional ethics documentation – if applicable, as detailed in the Ethics Issues Table checklist (in <u>Annex 3</u> to this document).

¹⁶ The Specific Privacy Statement on the protection of personal data related to the processing operations of applicants and beneficiaries' data: proposal evaluation, grant management and follow-up in H2020 are available through the following link: http://ec.europa.eu/research/participants/data/support/legal notice/h2020-ssps-grants_en.pdf. Applicants are reminded not to provide irrelevant and excessive data (mainly with regards to health data).

¹⁷ For general user guidance the Proposal Submission Service is available online at http://ec.europa.eu/research/participants/data/support/sep_usermanual.pdf.

The H2020 Online Manual (http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/applying-for-funding/submit-proposals_en.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission. The http://irran.htm) describes the standard process of proposal submission.

¹⁸ Please consult the section 1.1.2.2 Instructions for completing 'Part B' of the proposal of this document.

¹⁹ The filling of additional section 2 forms, corresponding to other beneficiaries e.g. institutions of team members ('additional participants'), may be necessary.

Section 5 – Call specific questions contain declarations related to eligibility, and permission statements on data-related questions (the data-related consents are entirely voluntary). In section 5, as established in page 35 of the <u>ERC Work Programme 2018</u>, applicant cPIs may request on behalf of the group that up to four specific persons should not act as an evaluator in the evaluation of their proposal.

The following notes are for information only. They should assist you in completing the online proposal submission forms of your proposal. On-line guidance will also be available. <u>The precise questions and options presented in PPSS may differ slightly from these below.</u>

Please regularly consult the Research and Innovation Participant Portal call page for updated information. For any difficulty encountered, please contact the PPSS Service Desk in due time before the call deadline by using the Research Enquiry Service http://ec.europa.eu/research/index.cfm?pg=enquiries or the Participant Portal IT Helpdesk http://ec.europa.eu/research/participants/api/contact/index.html You may also contact the SEP helpdesk directly on +32 (2) 29 92222 to receive immediate assistance on any issue with the submission system.

1 – General information (notes for information only)

Failure to fill in mandatory fields marked with * would block submission.

Торіс	[pre-filled] Chosen upfront on the participant portal call page, ERC-2018-SyG.
Call	[pre-filled]
identifier	The call identifier is the reference number given in the call or part of the call you are applying for, as indicated in the publication of the call in the Research and Innovation Participant Portal – H2020 Calls. A call identifier looks like this: ERC-2018-SyG.
Type of Action	[pre-filled] Definition for 'type of action', ERC-SyG.
Deadline ID	[pre-filled] ERC-2018-SyG
Proposal Acronym*	[pre-filled but editable] The short title or acronym will be used to identify your proposal efficiently in this call. It should be of no more than 20 characters (use standard alphabet and numbers only; no spaces, symbols or special characters please). The same acronym should appear on each page of the research proposal.

Proposal	The title should be no longer than 200 characters and should be understandable to the non-		
Title (max. 200 specialist in your field.			
characters) In order to best review your application, your agreement is needed below in the su			
(non- confidential	form so that this non-confidential title can be used when contacting potential reviewers,		
information)*	should your proposal be retained for step 2 of the evaluation process.		
Duration in Months*	The estimated duration of the project in full months (1-72 months).		
ERC Keyword 1, 2, 3, 4	[drop-down menu] - mandatory Please choose a minimum of 4 keywords that best characterise the research area of your proposal. Note that the keywords are neither hierarchical nor linked to predefined panels. They are used to allocate proposals to experts. The full list of ERC keywords is in Annex 1 of this ERC Information for Applicants for the Synergy Grant 2018 Call.		

	[drop-down menu]
ERC	You can select additional ERC keywords. Keywords 5-6 are optional.
Keywords 5, 6	Note that the keywords are neither hierarchical nor linked to predefined panels. They are used to allocate proposals to experts.
	In addition, please enter free text keywords that you consider best characterise the scope of
	your research proposal. The choice of keywords should take into account any multi-disciplinary
Free	aspects of the proposal.
Keywords	You can also use keywords from other specific classification systems, provided that the actual
	describing text is included. For example, applicants in the field of mathematics may want to use
	the Mathematics Subject Classification system, and can then enter a text like 'MSC2010: 51Hxx
	Topological geometry'. There is a limit of 200 characters.

Abstract (min.100/ max. 2000 char.) (non-confidential information)*	The abstract should, at a glance, provide the reader with a clear understanding of the objectives of the research proposal and how they will be achieved. The abstract will be used as the short description of your research proposal in the evaluation process and in communications to contact in particular the ERC experts and/or inform the Commission and/or the programme management committees and/or relevant national funding agencies (see also Data-Related Questions). It must therefore be short and precise and should not contain confidential information. Please use plain typed text, avoiding formulae and other special characters. The abstract must be written in English. There is a limit of 2000 characters (spaces and line breaks included).
In order to best review your application, do you agree that the above non confidential proposal title and abstract can be used, without disclosing your identity, when contacting potential reviewers?*	[Yes/No] – In the course of the evaluation procedure, the non-confidential title and abstract of your proposal may be communicated to potential ERC reviewers, in particular should your proposal be retained for step 2 of the evaluation process. Please specify your agreement or disagreement.

In case of a Synergy grant application 'Principal Investigator' means 'corresponding Principal Investigator on behalf of Principal Investigators', and 'Host Institution' means 'corresponding Host Institution'. 1) The Principal Investigator declares to have the written consent of all participants on their participation and on the content of this proposal, as well as of any researcher mentioned in the proposal as participating in the project (either as other PI, team member or collaborator).* 2) The Principal Investigator declares that the information contained in this proposal is correct and complete. 3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed			
Principal Investigators', and 'Host Institution' means 'corresponding Host Institution'. 1) The Principal Investigator declares to have the written consent of all participants on their participation and on the content of this proposal, as well as of any researcher mentioned in the proposal as participating in the project (either as other PI, team member or collaborator).* 2) The Principal Investigator declares that the information contained in this proposal is correct and complete. 3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed	Declarations		
1) The Principal Investigator declares to have the written consent of all participants on their participation and on the content of this proposal, as well as of any researcher mentioned in the proposal as participating in the project (either as other PI, team member or collaborator).* 2) The Principal Investigator declares that the information contained in this proposal is correct and complete. 3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed 1 (Yes/No) Tick the box for 'yes' [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes'			
of all participants on their participation and on the content of this proposal, as well as of any researcher mentioned in the proposal as participating in the project (either as other PI, team member or collaborator).* 2) The Principal Investigator declares that the information contained in this proposal is correct and complete. 3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — and set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] Tick the box for 'yes'		ns 'corresponding Host Institution'.	
proposal, as well as of any researcher mentioned in the proposal as participating in the project (either as other PI, team member or collaborator).* 2) The Principal Investigator declares that the information contained in this proposal is correct and complete. 3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes'	, , , , , , , , , , , , , , , , , , , ,		
as participating in the project (either as other PI, team member or collaborator).* 2) The Principal Investigator declares that the information contained in this proposal is correct and complete. 3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes'			
collaborator).* 2) The Principal Investigator declares that the information contained in this proposal is correct and complete. 3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes'		[Yes/No] Tick the box for 'yes'	
contained in this proposal is correct and complete. 3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed			
3) The Principal Investigator declares that all parts of this proposal comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes'	· · · · · · · · · · · · · · · · · · ·	[Yes/No] Tick the box for 'yes'	
comply with ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes' [Yes/No] - Please tick the one out of three option that is applicable to your proposal			
research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes' [Yes/No] Tick the box for 'yes'	, , , , , , , , , , , , , , , , , , , ,		
of Conduct for Research Integrity — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] Tick the box for yes [Yes/No] Tick the box for yes [Yes/No] Tick the box for yes	.,		
avoiding fabrication, falsification, plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] - Please tick the one out of three option that is applicable to your proposal		[Yes/No] Tick the box for 'yes'	
plagiarism or other research misconduct). 4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] - Please tick the one out of three option that is applicable to your proposal	5 , , , , , , , , , , , , , , , , , , ,		
4) The Principal Investigator hereby declares that: - in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed (Yes/No] - Please tick the one out of three options that is applicable to your proposal			
- in case of multiple participants in the proposal, the Host Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] - Please tick the one out of three option that is applicable to your proposal	,		
Institution has carried out the self-check of the financial capacity of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] - Please tick the one out of three option that is applicable to your proposal	, , , , , , , , , , , , , , , , , , , ,		
of the organisation on https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] — Please tick the one out of three option that is applicable to your proposal. The project for the last closed of the last closed. The project for the last closed of the last closed. The project for the last closed of the last closed of the last closed." The project for the last closed of the last closed of the last closed. The project for the last closed of the last closed of the last closed of the last closed. The project for the last closed of the last closed of the last closed. The project for the last closed of the last closed of the last closed. The project for the last closed of the last closed of the last closed. The project for the last closed of the last closed of the last closed. The project for the last closed of the last closed of the last closed.	· · · · · · · · · · · · · · · · · · ·		
https://ec.europa.eu/research/participants/portal4/desktop/en/ organisations/lfv.html or to be covered by a financial viability check in an EU project for the last closed [Yes/No] - Please tick the one out of three option that is applicable to your proposal			
organisations/lfv.html or to be covered by a [Yes/No] — Please tick the one out of three option that is applicable to your proposal	•		
financial viability check in an EU project for the last closed that is applicable to your proposal		[Ves/No] = Please tick the one out of three ontion	
financial year. Where the result was "weak" or "insufficient", the	financial year. Where the result was "weak" or "insufficient", the	chacks applicable to your proposal	
Host Institution confirms being aware of the measures that may			
be imposed in accordance with the H2020 Grants Manual (Chapter	· · · · · · · · · · · · · · · · · · ·		
on Financial capacity check)	•		
- in case of multiple participants in the proposal, the Host	• • • • • • • • • • • • • • • • • • • •		

Institution is exempt from the financial capacity check being a	
public body including international organisations, higher or	
secondary education establishment or a legal entity, whose	
viability is guaranteed by a Member State or associated country,	
as defined in the H2020 Grants Manual (Chapter on Financial	
capacity check)	
- in case of a sole participant in the proposal, the applicant is	
exempt from the financial capacity check.	
5) The Principal Investigator hereby declares that each applicant	
has confirmed:	
to have the financial and operational capacity to carry	
out the proposed action.	[Yes/No]
Where the proposal is to be retained for EU funding, each	
beneficiary applicant will be required to present a formal	
declaration in this respect.	

The Principal Investigator is only responsible for the correctness of the information relating to his/her own organisation. Each applicant remains responsible for the correctness of the information related to him and declared above. Where the proposal is to be retained for EU funding, the Host Institution and each beneficiary applicant will be required to present a formal declaration in this respect.

2 - Administrative data of participating organisations (notes for information only)

The first sub-section lists the participating organisations. The first form is given for the corresponding Host Institution. If other organisations are involved, additional fields will appear for each partner organisation added in Step 4 of the online submission system. For each institution many fields will be read-only data as registered and/or validated in the central registry of organisations of the European Commission, linked to the given PIC number in the Beneficiary Register (previously the URF).

Corresponding Host institution (applicant legal entity) or Host Institution This section has to be filled out for each participating Host Institution

Host institution		
Participant Identification Code (PIC)	[pre-filled] — The Participant Identification Code (PIC) enables organisations to take advantage of the Participant Portal. PIC numbers are necessary for the submission of proposals. By entering a PIC, section 2 will be filled in automatically. An online tool to search for existing PICs and the related organisations is available at http://ec.europa.eu/research/participants/portal/desktop/en/organisations/register.html . Organisations not yet having a PIC must self-register (via the same page) before submitting the proposal. Failure to do so will block the submission of your proposal.	
HI Legal name	[pre-filled]	
HI Short name	[pre-filled]	
Address of the organisation		
Street	[pre-filled]	
Town	[pre-filled]	
Postcode	[pre-filled]	
Country	[pre-filled]	
Webpage	[pre-filled]	
Legal Status of your organisation		
Legal person		[pre-filled]
Public body		[pre-filled]

Non-profit	[pre-filled]
International organisation	[pre-filled]
International organisation of European interest	[pre-filled]
Secondary or Higher education establishment	[pre-filled]
Small and Medium-sized Enterprises (SMEs)	[pre-filled]
Academic sector	[pre-filled]

Departments Carrying out the Proposed Work			
	(up to three departments can be specified)		
Department/Faculty/	Please indicate the address of the main department/institute/ unit that belongs to the same		
Institute/Lab	legal entity carrying out the work. Please use Latin characters. Use the 'Add a Department'		
Name	button to add additional departments or units within the same institution, if necessary.		
Street	Please enter the street name and number where the		
Street	department/faculty/institute/laboratory is located.		
Town	The town where the department/faculty/institute/laboratory is located, in English (please		
	avoid any district codes).		
Postcode	Please add here the district code.		
. osteode	Trease and here the district code.		
Country	The country where the department/faculty/institute/laboratory is located, in English.		
•	, , , , , , , , , , , , , , , , , , , ,		

Corresponding Principal Investigator (cPI) or Principal Investigator (PI) This section has to be filled for each participating PI

The following information on the corresponding PI and the other participating PIs is used to personalise the communications to applicants. Please make sure that your personal information is accurate and for any ERC specific question, please contact the ERC using the following e-mail address ERC-2018-SYG-APPLICANTS@ec.europa.eu.

The name and e-mail of contact persons including the Principal Investigators, Host Institution contacts are read-only in the administrative form, only additional details can be edited here. To give access rights and contact details of contact persons, please save and close this form, then go back to Step 4 of the submission wizard and save the changes. Please note that the e-mail provisions the access rights, therefore it cannot be changed here. The name of the person can be edited on Step 4. In order to be able to submit your proposal after saving changes made in Step 4 (Parties), you have to re-open the administrative form ('Edit forms' button), revise the changes, validate and save the form. Failure to do so will prevent you from submitting your proposal. Further details are available in the Submission service user manual.

Corresponding Principal Investigator or Principal Investigator		
ORCID	If you have a ORCID number please enter it here (an example is 0000-0002-1825-0097).	
Researcher ID	If you have a Researcher ID number please enter it here (an example is A-4031-2008).	
Other ID	If you have a different researcher identifier number, please enter it here.	
Last Name*	[pre-filled from 'Contacts' at Step 4]. Last name as given on Passport or Identity Card.	

Last Name at Birth	Your last name at birth.	
First Name(s)*	[pre-filled from 'Contacts' at Step 4] Your first name(s) as given on Passport or Identity Card.	
Title	Please choose one of the following: Prof., Dr., Mr., Mrs., Ms.	
Gender* Female(F)/Male(M)	This information is required for statistical and mailing purposes. Indicate F or M as appropriate.	
Nationality*	[drop-down menu]. Please select one country.	
Country of residence*	[drop-down menu]. Please select the country in which you legally reside.	
Date of Birth* (DD/MM/YYYY)	Please specify your date of birth using the format (DD/MM/YYYY).	
Country of Birth*	[drop-down menu]. Please select the country in which you were born.	
Place of Birth*	The town in which you were born. Insert the name of the town in English (please avoid any district codes).	

	Contact Address		
Current Organisation name	Name under which your organisation is registered.		
Current Department/Faculty/ Institute/Laboratory name	Name under which your department/faculty/institute/laboratory is registered.		
Street	The street name and number.		
Town*	The town, in English (please avoid any district codes).		
Postcode/Cedex	The postal code.		
Country*	[drop-down menu]. Please select one country.		
Phone*	Please insert the full phone number including country and city/area code. Example +32-2-2991111.		
Phone2/Mobile	Please insert the full mobile number including country and city/area code. Example +32-2-2991111. The mobile phone number is optional.		
E-mail*	[pre-filled from 'Contacts' at Step 4]		

Contact address of the (corresponding) Host Institution and contact person for the ERC.

The name and e-mail of the (corresponding) Host institution contact person(s) are **read-only** in the administrative form (available at Step 5 of the application), only additional details can be edited here. To give access rights and contact details of the Host Institution, please go back to **Step 4 of the submission wizard** and save the changes. **Please note that submission is blocked without a Main administrative contact person and email address for the Host Institution.** In order to be able to submit your proposal after saving changes made in Step 4 (Parties), you have to re-open the administrative form ('Edit forms' button), revise the changes, validate and save the form. Failure to do so will prevent you from submitting your proposal.

Contact address of the (corresponding) Host Institution and contact person for the ERC		
Organisation legal name [pre-filled from 'Contacts' at Step 4]		
First name(s)*	[pre-filled from 'Contacts' at Step 4]	

Last name*	[pre-filled from 'Contacts' at Step 4]	
E-mail*	[pre-filled from 'Contacts' at Step 4]	
Position in organisation	e.g. senior administrative officer	
Office/Section/ Department/Faculty/ name	The name under which the host department/faculty/institute/laboratory is registered.	
Street	The street name and number.	
Town	The town, in English (please avoid any district codes).	
Postcode/Cedex	The postal code.	
Country	[drop-down menu]. Please select one country.	
Phone	Please insert the full phone number including country and city/area code. Example +32-2-2991111.	
Phone2/Mobile	Please insert the full mobile number including country and city/area code. The mobile number is optional.	

Other Contact Persons with access rights		
First name(s)	[pre-filled from 'Contacts' at Step 4]	
Last name	[pre-filled from 'Contacts' at Step 4]	
E-mail	[pre-filled from 'Contacts' at Step 4]	
Phone	Editable. Please insert the full phone number including country and city/area code. Example	
Phone	+32-2-2991111.	

3 – Budget (notes for information only)

Financial information (in euros) — whole duration of the project			
Please ensure that all costs are given in whole euros (integer), not thousands of euros. Please ensure that the figures in this table match the total eligible costs and requested EU grant in Part B2 (section c, resources), where needed including the 25% indirect costs.			
Participant Number in this proposal	The <u>corresponding PI's Host Institution</u> of the proposal is automatically <u>number one</u> .		
Organisation short name	[pre-filled]		
Organisation country	[pre-filled]		
Total Eligible Costs	The sum of direct costs (personnel and others), indirect costs of 25% and subcontracting.		
Requested Grant	The total budget that you are requesting as the ERC grant (in euros)		

4 – Ethics (notes for information only)

This section can only be filled in by the corresponding PI or corresponding HI main administrative contact

In H2020 the completion of a general Ethics table has become compulsory and part of the online administrative submission forms. The PI must indicate any ethics issue in this section 4 together with a proposal page number (referring to Part B2). For correct indication of any ethics issue related to your proposal, please refer to Annex 3 to this document. Annex 3 will also give guidance on how to write the ethics self-assessment and give indication of any supporting documentation needed for the Ethics review procedure.

Areas excluded from funding under Horizon 2020 (Art. 19.3 of the H2020 Framework Programme)

- (i) Research activity aiming at human cloning for reproductive purposes;
- (ii) Research activity intended to modify the genetic heritage of human beings which could make such changes heritable (Research relating to cancer treatment of the gonads can be financed);
- (iii) Research activities intended to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer.

All Horizon 2020 funded research shall comply with the relevant national, EU and international ethics related rules and professional codes of conduct. Where necessary, the beneficiary(ies) shall provide the responsible ERCEA with a written confirmation that it has received (a) favourable opinion(s) of the relevant ethics committee(s) and, if applicable, the regulatory approval(s) of the competent national or local authority(ies) in the country in which the research is to be carried out. The copy of the official approval from the relevant national or local ethics committees must also be provided to the ERCEA.

Ethics Issues (extended table available in Annex 3)

I confirm that I have taken into account all ethics issues described above and that if any ethics issues apply, I will complete the ethics self-assessment and attach the required documents.

[Tickbox] - The Ethics Issues Table has to be completed even if there are no issues (simply confirm that none of the ethics issues apply to the proposal).

If any of the ethics issues indicated in the Ethics Issues Table apply to your proposal, you <u>must</u> provide an ethics self-assessment following the instruction in <u>Annex 3</u>.

For indication of additional supporting documentation needed, please see the extended table of ethics issues in Annex 3.

5 – Call specific questions (notes for information only)

This section can only be filled in by the corresponding PI or corresponding HI main administrative contact

 101	\mathbf{n}	11.
igi	UII	

As the corresponding Principal Investigator, I confirm that each Principal Investigator will spend a minimum of 50% of their total working time in an EU Member State or Associated Country.

[Yes/No] Please note that each PI is expected to spend a minimum of 50% of their total working time in an EU Member State or Associated Country.

As the corresponding Principal Investigator, I acknowledge that all PIs are aware of the eligibility requirements for applying for this ERC call as specified in the ERC Work Programme 2018, and certify that, to the best of my knowledge this application is in compliance with all these requirements. I understand that this proposal may be declared ineligible at any point during the evaluation or granting process if it is found not to be compliant with these eligibility criteria.*

[Yes] - Please confirm that all eligibility requirements established in the <u>ERC Work Programme 2018</u> are complied with — please pay particular attention to the section 'Restrictions on submission of proposals'.

Data-Related Questions and Data Protection

Consent to any question below is entirely voluntary. A positive or negative answer will not affect the evaluation of your proposal in any form and will not be communicated to the evaluators of your project. By replying 'yes' to the questions below, the Corresponding PI gives consent on behalf of all the other PIs, and confirms both that he/she has obtained the prior informed individual consent of each of the PIs and can provide evidence of those consents, if so requested.

individual consent of each of the PIs and can provide evidence of those consents, if so requested			
For communication purposes only, the ERC asks for your permission to publish the names of the participating PIs, the proposal title, the proposal acronym and Host Institutions, should this proposal be retained for funding.	[Yes/No]		
Some national and regional public research funding authorities run schemes to fund ERC applicants that score highly in the ERC's evaluation but which cannot be funded by the ERC due to its limited budget. In case the proposal could not be selected for funding by the ERC do you consent to allow the ERC to disclose the results of the evaluation of this proposal (score and ranking range) together with all PIs' names, non-confidential proposal title and abstract, proposal acronym, Host Institutions and contact details to such authorities?	[Yes/No]		
The ERC is sometimes contacted for lists of ERC funded researchers by institutions that are awarding prizes to excellent researchers. Do you consent to allow the ERC to disclose all PIs' names, non-confidential proposal title and abstract, proposal acronym, Host Institutions and contact details to such institutions?	to [Yes/No]		
For purposes related to monitoring, study and evaluating impl proposals and their respective evaluation data be processed by e with the requirements of Regulation 45/2001.			
Have any of the Principal Investigators previously submitted a proposal to the ERC?	[Yes/No]- If yes is selected you can specify up to four proposals submitted most recently by any of the participating Principal Investigators to the ERC. Please use the 'Add' button to fill information on each proposal. By clicking the 'Remove' button you may delete the entry. You can specify in the first box the previous proposal's number (e.g. 123456) and in the second box the name of the PI, the year of the call of proposal, the type of the call (e.g. StG/CoG/AdG/SyG).		

Exclusion of independent experts at the request of an applicant

As established in page 35 of the ERC Work Programme 2018, applicants submitting proposals to the SyG call, may request that up to four specific persons would not act as peer reviewers in the evaluation of their proposal (in total four per proposal, not per PI) . Such a request is done at the time of proposal submission in the online administrative forms section 5 'Excluded Reviewers'.

If the person(s) identified is an independent expert participating in the Synergy Grant 2018 evaluation, he/she may be excluded from the evaluation of the proposal as long as ERCEA remains in the position to have the proposal evaluated. Applicants need to provide the following data about the persons which they intend to exclude from the evaluation:

- Name of the expert(s);
- Institution/employer, Town and Country;
- Web page.

First Name	Last Name	Institution	Town	Country	Webpage

Please use the 'Add' button to fill information on each identified expert. By clicking the 'Remove' button you may delete the expert again.

Such a request will be treated confidentially by the authorised staff of ERCEA. If the excluded expert is a member of a panel he/she will be informed about the request concerning him/her. Please note that the request for exclusion is accepted by ERCEA as long as the proposal can still be evaluated by other reviewers having the necessary expertise. Additionally, in application of the existing regulation²⁰ on data protection, an excluded expert may be granted access to all data linked to their exclusion.

The names of the excluded experts may be provided to the Panel Chair and/or members of the relevant panel(s). Please note that all fields, excluding the webpage, have to be properly completed for the request to be considered.

Open Research Data Pilot in Horizon 2020

All selected applicants will now be included in the Horizon 2020 Pilot on Open Research Data²¹ in order to facilitate access, re-use and preservation of research data generated during their research work. Applicants can opt-out of this pilot at proposal submission stage by responding to the question below in the online submission form. The detailed requirements on open access to publications and to research data and data related products are contained in the Horizon 2020 H2020 ERC Model Grant Agreement²². Beneficiaries should carefully check the additional obligations related to open research data contained in Article 29.3. They may opt out of the Horizon 2020 Pilot on Open Research Data at any stage freeing themselves retroactively from the obligations associated with being included in the pilot.

21

²⁰ Reform of data protection legislation: http://ec.europa.eu/justice/data-protection/

²¹ According to article 43.2 of Regulation (EU) No 1290/2013 of the European Parliament and of the Council, of 11 December 2013, laying down the rules for participation and dissemination in 'Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)' and repealing Regulation (EC) No 1906/2006.

22 H2020 ERC Model Grant Agreement - Article 29.3 'Open access to research data'

Participation in this Pilot does not constitute part of the evaluation process. Proposals will not be evaluated favourably because they are part of the Pilot and will not be penalised for not participating.

We wish to opt out of the Pilot on Open Research Data in	[Yes/No] – this field is pre-ticked with 'NO'. If you wish to	
Horizon 2020	opt-out please tick 'YES'	
Optional: Please specify the reason(s) for not being able to	Free text box (optional)	
participate in the pilot		

1.1.2.2 Instructions for completing 'Part B' of the proposal

The research proposal (Part B) consists of two parts: Part B1 (including <u>cover page</u>, <u>sections a</u>, <u>b</u>, <u>and c</u>) and Part B2 (<u>including sections a</u>, <u>b</u>, <u>and c</u>). **The templates for these two sections are provided in PPSS and their use is mandatory**. The electronic upload of the research proposal Parts B1 and B2 is done at Step 5 'Edit Proposal' and submitted via PPSS – see point <u>1.1.3</u> of this document.

IMPORTANT NOTICE: Please be aware that at step 1 of the evaluation only Part B1 is evaluated by the panel members, while at step 2 and 3 both Parts B1 and B2 are evaluated.

When drafting Part B1, PIs should pay particular attention to the extended synopsis (section a) and should not consider it as simply complementing Part B2. It is important that the extended synopsis contains all relevant information <u>including the feasibility of the scientific proposal</u> and synergetic aspects, since the panel will only evaluate Part B1 at step 1.

Please note that at step 1 the panel has no access to Part B2. The panel members are asked to act as generalists when evaluating the proposals. Thus, their expertise will have to cover a wide range of proposals within a research field. For this reason and the fact that panel members evaluate only Part B1 at step 1, Pls should ensure that Part B1 is as complete and detailed as possible. In addition to the panel members (who act as 'generalists'), the ERC evaluations rely on input from remote referees. They are scientists and scholars who bring in the necessary specialised expertise. Remote referees work remotely and deliver their individual assessments by electronic means. They do not participate in panel meetings and normally their involvement is limited to step 2 of the evaluation process.

The information to be included in each of the sections as well as the maximum length of each section or its sub-sections, which needs to be respected strictly, is described below.

In fairness to all applicants, the page limits below will be applied strictly. Only the material that is presented within these limits will be evaluated (peer reviewers will only be asked to read the material presented within the page limits, and will be under no obligation to read beyond them).

Each proposal page <u>shall</u> carry a <u>header</u> presenting the <u>corresponding PI's last name</u>, the <u>acronym</u> <u>of the proposal</u>, and the reference to the respective proposal section (<u>Part B1</u> or <u>Part B2</u>).

The following parameters **shall** be respected for the layout:

Page Format	Font Type	Font Size	Line Spacing	Margins
A4	Times New Roman, Arial or similar	At least 11	Single	2 cm side 1.5 bottom

Part B1 - Cover page:

Please use the template provided online in the Participant Portal Submission Page for the call.

Proposal full title

Proposal short name (acronym)

Name of the corresponding PI (cPI)

Name of the corresponding Host institution (cHI)

List of the other participating PIs, indicating their respective Host Institutions

Proposal duration in months

Proposal abstract (half page, must be a copy/paste of abstract from the administrative form section 1)

Part B1 Section a, b and c:

The Research Proposal

a. Extended Synopsis of the scientific proposal (max. 5 pages)

The Extended Synopsis should give a concise presentation of the scientific proposal, with particular attention to the ground-breaking nature of the research project and the feasibility of the outlined scientific approach. Describe the proposed work in the context of the state of the art of the field. References to literature should also be included. It is important that this extended synopsis contains all relevant information including synergetic aspects, working arrangements and the feasibility of the scientific proposal since the panel will only evaluate Part B1 at step 1. References do not count towards the page limits.

The Principal Investigators

Each of the Principal Investigators must provide a list reflecting their track record. This can be either an **'early achievement track-record'** (for PIs within 2-7 and 7- 12 years after their PhD) or a **'10-year track-record'** (for advanced researchers) chosen by the applicants based on which is most appropriate for their career stage.

The evaluation experts will be instructed to judge each PI against the benchmarks relevant to his/her career stage.

b. Curriculum Vitae (max. 2 pages for each PI):

The CV should include the standard academic and research record. A suggested outline is available in the Part B1 downloadable template. The structure of the CV may be modified, but the ERC recommends the use of the provided template. If applicable, please make sure that any research career gaps and/or unconventional paths which might have influenced your ten-year track record are clearly explained in the career break section of your CV so that this can be fairly assessed by the evaluation panels.

The succinct 'funding ID', to be completed by each PI, which must specify any current research grants and their subject, and any on-going application for work related to the proposal must follow the table format indicated in the Part B1 template. The funding ID will not count towards the page limits and needs to be completed with the following information for on-going grants and applications:

Project Title, Funding source, Amount, Period, Role of the PI, Relation to ERC project (describe any potential overlap)

c. Track record (max. 2 pages for each PI) 23:

Each Principal Investigator is required to include, depending on their career stage, either an 'Early achievements track-record' or a '10-year track record'.

'Early achievements track-record'. Each applicant PI should list (if applicable):

- 1. Publications (up to five for Starting Grant and up to ten for Consolidator Grant profile) in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced and including all authors; field relevant bibliometric indicators may also be included); preprints²⁴ are also acceptable;
- 2. Research monographs and any translations thereof;
- Granted patent(s);
- 4. Invited presentations to internationally established conferences and/or international advanced schools;
- 5. Prizes/ Awards/ Academy memberships.

'10-year track record'. Each PI must provide a list of achievements in the last 10 years (as applicable below)

- 1. Up to ten representative publications, from the last ten years, as main author (or in those fields where alphabetic order of authorship is the norm, joint author) in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peerreviewed journals and peer-reviewed conferences proceedings of their respective research fields, (properly referenced; field relevant bibliometric indicators may also be included)"; preprints²⁴ are also acceptable;
- 2. Research monographs and any translations thereof;
- 3. Granted patents;

- 4. Invited presentations to internationally established conferences and/or international advanced schools;
- 5. **Research expeditions** that the applicant Principal Investigator has led;
- 6. Organisation of **international conferences** in the field of the applicant (membership in the steering and/or organising committee);
- 7. Prizes/ Awards/ Academy memberships;
- 8. Major contributions to the early careers of excellent researchers;
- 9. Examples of leadership in industrial innovation or design.

As described in the ERC Work Programme 2018 section on the profile of the ERC Starting/Consolidator/Advanced Grant PI.

²⁴ Preprints should be freely available from a preprint server; they should be properly referenced and either link to the preprint or a DOI should be provided

Part B2 Sections a, b, and c:

The scientific proposal (max 15 pages, excluding the c. Resources section)

This part is evaluated only in step 2 and step 3 of the peer review evaluation.

Please use the Word-template provided online in the Participant Portal Submission Page for the call. References do not count towards the page limit.

Describe in more detail the scientific, technical, and/or scholarly aspects of the project demonstrating the ground-breaking nature of the research, its potential impact and research methodology. Describe the **significant synergies, complementarity and added value of the group** beyond the current work of the PIs to enable it to jointly achieve the project's scientific objectives. Indicate the fraction of each PI's research effort that will be devoted to this project and a full estimation of the real project costs. Avoid a repetition of the extended synopsis in Part B2. At step 2 and 3 of the evaluation process Part B2 is evaluated together with part B1.

a. State of the art and objectives: Specify clearly the objectives of the proposal, in the context of the state of the art in the field. When describing the envisaged research it should be indicated how and why the proposed work is important for the field, and what impact it will have if successful, such as how it may open up new horizons or opportunities for science, technology or scholarship. Specify any particularly challenging or unconventional aspects of the proposal, including multi - or interdisciplinary aspects.

b. Methodology

Describe the proposed methodology in detail including, as appropriate, key intermediate goals. Explain and justify the methodology in relation to the state of the art, including any particularly novel or unconventional aspects addressing 'high-risk/high-gain' balance. Highlight any intermediate stages where results may require adjustments to the project planning. In case it is proposed that team members engaged by other organisations than the Host Institution(s) participate in the project, their participation has to be fully justified. This should be done emphasizing the scientific added value they bring to the project.

c. Resources (incl. project costs)

It is <u>strongly recommended to use the budget table template included in Part B2</u> to facilitate the assessment of resources by the panels. For detailed information on eligible- and non-eligible direct and indirect costs as well as the different cost categories applicants should consult the <u>H2020 ERC Model Grant Agreement</u> and the <u>H2020 ERC Annotated Model Grant Agreement</u> ²⁵. <u>Please use whole euro integers only when preparing the budget table</u>.

State the amount of funding considered necessary to fulfil the objectives for the duration of the project. The resources requested <u>should be reasonable and fully justified</u> in the proposal. The requested grant should be in proportion to the actual needs to fulfil the objectives of the project.

Specify briefly the commitment of each PI to the project and how much time each PI is willing to devote to the proposed project. Please note that <u>each PI is expected to devote at least 30% of their total working time to the ERC-funded project and spend at least 50% of their total working time in an</u>

²⁵ Applicants should pay special attention to the new cost category 'Direct costing for Large Research Infrastructures'. This new cost category will only be applicable for PIs who are hosted by institutions with Large Research Infrastructures of a value of at least EUR 20 million and **only** after having received a positive ex-ante assessment from the Commission's services. This new cost category should only be used for costs to access large research infrastructures inside the premises of and owned by the participating organisations. Please refer to the <u>ERC Annotated Model Grant Agreement</u>, pages 92 to 102.

EU Member State or Associated Country (see the ERC Work Programme 2018).

Describe the size and nature of the Synergy group, indicating, where appropriate, the key team members and their roles. The participation of team members engaged by another institution should be justified in relation to the additional financial cost this may impose to the project. Take into account the percentage of each PI's dedicated time to run the ERC funded activity when calculating the personnel costs.

Specify any existing resources that will contribute to the project. Describe other necessary resources, such as infrastructure and equipment. It is advisable to include a short technical description of the equipment requested, a justification of its need as well as the intensity of its planned use. When estimating the costs for travel, please also consider participation of the PIs and team members in conferences and dissemination events.

The terms and conditions laid down in the article 29.2 of the ERC Annotated Model Grant Agreement address how scientific publications must be made available through Open Access. Applicants should be aware that it will be **mandatory** to provide Open Access (free of charge, online access for any user) to all peer-reviewed scientific publications resulting from ERC projects funded through this call. This includes long-text publications such as monographs and book chapters. Open Access can be ensured through green or gold Open Access-routes, and Open Access must in any case be ensured through a repository at the latest 6 months after publication (12 months for publications from the Social Sciences and Humanities). Please see Article 29.2 of the H2020 ERC Model Grant Agreement for more details, or contact ERC-OPEN-ACCESS@ec.europa.eu.

Costs for providing immediate Open Access to publications (article processing charges) are eligible and can be charged against the ERC grant if they are incurred during the lifetime of the project. When drafting the budget, it is highly advisable to consider the need to include such expenditure, and if that is the case, to make a realistic estimation of the amount needed. In addition, the ERC recommends that all funded researchers follow best practice by retaining files of research data produced and used, and are prepared to share these data with other researchers when not bound by copyright restrictions, confidentiality requirements, or contractual clauses.

Costs related to data management can also be eligible.

Budget tables. Please use the budget table template provided in part B2 form. **Each PI is required to fill in their budget breakdown**. Include the direct costs of the project plus a flat-rate financing of indirect costs calculated as <u>25%</u> of the total eligible direct costs (excluding subcontracting) towards overheads. Furthermore, include a breakdown of the budget subdivided in personnel costs, travel, equipment, consumables, publication costs (including any costs related to Open Access), other direct costs, and any envisaged subcontracting costs.

If additional funding, above the normal (EUR 10 000 000), is requested for (a) covering eligible 'start-up' costs for a PI moving from another country to the EU or an Associated Country^{4,5} as a consequence of receiving an ERC grant and/or (b) the purchase of major equipment and/or (c) access to large facilities, then this also needs to be fully justified. Please note that any additional funding request under (a) and (b) is subject to 25% overhead. The request of additional funding under (c) to access facilities owned by a third party and not used on the premises of the beneficiaries should be listed in cost category 'C2. Other Direct Costs with no overheads'. Include the additional costs in the budget tables as well.

The costs are given for the full duration. A breakdown by reporting period is not requested for the evaluation process. The 'Total estimated eligible costs' as well as the 'Total requested grant' figures should be equal to those inserted in the online proposal submission forms (section 3 – Budget). The

ERC funds up to 100% of the total eligible costs. In case the total costs differ from the requested grant, it should be specified on the proposal what exactly is funded from other sources.

The project cost estimation should be as accurate as possible. The evaluation panels assess the estimated costs carefully; <u>unjustified budgets will be consequently reduced</u>.

1.1.2.3 Supporting documentation

Any additional annexes, including the corresponding Host Institution support letter (and where relevant in case of ethical issues) should be provided and uploaded as separate pdf documents. These annexes do not count towards the maximum page limits.

A scanned copy of the following supporting documentation needs to be submitted with the proposal by uploading electronically in PPSS in PDF format:

- The corresponding Host Institution (corresponding applicant legal entity) must confirm its association with and its support to the project and the corresponding Principal Investigator. As part of the application the corresponding Host Institution must provide a binding statement that the conditions of independence are already fulfilled or will be provided to the corresponding PI and any other PI that will be hosted by it, if the application is successful. The corresponding Host Institution support letter (template available on PPSS, or please see Annex 2 to this document) needs to be printed on the official letterhead of the cHI, originally signed, stamped and dated by the institution's legal representative. **Proposals that do not include this institutional statement may be declared ineligible.**
- Any additional supporting documents which may be required following the indications
 provided in the proposal application (i.e. ethical self-assessment and supporting
 documentation for the ethics review procedure).

Copies of official documents can be submitted in any of the EU official languages. Document(s) in any other language must be provided together with a certified translation into English.

Please provide only the documents requested above. Unless specified in the call, any hyperlinks to other documents, embedded material, and any other documents (company brochures, supporting documentation, reports, audio, video, multimedia etc.) will be disregarded.

Check if the proposal is complete for the evaluation

Incomplete proposals (where parts or sections of the proposal and/or the corresponding Host Institution's commitment statement are missing) may be declared ineligible and will not be evaluated²⁶. The proposal must be submitted **before the relevant deadline of the call**.

Where there is a doubt on the eligibility of a proposal, the peer review evaluation may proceed pending a decision by an eligibility review committee. If it becomes clear before, during or after the peer review evaluation phase, that one or more of the eligibility criteria has not been met, the proposal is declared ineligible and is withdrawn from any further examination.

²⁶ See also section 2.4 'eligibility check' in the <u>ERC Rules for Submission</u> and in the section "Proposal submission and description" of the <u>ERC Work Programme 2018</u>.

Box 2 Checklist – Is your proposal complete?

For the submission of a <u>complete Synergy Grant proposal</u>, the following components have to be prepared:

- 1. The Administrative 'Proposal submission forms': to be completed online in PPSS
- on-line forms pre-registration and sections 1, 2, 3, 4 and 5

The Research Proposal (Part B1 and B2) and all supporting documentation should be uploaded and submitted via PPSS as PDF files. Make sure all file names²⁷ contain the 'Proposal Short Name', such as PartB1 [Proposal-Short-Name].pdf and PartB2 [Proposal-Short-Name].pdf

The Research Proposal (Part B):

- 2. Part B1 (to be evaluated at step 1, step 2 and step 3):
- Section a The Extended Synopsis of the scientific proposal.
- Section b and c The Principal Investigators. The 'funding ID' should be specified for each PI in a separate table using the provided table format.
- **3.** Part B2 (not evaluated by reviewers at step 1, but only at step 2 and step 3):
- Section a State of the art and objectives
- Section b Methodology
- Section c Resources (including project costs)

The Supplementary Documents:

4. The **supporting statement from the corresponding Host Institution**: printed on the official letterhead of the institution, originally signed, stamped and dated by the corresponding Host Institution's legal representative (see Annex 2).

5. <u>If applicable</u>, the ethics self-assessment explaining how the ethics issues will be treated (see <u>Annex</u> <u>3</u> to this document on how to write the ethics self-assessment and on the need for supporting documentation).

Please ensure that all forms and supplementary documents are uploaded correctly in PPSS before the final submission. It is strongly recommended to double-check by downloading them and verifying their completeness. If all components (including all the sections in Part B1 and Part B2 and required supplementary documents) are not present and complete in the final submission your proposal risks to be declared ineligible.

28

 $^{^{27}}$ Please note that filenames cannot exceed 75 characters long including the file extension.

1.1.3 How to submit the grant application

General user guidance

- The user guide of the Submission Service is available online at: http://ec.europa.eu/research/participants/data/support/sep_usermanual.pdf.
- The Participant Portal H2020 Online Manual describes the standard process of proposal submission: http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/applying-for-funding/submit-proposals en.htm.
- The <u>'IT HOW TO'</u> wiki site provides an online IT manual with screenshots.

Proposals must be submitted electronically using the electronic submission system of the web-based Participant Portal (PPSS)²⁸. Access to PPSS is available from the call page (after selecting a topic, click on the 'Submission Service' button, and a type of action of a call) of the Research and Innovation Participant Portal²⁹.

Please note that some internet browsers and/or Operating Systems (OS) may not be supported by PPSS. The electronic submission system of the European Commission is a web application, so you will need a working Internet connection to use it. Although the system has been tested with a set of typical reference configurations, it is not guaranteed that the system will be fully functional on your computer. The system provides a diagnostic window that will warn you about some possible incompatibilities.

To use the electronic submission system, ensure well before the deadline that your computer configuration complies with the mandatory system requirements. **NB: As requirements can change, please check them here:**

https://ec.europa.eu/research/participants/submission/manage/diagnostics, or the Proposal submission service user manual.

Make sure you have the correct version of Adobe Reader installed and it is set up as your default PDF handler. Most browsers have their own built-in PDF viewers. If your browser's built-in PDF viewer is not allowing you to properly open, view and edit the Administrative form in step 5, it is recommended that you disable your browser's PDF viewer and instead use the corresponding Adobe Reader plug-in. This way you will be able to open up, view and edit the form within the browser. As stated above, you can also complete the form offline and then save it to the Commission servers. In case you chose to work offline, please check immediately that the set-up allows you to save the data to the submission system.

In case of difficulties with the browser and/or operating system including with the Adobe plug-in needed to work online with the electronic submission form we advise you to contact the PPSS Service Desk at DIGIT-EFP7-SEP-SUPPORT@ec.europa.eu or directly by phone at +32 (2) 29 92222.

Step 1: 'EUlogin registration' - Getting a user ID with the Commission

To be able to submit a proposal and, in general to login to the Participant Portal, you must first register an EUlogin account. Each time you access the proposal for editing, this user ID is requested. The same user ID is used for all later interactions with the ERCEA, including notification of the results of the evaluation³⁰.

²⁸ In duly justified exceptional circumstances the ERCEA may authorise submission on paper.

http://ec.europa.eu/research/participants/portal/

³⁰ Further details are available here: https://webgate.ec.europa.eu/cas/eim/external/help.cgi

Step 2: 'Access the proposal submission system'

Access to the system is provided from the <u>topic's page</u>³¹ after selecting the 'Submission Service' and choosing the required action type. The system requires a login on the Portal with your EUlogin ID.

Step 3: 'Create a draft proposal' (pre-registration)

At this step, you fill in pre-registration data for the proposal. These details will be used by the ERCEA in order to plan the evaluation. You will not have access to this page again once it is completed and you have progressed to Step 4, but certain data, such as Acronym and Short Summary (abstract) can be modified at a later stage (at step 5, when editing the administrative form). Be careful to choose the correct PIC-number for your Host Institution.

1. When registering, please select carefully the type of contact person you are:

We advise that either the corresponding Principal Investigator or the Main Administrative contact person (the administrative person on behalf of the corresponding Host Institution) start creating a proposal.

2. Corresponding Principal Investigator, Main Administrative Contact person, Principal Investigator or Contact person (e.g. additional contact person or team-member) can be chosen.

Your Role		
Please indicate your role in this proposal		
Corresponding Principal Investigator		
Main Administrative contact person		
O Principal Investigator		
O Contact person		

The person who starts drafting the proposal will have an influence on the subsequent steps. Only the person starting the proposal will have the right to manage the access rights of other people to the proposal at Step 4. The person who creates the proposal will have the coordinating role, and alongside other people at the corresponding Host Institution with a designated coordinating role, will be able to modify any parts of the proposal and to submit it. Further contacts or PIs at other Host Institution will only be able to edit the parts related to their personal data or their Host Institution (have 'full access' rights to their parts).

- 3. **Acronym**: This is used to identify your proposal efficiently in the call. It should be no more than 20 characters (use standard alphabet and numbers only; no symbols or special characters, except underscore, space, hyphen or dot).
- 4. **Short summary**: The short summary (in English) describes briefly the purpose of the proposal with a maximum of 2000 characters. You may decide not to provide the full summary, but a list of keywords of the proposal will help the services in the planning of the evaluation. The 'short summary' information is copied to the 'Abstract' field in the online administrative form section 1, where it can be modified (see Step 5).

³¹ http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/erc-2018-syg.html

Please note that the list of participants will also be part of the pre-registration data.

At this step, the Host Institutions <u>must be identified with a Participant Identification Code (PIC)</u>. Failure to do so blocks the preparation and the submission of the proposal! The PIC is a unique 9 digit number that helps the ERCEA identify a participant (organisation). It is used in all grant-related interactions between the organisation and the ERCEA (or with the European Commission in other actions of Horizon 2020). Once an organisation is registered (in the Beneficiary Register, which is hosted in the Participant Portal), it eliminates redundant requests for information.

If a PIC is not yet available for an organisation, it can be obtained by registering the organisation in the <u>Beneficiary Register</u>. A PIC is then given, which can then be used in PPSS³².

If your Host Institution has already participated in an EU Research Framework Programme proposal, it is likely that it already has a PIC number. You can check this on the Beneficiary Register Page, where additional information on how to register is also available: http://ec.europa.eu/research/participants/portal/desktop/en/organisations/register.html

You are strongly advised to register your proposal well in advance of the call deadline to verify if the PIC is available for your Host Institution. If it is not, you then have sufficient time to register and contact your Host Institution or the PPSS Service Desk if needed at DIGIT-EFP7-SEP-SUPPORT@ec.europa.eu or +32 (2) 29 92222.

After entering the PIC, certain sections of the online proposal submission forms are filled in automatically. The objective of the PIC is to identify the organisation. The validation of the information will happen at a later stage, if the proposal is retained for funding.

Note:

5. If an organisation has a PIC, it may be likely that it has a person in charge of the administrative questions with the European Commission (the legal entity appointed representative – LEAR³³). Identifying this person inside your organisation may help you in the proposal submission process. The LEAR can modify the data related to the PIC if needed.

6. How to contact the LEAR? If you are at step 3, click on 'Search' button. Search for your organisation's PIC, and in the search result window (1) click on the green CO button (contact organisation) or, if you are at step 4 'Parties' (2), click on the green 'Contact LEAR' button in the HI box.

³² This self-registration will lead to a request by the Validation Service to the organisation to provide supporting documents and to nominate a Legal Entity Authorised Representative (LEAR). However, this PIC code does not need to be validated for proposal submission. If your proposal is selected, this additional information and validation will be completed at a later stage before signing the grant agreement.

³³ The LEAR is a parson positive of the control of t

³³ The LEAR is a person nominated in each legal entity participating in FP7/H2020. This person is the contact for the ERCEA related to all questions on legal status. The LEAR has access to the on-line database of legal entities with a possibility to view the data stored on their entity and to initiate updates and corrections to these data. After the validation of the entity has been finalised, the contact person/authorised representative named in the Research and Innovation Participant Portal receives the PIC number. Once the LEAR is validated, he/she manages the modifications of the entity-related information in the Research and Innovation Participant Portal and distributes the PIC number within his/her organisation, which can be used in all proposals submission and grant preparation.





If the organisation is not validated the 'self-registrant' of the organisation will be contacted instead.

Once Steps 1 to 3 are completed, the proposal is created and you will receive a confirmation of the creation of the draft proposal via e-mail. You can continue to Step 4 or return later to edit this draft proposal. This is done by following the steps below:

- 1. Go to the Participant Portal http://ec.europa.eu/research/participants/portal/
- 2. Click on the login button and provide your EUlogin username and password
- 3. Click on the 'My Proposals' tab
- 4. Depending on the status of the proposal, you jump to either Step 5 'Edit draft' or Step 6 'View submitted'.

Step 4 'Manage Your Related Parties'

Here you see the name and details of the corresponding Host Institution (always participant number '1') and the name of the person who created the draft proposal. At this step, you can:

- add the Main administrative contact person name (for the corresponding Host Institution)
 or the corresponding Principal Investigator (if not done yet) and e-mail;
- add further Principal Investigators hosted at the corresponding HI (full access or read-only access);
- add further Principal Investigators hosted at other Host Institutions;
- give access to one or more 'Contact person(s)' (full access or read-only access);
- add additional organisations ('Add Partner Organisations'): to add team members hosted in other organisations than the Host Institutions.

Be careful to type the correct e-mail address of the PIs and all contact persons at this step. Please note that if the Principal Investigator and the administrative contact person is the same person (because the PI is self-employed), you must use two different e-mail addresses as the system does not allow two identical e-mail addresses to be entered.

Organisations must be identified by their nine-digit PIC numbers. A search function is provided in the system to facilitate the search for partners (if any). If you realise that you have made a mistake in selecting the organisation, you can use the 'Change Organisation' button (3).



For each contact person the **role within the project** must be defined. When giving access rights to **contact persons**, the e-mail address of the person serves as the main identifier. You must define the level of access rights for each contact person:

- Coordinator contact (full access): corresponding Principal Investigator level of rights is named 'Coordinator contact' in PPSS. The Coordinator contact/cPI, the Main administrative contact of the corresponding HI or another PI with full access at the corresponding HI has the right to edit all parts of the proposal, upload documents, submit, and withdraw the proposal.
- Participant contact (full access): Pls at other Hls and their administrative contacts have full
 access to their parts, but have only read-only rights to other institutions parts, and cannot
 submit the proposal.
- **Team member (read-only rights):** The persons identified with read-only rights cannot edit or submit the proposal.

Please also be aware that only one person should work on the forms at any given time. If two persons work on the forms at the same time, in case of a save conflict, the last save wins, which means that you risk overwriting changes made by another contact person if you are working in parallel. We therefore recommend that you give 'read-only' access to your partners / additional contact persons (other contacts) unless it is absolutely necessary to grant full access. Please remember that the Main administrative contact person has full access – it is not possible to grant them 'read-only access'.

For the Principal Investigators and the Host Institution contact persons full details will be required later in the administrative forms (section 2). Please be aware that you MUST enter the details of the Pls and the Host Institution contact persons at Step 4 before going further, since these fields are not-editable in Step 5 in the forms. You may at any point return to Step 4 of the submission to add or delete any contact person or to change the access rights. Remember to save your data before leaving Step 4 otherwise you will be prevented from submitting the proposal.

You may also add the LEAR as a contact person (e.g. as a team member with read-only rights) to the proposal at Step 4 of the application.

Once the coordinator (corresponding PI or corresponding HI main administrative contact) saves the changes, an **automatic invitation** is sent to all contacts' e-mail addresses. The invited persons can **access the proposal** after logging in to the Participant Portal - with the EUlogin account linked to the given e-mail address — under the 'My Proposals' tab. <u>In case you encounter difficulties, please contact the submission system's Service Desk at DIGIT-EFP7-SEP-SUPPORT@ec.europa.eu or +32 (2) 29 92222.</u>

Step 5: 'Edit Proposal'

This step is the core of the submission process, as from this step, you can **edit the online administrative** proposal submission **forms**, view the history, print the draft proposal, download templates, upload files and submit the proposal by clicking on the relevant buttons.

By clicking the 'Edit form' button at Step 5 of the submission wizard, users can fill in the administrative forms of the proposal.

The ERC actions have specific administrative forms. The specificities lay mainly in the budget table, in the call specific questions and in the list of declarations.

Guidance on how to fill in the administrative online form is provided directly in the form as ghost text for the single entries or as additional help text hidden behind question-marks Some parts of the form will be prefilled based on the data entered at pre-registration or in the Beneticiary Register. Please use the functionality 'Validate form' button to check the validity and completeness of your data. Any warning or error will be listed at the end of the validated form.

Further information on the preparation of the application (the online administrative forms and Proposal Parts B1 and B2) is given in points 1.1.2.1 and 1.1.2.2 of this document.

- For Part B you must only use PDF ('portable document format'). Other file formats will not be accepted by the system. Irrespective of any page limits specified in this document, there is an overall limit of 10 Mbytes to the size of each uploaded document (Part B1, B2, and supporting documentation). However, it is advised to limit the size of Parts B1 and B2 to 2 Mbytes each.
- Unless specified in the call, embedded material and any other documents (company brochures, scientific papers, reports, audio, video, multimedia, etc.) sent electronically or by post will be disregarded.
- There are also restrictions to the name given to the Part B files: use alphanumeric characters; special characters and spaces must be avoided.

You are advised to clean your document before converting it to PDF (e.g. accept all tracked changes, delete notes).

Check that your conversion software has successfully converted <u>all</u> the pages of your original document (e.g. there is no problem with page limits).

Check that your conversion software has not cut down landscape format pages to fit them into portrait format. Check that captions and labels have not been lost from your diagrams.

Please note that the ERCEA prints out proposals in black and white on plain A4 paper. The printable zone on the print engine is bounded by 1.5 cm right, left, top bottom. No scaling is applied to make the page 'fit' the window. Printing is done at 300 dots per inch.

• Completing the Proposal submission forms in the PPSS and uploading all the necessary files does not yet mean that your proposal is submitted (mandatory files: Part B1, Part B2, Host Institution support letter and – if applicable: Ethical Self-assessment and supporting documentation for ethics issues) Once there is a consolidated version of the proposal, the 'SUBMIT' button must be pressed. The system performs a limited automatic validation of the proposal. A list of any problems such as missing data, wrong file format or excessive file size will then appear on the screen. You may submit your proposal with warnings, but submission is blocked until all errors are corrected. However, these checks do not replace the formal eligibility checks described in point 1.2.1 of this document and cannot guarantee that the contents of these files respond to the requirements of the call. When corrected, you must then repeat the above steps to achieve submission.

IMPORTANT: If the submission sequence described above is not followed, the ERCEA considers that no proposal has been submitted.

• When the proposal is successfully submitted, the system will proceed to Step 6 where a message that indicates that the proposal has been received is displayed. The system also sends a submission confirmation e-mail to you, with the summary data of the submitted proposal. To be noted: The mail can end up in the spam folder or be blocked by the antispam system of your organisation. This automatic message is not the official acknowledgement of receipt.

Step 6: 'Submit'

Reaching this step means that the proposal is submitted (i.e. sent to the ERCEA for evaluation). It does not mean that the proposal is valid, complete and eligible in all respects. Within a few minutes of submission your proposal will be available for download with an e-receipt in the PPSS system.

In Step 6 you can:

- Re-edit the proposal, going back to Step 5. You may continue to modify the proposal and submit revised versions overwriting the previous one right up until the deadline. The sequence above must be repeated each time.
- Download the proposal. You are advised to download the proposal once submitted to check that it has been correctly sent. The downloaded proposal with an e-receipt is digitally signed and time stamped. The e-receipt is also the Acknowledgement of receipt.
- Withdraw the proposal before the call deadline. If the proposal is deleted or withdrawn, it is
 not considered for evaluation. (Note: your proposal draft is not deleted from the server and
 this withdrawal action can be reversed, <u>but only before the deadline</u>, by simply submitting it
 again).

Once submitted, it is recommended to verify the proposal and its content by downloading all the submitted files. We strongly advise that you submit a first version of your proposal at least 24 hours in advance of the call deadline.

Warning: Please note that in the last hours prior to call closure, the download option for checking your submitted proposal may be disabled due to a high pressure on the system. In this case the ERCEA will inform the applicants via the call page on the Participant Portal (under 'call summary') of the call that the function has been disabled:

To access the call page ERC-2018-SYG, go to 'Funding Opportunities' in the <u>Participant Portal</u>, select 'H2020', then 'European Research Council' and then select the call you wish to view.

If the e-receipt and download option have been disabled, you may review your submitted proposal by going back to Step 5 to check the data in the administrative forms and click on 'View History' to verify which attachments have been uploaded.

Proposals must be submitted before the deadline specified in the call for proposals³⁴.

³⁴ In the unlikely event of a failure of the PPSS service due to a breakdown of the Commission server during the last 24 hours of a call, the deadline will be extended by a further 24 hours. This will be notified by e-mail to all applicants who had registered for this call by the time of the original deadline, and also by a notice on the call page on the Participant Portal: http://ec.europa.eu/research/participants/portal Such a failure is a rare and exceptional event; therefore do not assume that there will be an extension to this call. If you have difficulty in submitting your proposal, you should not assume that it is because of a problem with the Commission server, as this is rarely the case. For technical inquiries on the use of PPSS, please contact the Participant Portal IT Help Desk (http://ec.europa.eu/research/participants/api/contact/index.html). Please note that the ERCEA will not

PPSS will be closed for a relevant call at its call deadline. After this moment, it will be impossible to access PPSS for the relevant call.

Early registration and submission in PPSS is strongly recommended and should be done as early as possible in advance of the call deadline. Applicants who wait until shortly before the close of the call to start uploading their proposal, take a serious risk that the uploading will not be concluded in time and thus the 'SUBMIT' button will not be active anymore in order to conclude the submission process.

Box 3: Proposal submission - important to know:

- Proposals sent by means other than PPSS will not be accepted.
- Up to the call deadline, it is possible to modify a proposal simply by submitting a new version. As long as the call has not yet closed, the new submission will overwrite the old one.
- After the call deadline no update of the proposal will be accepted. Only the material that the
 proposal contains within the given page limits while respecting the indicated layout parameters will
 be evaluated.
- Submission is deemed to occur only if the submission sequence described above has been followed and not when the applicant starts uploading the proposal.
- Proposals are kept under secure conditions at all times. When no longer needed, all copies are destroyed except those required for archiving and/or auditing purposes.
- In some rare occasions the proposal may be altered while converted into a PDF file. Before uploading the file, please check that everything is correct. Additionally, please download and verify **all** uploaded files in due time before the submission deadline.
- In case of technical problems with PPSS please contact DIGIT-EFP7-SEP-SUPPORT@ec.europa.eu or get in touch with the SEP helpdesk directly on +32 (2) 29 92222 to receive immediate assistance.

If the submission is technically successful, the applicant receives an automatic computer-generated acknowledgement from PPSS.

Subsequent to submission, and only in exceptional cases, the ERC may contact the PI if this is necessary to clarify questions of eligibility, ethics issues, research integrity or to verify administrative or legal data contained in the proposal.

1.1.3.1 Modifying or withdrawing a proposal

Up to the call deadline, it is possible to **modify a proposal simply by submitting a new version**. As long as the call has not yet closed, the new submission will overwrite the old one.

The last version of your proposal submitted before the deadline is the one which will be evaluated; no later version can be substituted and no earlier version can be recovered.

Once the deadline has passed, the ERCEA cannot accept any further additions, corrections or resubmissions. However a read-only access to the submitted proposal is granted in case the PI (or other contact persons) wishes to verify what has been submitted. This possibility is available for <u>90</u> days after the call deadline.

extend deadlines for system failures that are not its own responsibility. In all circumstances, you should aim to submit your proposal well before the deadline to have time to solve any problems.

Proposals may be withdrawn before the call deadline at Step 6 using the 'Withdraw' button. These withdrawn proposals will not be considered subsequently for peer review evaluation or for selection, nor count against possible re-application restrictions³⁵.

For a proposal to be withdrawn after the call deadline, and for the application not to count against possible future re-applications restrictions, a written request for withdrawal must be received by the Agency at the latest on the day preceding the panel meeting where a final position on the outcome of the evaluation of that proposal is established. The withdrawal of a proposal must be done by sending an e-mail to the call-specific mail-box (ERC-2018-SYG-APPLICANTS@ec.europa.eu) including a signed scanned letter of withdrawal. The ERCEA will use the date of the e-mail as the reference point when deciding if a withdrawal can be accepted. The applicant will receive an acknowledgement of receipt of the e-mail and the signed scanned letter to confirm the withdrawal.

If more than one version of the same proposal is submitted before the call deadline, only the most recent version is kept for evaluation. In the case of very similar proposals submitted by the same PI, the ERCEA services may ask the PI to withdraw one or more of the proposals concerned.

Please consult regularly the <u>Research and Innovation Participant Portal</u> call page for updated information.

³⁵ As set out in the <u>ERC Work Programme 2018</u>

1.2 Evaluation and selection of grant proposals³⁶

1.2.1 Eligibility Check

Proposals are checked by the ERC Executive Agency to ensure that all of the eligibility criteria are met.

A proposal must fulfil all of the following eligibility criteria:

- o It must be submitted before the single submission deadline.
- o It must be <u>complete</u> (i.e. all of the requested forms, <u>parts or sections of the proposal</u>, and supporting documents must be completed and present).
- o It must meet the <u>eligibility requirements</u> of the respective ERC grant as well as other criteria mentioned in the relevant call for proposals.
- It must be in compliance with the restrictions on submission of proposals (see <u>ERC</u> Work Programme 2018).

The eligibility is checked on the basis of the information given by the PI in the proposal. Where there is a doubt on the eligibility of a proposal, the peer review evaluation may proceed pending a final decision by the eligibility review committee. If it becomes clear before, during or after the peer review evaluation phase, that one or more of the eligibility criteria has not been met (for example, due to incorrect or misleading information), the proposal will be declared ineligible and not considered any further.

1.2.2 Peer review evaluation of proposals

A single submission of the full proposal will be followed by a **three-step evaluation, including interviews**. The evaluation will be conducted by means of a structure of dedicated panels. The composition of the ERC evaluation panels is by nature multi-disciplinary to accommodate a proper evaluation of multidisciplinary proposals. The panels will be assisted by independent experts working remotely. These ERC panels assess and score the proposals on the basis of the individual evaluations and on the panel discussion which follows them.

Proposal allocation to peer reviewers

As there are no predefined panels, and to facilitate the allocation of proposals to the right experts, the applicant cPI has to indicate between four and six fixed keywords. These keywords are the same as the ones used in the ERC Starting, Consolidator and Advanced Grants and given in Annex 1 of this guide. There is no hierarchical ordering of the selected keywords. The fixed keywords and free keywords and the abstract of the proposal are analysed together to ensure the best expertise for each proposal. It is the corresponding PI's responsibility to choose and indicate the most relevant keywords for the evaluation of the proposed research (administrative form A, see section 1.1.2 - How to complete the grant application - of this guide). The allocation of the proposals to the various panels will be done by grouping proposals based on the given keywords, abstracts and panel members.

The corresponding Principal Investigator can request during the electronic proposal submission that up to four specific persons should not act as an evaluator in the evaluation of their proposal.

Reviewing process - summary

• At step 1, the extended synopsis and the Principal Investigators' track records and CVs will be assessed (part B1 only, and not the full scientific proposal).

³⁶ See also the ERC Work Programme 2018.

- At step 2 the complete version of the retained proposals will be assessed (Part B1 and B2).
- At step 3, for all the proposals retained after step 2, each of the Principal Investigators of the Synergy group will be invited for an interview to present their grant application to a panel in Brussels.

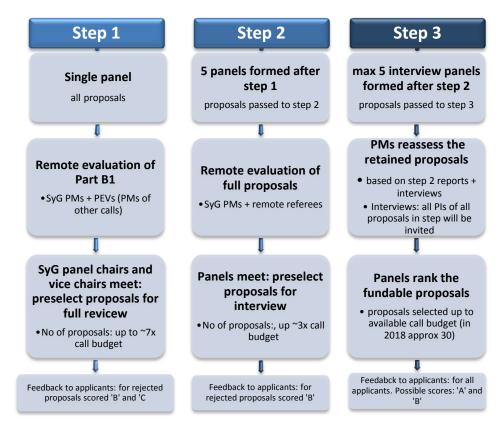
The composition of the panels in step 1 is not predefined. Step 1 panels will be formed from approximately 85 panel members and chairs. Five panels in step 2 will be formed in a dynamic way after the step 1 filtering to ensure the best expertise for a group of proposals. The five step 2 panels will be composed using the step 1 panel members, grouping them by around 15-18 experts in each panel. In step 3, the interview panels may be reconfigured to ensure the best expertise for the proposals.

Depending on the budget available for the call a budgetary cut-off applies to the ranking list and only the highest ranked proposals are offered an ERC grant until the call budget is consumed.

The ERC's peer review evaluation process has been carefully designed to identify scientific excellence irrespective of the gender, age, nationality or institution of the Principal Investigator and other potential biases, and to take career breaks as well as unconventional research career paths into account. The evaluations are monitored to guarantee transparency, fairness and impartiality in the treatment of proposals.

More details about the evaluation procedure for the Synergy grant 2018 call

The evaluation process requires around 80, dedicated, carefully selected Synergy panel members and 5 chairs who would ensure a wide generalist approach to reviewing. The number of proposals to be passed at each step are estimated based on the budget of 250 M€ allocated to the 2018 Synergy call. First the composition of the panels is presented, and then the reviewing process is discussed. Figure 1 shows the schematic representation of the 2018 evaluation process. PM: panel member; PEV: panel evaluator. PEV is an ERC term used for panel members of the other ERC frontier calls reviewing ERC SyG proposals.



The panels:

The panel chairs and members have been proposed by the ERC Scientific Council on the basis of their scientific reputation. Before the deadline of a call, the names of the panel chairs are published on the ERC website. Similarly, the names of panel members are published, however, only after the evaluation process is concluded.

Step 1: No disciplinary panels will be constituted. During submission of proposals, the applicants select 4-6 fixed keywords (same keywords used as for Starting/Consolidator/Advanced grants). Proposals will be evaluated remotely and individually by a pool of approximately 85 experts. In case of a high number of applications, panel members of other ERC frontier calls, called panel evaluators, will provide additional reviews.

Step 2: Five panels dynamically constituted (roughly 2 physical Sciences, 2 Life sciences, 1 Social sciences and humanities oriented panels). Each panel will have around 15 - 18 members selected from the pool of around 85 Synergy panel members. A dynamic panel structure would accommodate the possibility of experts participating in different panels/configurations to ensure proper treatment of inter/multidisciplinary proposals.

Step 3: Step 2 panel members would continue to be panelists in interview panels (minimum 3 and maximum 5, and in case needed, newly formed).

The reviewing process

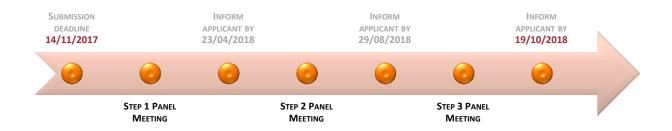


Figure 2: schematic representation of reviewing main steps. The time to inform the applicants corresponds to indicative dates.

Step 1: Based on 3 to 4 independent reviews per proposal (i.e. Part B1: the synopsis + CVs + track records of the 2 to 4 Principal Investigators) panel chairs and vice chairs would meet to select proposals that would pass to step 2. After proposal are selected for step 2, the chairs will form the step 2 panels, allocating the proposals and the panel members to the 5 panels based on the subject of the applications and on the expertise of the panelists. Applicants rejected at step 1 will receive an Evaluation Report consisting of individual reviews and a short panel comment conveying the score (B or C score) and general appreciation of the panel.

Step 2: Full versions of the proposals (i.e. Part B1 and Part B2) passed from the Step 1 evaluation process are assessed by members of the Step 2 panels. External specialized reviews will complement the generalist reviews of the panelists.

At the end of the remote assessment the 5 panels meet in Brussels. Based on the individual reviews provided and on a panel discussion, the number of proposals would be reduced. For the proposals

not selected for step 3, scored B, panel comments will be written, thus the Evaluation Report sent to the applicants will consist of the individual reviews and of the summary comment.

Step 3: Following the step 2 evaluation the applicants will receive an invitation letter detailing the format and the length of the interview. All Principal Investigators of the proposals selected for interviews will be invited to present their proposal to the interview panel in Brussels. A minimum of three and a maximum of five panels would interview the applicants in parallel. The composition of the panels might be different from the panels at step2. These panels may not be the same panels as in step 2. The resources requested by the applicants will be scrutinized and can be adjusted if not sufficiently justified.

All proposals at this final stage are ranked and only those ranked within the call budget are funded.

1.2.3 Ethics Review

Please see Annex A to the ERC Rules for Submission for a detailed description of the ERC Ethics Review procedure.

The ethics review process concerns all projects funded by the ERC in Horizon 2020. The applicants should pay particular attention to the ethical aspects of the proposed work and should submit all ethics documentation available for their proposal.

The process is aimed at ensuring that the Article 19 of <u>Horizon 2020 Framework Programme</u>, and Articles 13 and 14 of the <u>Rules for Participation</u> are implemented and, in particular, that all the research and innovation activities under Horizon 2020 comply with ethics principles and relevant national, Union and international legislation, including the <u>Charter of Fundamental Rights of the European Union</u> and the <u>European Convention on Human Rights</u> and its Supplementary Protocols.

The main areas that are addressed during the ethics review process include:

- 1. Human protection (including study participants and researchers)
- 2. Animal protection and welfare
- 3. Data protection and privacy
- 4. Environment protection
- 5. Participation of non-EU countries
- 6. Malevolent use of research results

When submitting their proposal, applicants must complete the Ethics Issues Table which is section 4 of the online proposal submission forms and submit an ethics self-assessment (separate annex) if they answer yes to one or several questions in the Ethics Issues Table. Please see <u>Annex 3</u> to this document for guidance to write an ethics self-assessment.

If the proposal is retained for funding, further to the outcome of the ethics review process, the Host Institutions and the Principal Investigators receive a copy of the ethics report - unsigned so as to preserve the anonymity of the experts.

Please include any supporting documentation, such as any authorisation you may already have. This will allow a more effective ethics clearance and an accelerated granting process³⁷. Please upload any related documents or annexes in PPSS Step 5 'Edit Proposal'.

_

³⁷ A full description of the Ethics Review is provided in the <u>ERC Rules for the submission</u> of proposals and the related evaluation, selection and award procedures relevant to the H2020 Specific Programme.

Applicants should be aware that no grant agreement can be signed by ERCEA prior to a satisfactory conclusion of the ethics review procedure.

If a proposal is rejected because of ethics considerations, the applicant is informed of the grounds for such a decision and the means to address enquiries and complaints.

A dedicated website that aims to provide helpful information including ethics issues is available at: http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/ethics_en.htm

1.2.4 Evaluation criteria

Excellence is the sole criterion of evaluation. It will be applied to the evaluation of both the Principal Investigators and the group's research project.

The detailed elements applying to the two parts of the proposal are specified in the <u>FRC Work Programme 2018</u> – section 8.4. Applicants should carefully read the section *Evaluation procedure and criteria* of the Work Programme. The criteria are reproduced below:

1. Research Project

Ground-breaking nature, ambition and feasibility

Ground-breaking nature and potential impact of the research project

To what extent does the proposed research address important challenges?

To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development between or across disciplines)?

To what extent is the proposed research high risk/high gain?

Scientific Approach

To what extent is the outlined scientific approach feasible bearing in mind the extent that the proposed research is high risk/high gain?

To what extent does the proposal go beyond what the individual Principal Investigators could achieve alone?

To what extent does the proposal require and demonstrate significant synergies, complementarities and scientific added-value to enable it to achieve its objectives?

To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project?(to be reviewed only at step 2 based on the full part B2 proposal)

To what extent does the proposal involve the development of novel methodology? (to be reviewed only at step 2 based on the full part B2 proposal)

To what extent are the proposed timescales and resources necessary and properly justified? (to be reviewed only at step 2 based on the full part B2 proposal)

2. Principal Investigator

Intellectual capacity, creativity and commitment

Intellectual capacity and creativity

To what extent have the PIs demonstrated the ability to propose and conduct ground-breaking research?

To what extent do the PIs provide evidence of creative independent thinking?

To what extent have the achievements of the PIs typically gone beyond the state of the art?

Commitment

To what extent do the PIs demonstrate the level of commitment to the project necessary for its execution and the willingness to devote a significant amount of time to the project (minimum 30% of the total working time on it)? (to be reviewed only at step 2 based on the full part B2 proposal)

1.2.5 Outcome of evaluation

At each evaluation step, each proposal will be evaluated and marked for each of the two main elements of the proposal: Research Project and Principal Investigator.

At the end of each evaluation step, the proposals will be ranked by the panels on the basis of the marks they have received and the panels' overall appreciation of their strengths and weaknesses.

At the end of **step 1** of the evaluation, on the basis of the assessment of Part B1 of the proposal, applicants will be informed that their proposal:

- **A.** is of sufficient quality to pass to step 2 of the evaluation;
- **B.** is of high quality but not sufficient to pass to step 2 of the evaluation;
- **C.** is not of sufficient quality to pass to step 2 of the evaluation.

At the end of **step 2** of the evaluation, on the basis of the assessment of the full proposal, applicants will be informed that their proposal:

- **A.** is of sufficient quality to pass to step 3 of the evaluation;
- **B.** is of high quality but not sufficient to pass to step 3 of the evaluation;

At the end of **step 3** of the evaluation applicants will be informed that their proposal:

- **A.** fully meets the ERC's excellence criterion and is recommended for funding if sufficient funds are available;
- **B.** meets some but not all elements of the ERC's excellence criterion and will not be funded.

The evaluation panels may review the level of the requested budget and, as appropriate, suggest adjustments.

In addition, once the evaluation of their proposal has been completed, applicants will receive an evaluation report which will include the ranking range of their proposal out of the proposals evaluated by the panel.

Projects recommended for funding (scored 'A' at step 3) will be funded by the ERC if sufficient funds are available. Proposals will be funded in priority order based on their rank. This means that it

is very likely that <u>not all</u> proposals scored 'A', and therefore recommended for funding, will be eventually funded by the ERC.

1.2.6 Feedback to applicants

Following the peer review evaluation, the ERCEA provides feedback through an 'information letter' to the PIs and the Host Institutions (applicant legal entity) via the EUlogin secured web-mail account accessible on the Participant Portal.

Besides the information letter, an evaluation report will be provided to all PIs and all HIs' contact person(s). This indicates whether the proposal meets the quality threshold and is retained, and provides the score and corresponding comments given by the panel as well as the comments given by the individual reviewers.

Please note that the comments by the individual reviewers may not necessarily be convergent – controversy and differences of opinions about the merits of a scientific proposal are part of scientific debate and are legitimate.

Furthermore, the ERC panel may take a position that is different from what could be inferred from the comments of the individual reviewers. This is the case for example, if the panel discussion reveals an important weakness in a proposal that had not been identified by the individual reviewers. The panel comments reflect the consensus decision taken by the panel as a whole based on prior remote individual assessments from independent reviewers, which can be remote referees as well as panel members, and on a thorough discussion and on the ranking against other proposals during the panel meeting.

1.2.6.1 Evaluation review (or redress) procedure

Please see the section 3.9 of the <u>ERC Rules for Submission</u> for a detailed description of the enquiries and complaints and evaluation review procedures.

Upon reception of the feedback on the outcome of the peer review evaluation with the evaluation report or with the results of the eligibility check, the cPI and/or the cHI may introduce a complaint against the ineligibility or a request for evaluation review, if there is an indication that there has been a shortcoming in the way a proposal has been evaluated, or that the results of the eligibility checks are incorrect. A complaint can be made if the PI(s) and/or the HI(s) consider that the assessment of the eligibility and/or evaluation of their proposal has not been carried out in accordance with the procedures set out in the Rules for Participation, the relevant ERC work programme, call for proposals or the ERC Rules for Submission and Evaluation. The evaluation review procedure is not meant to call into question the scientific judgement made by the peer review panel; it will look into procedural shortcomings and – in rare cases – into factual errors.

The information letter will provide an electronic address to be used for the cPI and/or cHI. The letter will specify a deadline for the receipt of any such complaints, which will be 30 days from the date of receiving the ERCEA's information letter.

Complaints must be:

- related to the peer review evaluation process, or eligibility checks, for the call and grants in question;
- set out using the on-line form via the above-mentioned web-based mailing system, including a clear description of the grounds for complaint;
- received within the time limit specified on the Call information letter;
- sent by the corresponding PI and/or the corresponding Host Institution (as the corresponding applicant legal entity).

An acknowledgment of receipt will be sent to complainants no later than two weeks after the deadline for submitting the complaint. This acknowledgement of receipt will indicate the estimated date of a definitive reply.

A redress committee of the ERCEA may be convened to examine the eligibility checks and peer review evaluation process for the case in question. The redress committee will bring together staff of the ERCEA with the requisite scientific/technical and legal expertise. The committee's role is to ensure a coherent interpretation of requests, and fair and equal treatment of applicants. During the evaluation review procedure, the committee itself, however, does not re-evaluate the proposal. Depending on the nature of the complaint, the committee may review the evaluation report, the individual comments and examine the CVs of the experts. The committee will not call into question the scientific judgement of appropriately qualified panels of experts. In the light of its review, the committee will recommend a course of action to the authorising officer. If there is clear evidence of a shortcoming that could affect the eventual funding decision, it is possible that all or part of the proposal will be re-evaluated.

Please note:

- A re-evaluation will only be carried out if there is evidence of a shortcoming that affects the
 quality assessment of a proposal. This means, for example, that a problem relating to one
 evaluation criterion will not lead to a re-evaluation if a proposal has failed anyway on the
 other criteria.
- The evaluation score following any re-evaluation will be regarded as definitive. It may be lower than the original score.
- Only one request for evaluation review per proposal will be considered by the committee.
- All requests for evaluation review will be treated in confidence.

The above procedure does not prevent the applicants from resorting to any other means of seeking redress such as lodging an appeal to the Commission in accordance with Article 22³⁸ of Council Regulation 58/2003, or filing an action for annulment under Article 263³⁹ of the Treaty on the Functioning of the European Union (TFEU) before the Court of Justice of the European Union for a decision affecting a person or legal entity. PIs and applicant legal entities will have to choose either one or several of these means of redress, and they are not obliged to pursue one before another. These channels are also available to applicants who wish to register a complaint after the deadline mentioned above.

Please be aware that you cannot take more than one **formal action** at a time. Thus, if you make, for instance, a request for eligibility review or evaluation review, you cannot — at the same time — take any other action. If you file an Article 22 request, you cannot — at the same time — bring an Article 263 TFEU action. You must wait for the final decision of Commission/Agency and can then take further action against that decision. All deadlines will start to run from when you receive the final decision⁴⁰.

-

³⁹ Treaty on the Functioning of the European Union (OJ C 326, 26.10.2012, p. 47–390).

 $^{^{38}}$ Council Regulation (EC) No 58/2003 of 19 December 2002 laying down the statute for executive agencies to be entrusted with certain tasks in the management of Community programmes (OJ L 11, 16.01.2003, p. 1

⁴⁰ Please be aware that, as per Article 22 of Regulation 58/2003, reaching a final decision on an Article 22 request may generally take more than 30 days. Therefore if you first file an Article 22 request you may not be able to submit afterwards an evaluation review request within the 30 days deadline.

2: Annexes

Annex 1: ERC Keywords

For the planning and operation of the evaluation of ERC Synergy grant proposals, the following keyword will be used.

Social Sciences and Humanities

<u>SH1</u>	Individuals, Markets and Organisations: Economics, finance and management		
	SH1_1	Macroeconomics; monetary economics; economic growth	
	SH1_2	International trade; international business; international management; spatial; economics	
	SH1_3	Development economics, health economics, education economics	
	SH1_4	Financial economics; banking; corporate finance; international finance; accounting;	
		auditing; insurance	
	SH1_5	Labour and demographic economics; human resource management	
	SH1_6	Econometrics; operations research	
	SH1_7	Behavioural economics; experimental economics; neuro-economics	
	SH1_8	Microeconomics; game theory	
	SH1_9	Industrial organisation; strategy; entrepreneurship	
	SH1_10	Management; marketing; organisational behaviour; operations management	
	SH1_11	Technological change, innovation, research & development	
	SH1_12	Agricultural economics; energy economics; environmental economics	
	SH1_13	Public economics; political economics; law and economics	
	SH1_14	Quantitative economic history; institutional economics; economic systems	
SH2	Institutio	ons, Values, Environment and Space: Political science, law, sustainability	
science		phy, regional studies and planning	
	SH2_1	Political systems, governance	
	SH2_2	Democratisation and social movements	
	SH2_3	Conflict resolution, war	
	SH2_4	Legal studies, constitutions, human rights, comparative law	
	SH2_5	International relations, global and transnational governance	
	SH2_6	Sustainability sciences, environment and resources	
	SH2_7	Environmental and climate change, societal impact and policy	
	SH2_8	Energy, transportation and mobility	
	SH2_9	Urban, regional and rural studies	
	SH2_10	Land use and regional planning	
	SH2_11	Human, economic and social geography	
	SH2_12	GIS, spatial analysis; big data in political, geographical and legal studies	
SH3	The Soc	cial World, Diversity, Population: Sociology, social psychology, social	
<u> </u>		emography, education, communication	
SH3_1 Social structure, social mobility		Social structure, social mobility	
		Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour	
	SH3_3	Social integration, exclusion, prosocial behaviour	
	SH3_4	Attitudes and beliefs	
	_ SH3_5	Social influence; power and group behaviour	
	SH3_6	Kinship; diversity and identities, gender, interethnic relations	
	SH3_7	Social policies, welfare	

	SH3_8	Population dynamics; households, family and fertility
	SH3_9	Health, ageing and society
	SH3_10	Religious studies, ritual; symbolic representation
	SH3_11	Social aspects of learning, curriculum studies, educational policies
	SH3_12	Communication and information, networks, media
	SH3_13	Digital social research
	SH3_14	Science and technology studies
SH4	The Hu	man Mind and Its Complexity: Cognitive science, psychology, linguistics,
philos	ophy of n	
	SH4_1	Cognitive basis of human development and education, developmental disorders, comparative cognition
	SH4_2	Personality and social cognition; emotion
	SH4_3	Clinical and health psychology
	SH4_4	Neuropsychology
	SH4_5	Attention, perception, action, consciousness
	SH4_6	Learning, memory; cognition in ageing
	SH4_7	Reasoning, decision-making; intelligence
	SH4_8	Language learning and processing (first and second languages)
	SH4_9	Theoretical linguistics; computational linguistics
	SH4_10	Language typology
	SH4_11	Pragmatics, sociolinguistics, discourse analysis
	SH4_12	Philosophy of mind, philosophy of language
	SH4_13	Philosophy of science, epistemology, logic
<u>SH5</u>	Cultures	s and Cultural Production: Literature, philology, cultural studies, study of the
arts, p	hilosophy	Y
	SH5_1	Classics, ancient literature and art
	SH5_2	Theory and history of literature, comparative literature
	SH5_3	Philology and palaeography; historical linguistics
	SH5_4	Visual and performing arts, film, design
	SH5_5	Music and musicology; history of music
	SH5_6	History of art and architecture, arts-based research
	SH5_7	Museums, exhibitions, conservation and restoration
	SH5_8	Cultural studies, cultural identities and memories, cultural heritage
	SH5_9	Metaphysics, philosophical anthropology; aesthetics
	SH5_10	Ethics; social and political philosophy
	SH5_11	History of philosophy
	SH5_12	Computational Modelling and Digitisation in the Cultural Sphere
<u>SH6</u>	The Stu	dy of the Human Past: Archaeology and history
	SH6_1	Historiography, Theory and methods in history, including the analysis of digital data
	SH6_2	Classical archaeology, history of archaeology
	SH6_3	General archaeology, archaeometry, landscape archaeology
	SH6_4	Prehistory, palaeoanthropology, palaeodemography, protohistory
	SH6_5	Ancient history
	SH6_6	Medieval history
	SH6_7	Early modern history

SH6_8	Modern and contemporary history
SH6_9	Colonial and post-colonial history
SH6_10	Global history, transnational history, comparative history, entangled histories
SH6_11	Social and economic history
SH6_12	Gender history; Cultural History; History of Collective Identities and Memories
SH6_13	History of Ideas, Intellectual History, history of economic thought
SH6_14	History of Science, Medicine and Technologies

Physical Sciences and Engineering

PE1		Mathematics: All areas of mathematics, pure and applied, plus mathematical			
found	foundations of computer science, mathematical physics and statistics				
	PE1_1	Logic and foundations			
	PE1_2	Algebra			
	PE1_3	Number theory			
	PE1_4	Algebraic and complex geometry			
	PE1_5	Geometry			
	PE1_6	Topology			
	PE1_7	Lie groups, Lie algebras			
	PE1_8	Analysis			
	PE1_9	Operator algebras and functional analysis			
	PE1_10	ODE and dynamical systems			
	PE1_11	Theoretical aspects of partial differential equations			
	PE1_12	Mathematical physics			
	PE1_13	Probability			
	PE1_14	Statistics			
	PE1_15	Discrete mathematics and combinatorics			
	PE1_16	Mathematical aspects of computer science			
	PE1_17	Numerical analysis			
	PE1_18	Scientific computing and data processing			
	PE1_19	Control theory and optimisation			
	PE1_20	Application of mathematics in sciences			
	PE1_21	Application of mathematics in industry and society			
PE2	Fundan	nental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas,			
and o	ptical phys				
	PE2_1	Fundamental interactions and fields			
	PE2_2	Particle physics			
	PE2_3	Nuclear physics			
	PE2_4	Nuclear astrophysics			
	PE2_5	Gas and plasma physics			
	PE2_6	Electromagnetism			
	PE2_7	Atomic, molecular physics			
	PE2_8	Ultra-cold atoms and molecules			
	PE2_9	Optics, non-linear optics and nano-optics			
	PE2_10	Quantum optics and quantum information			
	PE2_11	Lasers, ultra-short lasers and laser physics			

PE2_12	Relativity					
PE2_13	Thermodynamics					
PE2_14	Non-linear physics					
PE2_15	Metrology and measurement					
PE2_16	Statistical physics (gases)					
PE3 Conder	PE3 Condensed Matter Physics: Structure, electronic properties, fluids, nanosciences,					
biological physic	· · · · · · · · · · · · · · · · · · ·					
PE3_1	Structure of solids, material growth and characterisation					
PE3_2	Mechanical and acoustical properties of condensed matter, Lattice dynamics					
PE3_3	Transport properties of condensed matter					
PE3_5	Physical properties of semiconductors and insulators					
PE3_6	Macroscopic quantum phenomena: superconductivity, superfluidity, etc.					
PE3_7	Spintronics					
PE3_8	Magnetism and strongly correlated systems					
PE3_9	Condensed matter – beam interactions (photons, electrons, etc.)					
PE3_10	Nanophysics: nanoelectronics, nanophotonics, nanomagnetism,					
	nanoelectromechanics, etc.					
PE3_11	Mesoscopic physics					
PE3_12	Molecular electronics					
PE3_13	Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid					
	crystals, etc.), liquids, glasses, defects, etc.					
PE3_14	Fluid dynamics (physics)					
PE3_15	Statistical physics: phase transitions, noise and fluctuations, models of complex					
	systems, etc.					
PE3_16	Physics of biological systems					
PE4 Physica	al and Analytical Chemical Sciences: Analytical chemistry, chemical theory,					
	try/chemical physics					
PE4_1	Physical chemistry					
 PE4_2	Spectroscopic and spectrometric techniques					
PE4_3	Molecular architecture and Structure					
PE4_4	Surface science and nanostructures					
PE4_5	Analytical chemistry					
PE4_6	Chemical physics					
PE4_7	Chemical instrumentation					
PE4_8	Electrochemistry, electrodialysis, microfluidics, sensors					
PE4_9	Method development in chemistry					
PE4_10	Heterogeneous catalysis					
PE4_11	Physical chemistry of biological systems					
PE4_12	Chemical reactions: mechanisms, dynamics, kinetics and catalytic reactions					
PE4_13	Theoretical and computational chemistry					
PE4_14	Radiation and Nuclear chemistry					
_ PE4_15	Photochemistry					
PE4_16	Corrosion					
PE4_17	Characterisation methods of materials					
PE4_18	Environment chemistry					

PE5 Synthetic Chemistry and Materials: Materials synthesis, structure-properties relations,					
functional and advanced materials, molecular architecture, organic chemistry					
PE5_1	PE5_1 Structural properties of materials				
PE5_2	Solid state materials				
PE5_3	Surface modification				
PE5_4	Thin films				
PE5_5	Ionic liquids				
PE5_6	New materials: oxides, alloys, composite, organic-inorganic hybrid, nanoparticles				
PE5_7	Biomaterials, biomaterials synthesis				
PE5_8	Intelligent materials – self assembled materials				
PE5_9	Coordination chemistry				
PE5_10	Colloid chemistry				
PE5_11	Biological chemistry				
PE5_12	Chemistry of condensed matter				
PE5_13	Homogeneous catalysis				
PE5_14	Macromolecular chemistry				
PE5_15	Polymer chemistry				
PE5_16	Supramolecular chemistry				
PE5_17	Organic chemistry				
PE6 Comput	ter Science and Informatics: Informatics and information systems, computer				
	c computing, intelligent systems				
PE6 1	Computer architecture, pervasive computing, ubiquitous computing				
_ PE6_2	Computer systems, parallel/distributed systems, sensor networks,				
_	embedded systems, cyber-physical systems				
PE6_3	Software engineering, operating systems, computer languages				
PE6_4	Theoretical computer science, formal methods, and quantum computing				
PE6_5	Cryptology, security, privacy, quantum crypto				
PE6_6	Algorithms, distributed, parallel and network algorithms, algorithmic game theory				
PE6_7	Artificial intelligence, intelligent systems, multi agent systems				
PE6_8	Computer graphics, computer vision, multimedia, computer games				
PE6_9	Human computer interaction and interface, visualisation and natural language				
	processing				
PE6_10	Web and information systems, database systems, information retrieval and digital				
	libraries, data fusion				
PE6_11	Machine learning, statistical data processing and applications using signal processing (e.g. speech, image, video)				
PE6_12	Scientific computing, simulation and modelling tools				
PE6_13	Bioinformatics, biocomputing, and DNA and molecular computation				
PE7 System	PE7 Systems and Communication Engineering: Electrical, electronic, communication, optical				
and systems eng	· · · · · · · · · · · · · · · · · · ·				
PE7_1	Control engineering				
PE7_2	Electrical engineering: power components and/or systems				
PE7_3	Simulation engineering and modelling				
PE7_4	(Micro and nano) systems engineering				
PE7_5	(Micro and nano) electronic, optoelectronic and photonic components				

	PE7_6			
	PE7_7	Signal processing		
	PE7_8	Networks (communication networks, sensor networks, networks of robots, etc.)		
	PE7_9	Man-machine-interfaces		
	PE7_10	Robotics		
	PE7_11	Components and systems for applications (in e.g. medicine, biology, environment)		
	PE7_12	Electrical energy production, distribution, application		
PE8	Product	s and Processes Engineering: Product design, process design and control,		
constr	uction me	thods, civil engineering, energy processes, material engineering		
	PE8_1	Aerospace engineering		
	PE8_2	Chemical engineering, technical chemistry		
	PE8_3	Civil engineering, architecture, maritime/hydraulic engineering, geotechnics, waste		
		treatment		
	PE8_4	Computational engineering		
	PE8_5	Fluid mechanics, hydraulic-, turbo-, and piston engines		
	PE8_6	Energy processes engineering		
	PE8_7	Mechanical and manufacturing engineering (shaping, mounting, joining, separation)		
	PE8_8	Materials engineering (biomaterials, metals, ceramics, polymers, composites, etc.)		
	PE8_9	Production technology, process engineering		
	PE8_10	Industrial design (product design, ergonomics, man-machine interfaces, etc.)		
	PE8_11	Sustainable design (for recycling, for environment, eco-design)		
	PE8_12	Lightweight construction, textile technology		
	PE8_13	Industrial bioengineering		
PE9		e Sciences: Astro-physics/chemistry/biology; solar system; stellar, galactic and		
extrag	alactic ast	ronomy, planetary systems, cosmology, space science, instrumentation		
	PE9_1	Solar and interplanetary physics		
	PE9_2	Planetary systems sciences		
	PE9_3	Interstellar medium		
	PE9_4	Formation of stars and planets		
	PE9_5	Astrobiology		
	PE9_6	Stars and stellar systems		
	PE9_7	The Galaxy		
	PE9_8	Formation and evolution of galaxies		
	PE9_9	Clusters of galaxies and large scale structures		
	PE9_10	High energy and particles astronomy – X-rays, cosmic rays, gamma rays, neutrinos		
	PE9_11	Relativistic astrophysics		
	PE9_12	Dark matter, dark energy		
	PE9_13	Gravitational astronomy		
	PE9_14	Cosmology		
	PE9_15	Space Sciences		
	PE9_16	Very large data bases: archiving, handling and analysis		
PE10 oceand		ystem Science: Physical geography, geology, geophysics, atmospheric sciences, limatology, cryology, ecology, global environmental change, biogeochemical cycles,		
		s management		

Atmospheric chemistry, atmospheric composition, air pollution

PE10_2	Meteorology, atmospheric physics and dynamics	
PE10_3	Climatology and climate change	
PE10_4	Terrestrial ecology, land cover change	
PE10_5	Geology, tectonics, volcanology	
PE10_6	Palaeoclimatology, palaeoecology	
PE10_7	Physics of earth's interior, seismology, volcanology	
PE10_8	Oceanography (physical, chemical, biological, geological)	
PE10_9	Biogeochemistry, biogeochemical cycles, environmental chemistry	
PE10_10	Mineralogy, petrology, igneous petrology, metamorphic petrology	
PE10_11	Geochemistry, crystal chemistry, isotope geochemistry, thermodynamics	
PE10_12	Sedimentology, soil science, palaeontology, earth evolution	
PE10_13	Physical geography	
PE10_14	Earth observations from space/remote sensing	
PE10_15	Geomagnetism, palaeomagnetism	
PE10_16	Ozone, upper atmosphere, ionosphere	
PE10_17	Hydrology, water and soil pollution	

Life Sciences

LS1 Molecular Biology, Biochemistry, Structural Biology and Molecular Biophysics: Molecular synthesis, modification, mechanisms and interactions; biochemistry; structural biology, molecular biophysics; metabolism; signalling pathways

- LS1_1 Macromolecular complexes including interactions involving nucleic acids, proteins, lipids and carbohydrates
- LS1_2 Biochemistry and metabolism
- LS1_3 DNA synthesis, modification, repair, recombination, degradation
- LS1_4 RNA synthesis, processing, modification, degradation
- LS1 5 Protein synthesis, modification, turnover
- LS1_6 Lipid synthesis, modification, turnover
- LS1_7 Carbohydrate synthesis, modification, turnover
- LS1 8 Molecular biophysics (e.g. single-molecule approaches, bioenergetics, fluorescence)
- LS1_9 Structural biology and its methodologies (e.g. crystallography, cryo-EM, NMR and new technologies)
- LS1_10 Molecular mechanisms of signalling pathways
- LS1_11 Fundamental aspects of synthetic biology and chemical biology

<u>LS2 Genetics, 'Omics', Bioinformatics and Systems Biology:</u> Molecular genetics, quantitative genetics, genetic epidemiology, epigenetics, genomics, metagenomics, transcriptomics, proteomics, metabolomics, glycomics, bioinformatics, computational biology, biostatistics, systems biology

- LS2_1 Molecular genetics, reverse genetics, forward genetics, genome editing
- LS2_2 Non coding RNAs
- LS2_3 Quantitative genetics
- LS2_4 Genetic epidemiology
- LS2_5 Epigenetics and gene regulation
- LS2_6 Genomics (e.g. comparative genomics, functional genomics)
- LS2_7 Metagenomics
- LS2 8 Transcriptomics

- LS2_9 Proteomics
- LS2_10 Metabolomics
- LS2 11 Glycomics/Lipidomics
- LS2 12 Bioinformatics
- LS2_13 Computational biology
- LS2 14 Biostatistics
- LS2 15 Systems biology
- **LS3 Cellular and Developmental Biology:** Cell biology, cell physiology, signal transduction, organogenesis, developmental genetics, pattern formation, stem cell biology, in plants and animals and where appropriate in microorganisms
 - LS3 1 Morphology and functional imaging of cells and tissues
 - LS3_2 Cytoskeleton and cell behaviour (e.g. control of cell shape, cell migration and cellular mechanosensing)
 - LS3_3 Organelle biology and trafficking
 - LS3 4 Cell junctions, cell-adhesion, cell communication and the extracellular matrix
 - LS3_5 Cell signalling and signal transduction
 - LS3_6 Cell cycle, division and growth
 - LS3 7 Cell death (including senescence) and autophagy
 - LS3 8 Cell differentiation, physiology and dynamics
 - LS3_9 Developmental genetics in animals and plants
 - LS3 10 Embryology and pattern formation in animals and plants
 - LS3_11 Tissue organisation and morphogenesis in animals and plants (including biophysical approaches)
 - LS3_12 Stem cell biology in development, tissue regeneration and ageing, and fundamental aspects of stem cell-based therapies
- **LS4 Physiology, Pathophysiology and Endocrinology:** Organ physiology, pathophysiology, endocrinology, metabolism, ageing, tumorigenesis, cardiovascular diseases, metabolic syndromes
 - LS4_1 Organ physiology and pathophysiology
 - LS4 2 Comparative physiology and pathophysiology
 - LS4 3 Molecular aspects of endocrinology
 - LS4_4 Fundamental mechanisms underlying ageing
 - LS4 5 Metabolism, biological basis of metabolism related disorders
 - LS4_6 Fundamental mechanisms underlying cancer
 - LS4_7 Fundamental mechanisms underlying cardiovascular diseases
 - LS4 8 Non-communicable diseases (except for neural/psychiatric and immunity-related)
- **LS5 Neuroscience and Neural Disorders:** Neural cell function and signalling, systems neuroscience, neural bases of cognitive and behavioural processes, neurological and psychiatric disorders
 - LS5_1 Neural cell function, communication and signalling, neurotransmission in neuronal and/or glial cells
 - LS5_2 Systems neuroscience and computational neuroscience (e.g. neural networks, neural modelling)
 - LS5_3 Neuronal development, plasticity and regeneration
 - LS5_4 Sensation and perception (e.g. sensory systems, sensory processing, pain)
 - LS5_5 Neural bases of cognitive processes (e.g. memory, learning, attention)
 - LS5_6 Neural bases of behaviour (e.g. sleep, consciousness, addiction)
 - LS5_7 Neurological disorders (e.g. neurodegenerative diseases, seizures)

- LS5_8 Psychiatric disorders (e.g. affective and anxiety disorders, autism, psychotic disorders)
- LS5_9 Neurotrauma and neurovascular conditions (including injury, blood-brain barrier, stroke, neurorehabilitation)

LS6 Immunity and Infection: The immune system and related disorders, biology of infectious agents and infection, biological basis of prevention and treatment of infectious diseases

- LS6 1 Innate immunity in animals and plants
- LS6 2 Adaptive immunity
- LS6_3 Regulation and effector functions of the immune response (e.g. cytokines, interferons and chemokines, inflammation, immune signalling, helper T cells, immunological memory, immunological tolerance, cell-mediated cytotoxicity, complement)
- LS6_4 Immunological mechanisms in disease (e.g. autoimmunity, allergy, transplantation immunology, tumour immunology)
- LS6_5 Biology of pathogens (e.g. bacteria, viruses, parasites, fungi)
- LS6_6 Mechanisms of infection (e.g. transmission, virulence factors, host defences, immunity to pathogens, molecular pathogenesis)
- LS6_7 Biological basis of prevention and treatment of infection (e.g. infection natural cycle, reservoirs, vectors, vaccines, antimicrobials)
- LS6 8 Infectious diseases in animals and plants

LS7 Applied Medical Technologies, Diagnostics, Therapies, and Public Health: Development of tools for diagnosis, monitoring and treatment of diseases, pharmacology, clinical medicine, regenerative medicine, epidemiology and public health

- LS7 1 Imaging for medical diagnosis
- LS7 2 Genetic tools for medical diagnosis
- LS7_3 Other medical technologies for diagnosis and monitoring of diseases
- LS7_4 Pharmacology and pharmacogenomics (including drug discovery and design, drug delivery and therapy, toxicology)
- LS7_5 Applied gene and cell therapies, regenerative medicine
- LS7_6 Radiation therapy
- LS7_7 Analgesia and surgery
- LS7 8 Epidemiology and public health
- LS7 9 Environmental health, occupational medicine
- LS7 10 Health services, health care research, medical ethics

LS8 Ecology, Evolution and Environmental Biology: Population, community and ecosystem ecology, evolutionary biology, behavioural ecology, microbial ecology

- LS8_1 Ecosystem and community ecology, macroecology
- LS8_2 Biodiversity, conservation biology, conservation genetics
- LS8_3 Population biology, population dynamics, population genetics
- LS8 4 Evolutionary ecology
- LS8_5 Evolutionary genetics
- LS8_6 P hylogenetics, systematics, comparative biology
- LS8_7 Macroevolution and paleobiology
- LS8_8 Coevolution, biological mechanisms and ecology of species interactions (e.g. symbiosis, parasitism, mutualism, food-webs)
- LS8_9 Behavioural ecology and evolution
- LS8_10 Microbial ecology and evolution
- LS8_11 Marine biology and ecology

LS9 Applied Life Sciences, Biotechnology and Molecular and Biosystems engineering: Applied plant and animal sciences; forestry; food sciences; applied biotechnology; environmental, and marine biotechnology; applied bioengineering; biomass, biofuels; biohazards

- LS9_1 Applied biotechnology (including, transgenic organisms, applied genetics and genomics, biosensors, bioreactors, microbiology, bioactive compounds)
- LS9_2 Applied bioengineering, synthetic biology, chemical biology, nanobiotechnology, metabolic engineering, protein and glyco-engineering, tissue engineering, biocatalysis, biomimetics
- LS9_3 Applied animal sciences (including animal breeding, veterinary sciences, animal husbandry, animal welfare, aquaculture, fisheries, insect gene drive)
- LS9_4 Applied plant sciences (including crop production, plant breeding, agroecology, forestry, soil biology)
- LS9_5 Food sciences (including food technology, food safety, nutrition)
- LS9_6 Biomass production and utilisation, biofuels
- LS9_7 Environmental biotechnology (including bioindicators, bioremediation, biodegradation)
- LS9_8 Biohazards (including biological containment, biosafety, biosecurity)
- LS9_9 Marine Biotechnology (including marine bioproducts, feed resources, genome mining)

Annex 2: corresponding Host Institution support letter Print on paper bearing the official letterhead of the institution

Commitment of the corresponding host institution for the ERC Synergy Call 2018^{41, 42, 43}

The <<pre><<pre>clease fill in here the name of the legal entity that is associated to the proposal
and may host the corresponding principal investigator and the project in case the
application is successful>>, which is the corresponding applicant legal entity, confirms its
intention to sign a supplementary agreement with

<< please fill in here the name of the corresponding principal investigator and, where applicable, of the principal investigator(s) that will be engaged by the corresponding host institution>>^{44,45}

in which the obligations listed below will be addressed should the proposal entitled

<<short name of the proposal: title of the proposal>>

be retained.

The corresponding applicant legal entity confirms also its association with and support to the Synergy project which involves the following Principal Investigators:

<< Please enter below the name of the corresponding principal investigator and of all principal investigators participating in the project.>>

Corresponding PI:

PI 2:

PI 3 (if applicable):

PI 4 (if applicable):

The fact that the corresponding applicant legal entity confirms it association with and support to the group's Synergy project does not imply an obligation to contractually engage all of the Principal Investigators.

⁴¹ A scanned copy of the signed statement should be uploaded electronically via the Participant Portal Submission Service in PDF format.

⁴³ This statement (on letterhead paper) shall be dated, stamped and signed by the corresponding institution's legal representative, stating their name, function, email address.

⁴⁴ Please insert the names only of those Principal Investigators that will be engaged by the corresponding host institution.

⁴⁵ In case of more than one beneficiary, the other host institution(s) will be requested to sign a supplementary agreement with their respective Principal Investigators and undertake the same obligations with their respective Principal Investigators at the moment of granting.

Performance obligations of the corresponding applicant legal entity that will become the beneficiary of the H2020 ERC Grant Agreement (hereafter referred to as the Agreement), should the proposal be retained and the preparation of the Agreement be successfully concluded:

The following obligations apply <u>only</u> to the Principal Investigators, hereinafter referred as the PI(s), who will be engaged by the corresponding applicant legal entity.

The corresponding applicant legal entity commits itself to hosting and engaging the PI(s) for the duration of the grant to:

- a) ensure that the work will be performed under the scientific guidance of the PI(s) who are expected to devote at least 30% of their total working time to the ERC-funded project (action) and spend at least 50% of their total working time in an EU Member State or associated country.
- b) carry out the work to be performed, as it will be identified in Annex 1 of the Agreement, taking into consideration the specific role of the *PI(s.)*
- c) enter before signature of the Agreement into a 'supplementary agreement' with the PI(s), that specifies the obligation of the corresponding applicant legal entity to meet its obligations under the Agreement;
- d) provide the PI(s) with a copy of the signed Agreement;
- e) guarantee the *PI(s)* scientific independence, in particular for the:
 - i) use of the budget to achieve the scientific objectives;
 - ii) authority to publish as senior author and invite as co-authors those who have contributed substantially to the work;
 - iii) preparation of scientific reports for the project (action);
 - iv) selection and supervision of the other team members (hosted and engaged by the corresponding applicant legal entity or other legal entities), in line with the profiles needed to conduct the research and in accordance with the corresponding applicant legal entity's usual management practices;
 - v) possibility to apply independently for funding;
 - vi) access to appropriate space and facilities for conducting the research;
- f) provide during the implementation of the project (action) research support to the PI(s) and the team members (regarding infrastructure, equipment, access rights, products and other services necessary for conducting the research);
- g) support the PI(s) and provide administrative assistance, in particular for the:
 - i) general management of the work and their team;
 - ii) scientific reporting, especially ensuring that the team members send their scientific results to the PI(s);

- iii) financial reporting, especially providing timely and clear financial information;
- iv) application of the corresponding applicant legal entity's usual management practices;
- v) general logistics of the project (action);
- vi) access to the electronic exchange system (see Article 52 of the Agreement);
- h) inform the *PI(s)* immediately in writing of any events or circumstances likely to affect the Agreement (see Article 17 of the Agreement);
- i) ensure that the PI(s) enjoys adequate:
 - i) conditions for annual, sickness and parental leave;
 - ii) occupational health and safety standards;
 - iii) insurance under the general social security scheme, such as pension rights;
- j) allow the transfer of the Agreement to a new beneficiary ('portability'; see Article 56a of the Agreement).
- k) take all measures to implement the principles set out in the Commission Recommendation on the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers⁴⁶ - in particular regarding working conditions, transparent recruitment processes based on merit and career development – and ensure that the *PI(s)*, researchers and third parties involved in the project (action) are aware of them.

For the host institution (corresponding applicant legal entity)

Date
Name and Function
<u></u> ; <u></u> ;
E-mail and Signature of legal representative
;
Stamp of the corresponding host institution (applicant legal entity

IMPORTANT NOTE: In order to be complete all the above mentioned items are mandatory and shall be included in the commitment of the corresponding host institution.

⁴⁶ Commission Recommendation 2005/251/EC of 11 March 2005 on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers (OJ L 75, 22.3.2005, p. 67).

Annex 3: Specific Guidance Related to Ethics

Ethics Self-Assessment

Overview

The aim of the ethics self-assessment is to provide guidance for discussion of the ethics issues involved in the proposal and of how they will be dealt with.

How do you introduce, at the outset, the ethical perspective in your research?

Please provide a **description of the ethics issues** associated to your proposal, making sure you cover all topics flagged in the ethics issues table. Please **specify** as well **any authorisation or permission** you already have **for the proposed work** and **include copies** (the ethics self-assessment and the copies do not count towards the page limit of your proposal). All documents must be submitted in an official EU language or the original document together with a certified translation in English or another official EU language. Please list the documents provided with their expiry date. In case such documents are not available yet, please provide an approximate timing for their submission. This will allow a more effective ethics clearance and an accelerated granting process if the proposal is retained for possible funding.

Human embryos/foetus

Please make sure that you describe adequately why the use of human embryos/foetus is needed, the ethics issues associated to it and how you plan to deal with them and to conform to national legislation.

Please note that research on **human stem cells**, both adult and embryonic, may be financed, depending both on the contents of the scientific proposal and the legal framework of the Member States involved. No funding shall be granted for research activities that are prohibited in all the Member States. No activity shall be funded in a Member State where such activity is forbidden.

Any proposal for research on **human embryonic stem cells** shall include, as appropriate, details of licensing and control measures that will be taken by the competent authorities of the Member States as well as details of the ethics approvals that will be provided. As regards the derivation of human embryonic stem cells, institutions, organisations and researchers shall be subject to strict licensing and control in accordance with the legal framework of the Member States involved⁴⁷.

If your proposal involves the use of Human embryos/foetus, including human embryonic stem cells (hESC), please provide the following information:

 Confirm that the proposal does not include research activities which destroy embryos including for the procurement of stem cells;

⁴⁷ Regulation of the European Parliament and of the Council laying down the rules for the participation and dissemination in 'Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020)

- Confirm that you have taken into account the legislation, regulations, ethics rules and/or
 codes of conduct in place in the country(ies) where the research is to take place, including
 the procedures for obtaining informed consent;
- Describe the origin of the Human embryos/foetus/hESC;
- Describe the measures taken to protect personal data, including genetic data, and privacy;
- Describe the nature of financial inducements, if any.

If already available at this stage, please submit the national/local ethics approvals, information sheets and informed consent forms to cover the research on Human embryos/foetus, including human embryonic stem cells (hESC). Please note that the funding of hESC proposals requires an additional approval procedure at EU level in accordance with Articles 10 and 12 of Decision 2013/743/EU establishing the specific programme implementing Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020).

Humans

This category refers to any type of research involving empirical work with human beings, regardless of the scientific domain. Common to all fields, the main ethics issues concern the respect for persons and for human dignity, the just distribution of research's benefits and burden, the social value and the rights and interests of research participants, the need to ensure participants' free informed consent (with particular attention to vulnerable categories of individuals such as children, patients, discriminated people, minorities, persons unable to give consent, etc.). Research methodologies should not result in discriminatory practices or unfair treatment.

When children and other persons unable to give consent are directly involved, their assent (besides parents or legal guardians' consent) should be elicited when feasible⁴⁸. If children participants turn 18 during the course of the project, their consent must be then confirmed.

With regard to proposals in the field of **social sciences and humanities**, their peculiarity for what concerns ethics issues and requirements should be taken into consideration. Please specify what type of work with humans is involved (ex: interviews, observation, experiments with volunteers, and whether those include physical interventions), and discuss the ethical implications of the chosen methodologies. For instance, describe the sampling methods or recruitment procedures and discuss whether they may result in discriminatory practices. Assess whether the research topics or methodologies may entail any psychological, social, legal or other type of harm to participants. The consent procedures must be described and the related templates provided. If due to the research context or methodology, standard written informed consent procedures are not applicable or advisable, please explain how you will ensure consent in a more appropriate way. The involvement of persons having personal or hierarchical links with the investigators should be avoided, or else the procedure to ensure real free and informed consent should be described (including students being awarded academic credits for participating in research projects).

If applicable, please describe the possible unexpected findings of the research (ex: presence of illegal activities, cases of child abuse, etc.) and how you will deal with them.

_

⁴⁸ Directive 2001/20/EC of the European Parliament and of the Council of 4 April 2001 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the implementation of good clinical practice in the conduct of clinical trials on medicinal products for human use – see article 4 and 5.

For guidance on how to deal with ethics issues in social research, see also: http://ec.europa.eu/research/participants/data/ref/fp7/89867/social-sciences-humanities_en.pdf

With regard to **medical studies**, the *Declaration of Helsinki*⁴⁹ sets the ethics framework for research, specifying the main principles for medical research (e.g. protection of life, health, dignity, integrity, right to self-determination, privacy, and confidentiality of personal information of research subjects, protocols' design, role of research ethics committees, informed consent procedures, etc.).

Moreover, projects funded under the EU research framework programmes have to comply with the principles enshrined in the <u>Council of Europe Convention on human rights and biomedicine</u> – known as the Bioethics Convention (Oviedo). Its main purpose is to protect individuals against exploitation arising out of treatment or research and it contains several detailed provisions on informed consent⁵⁰.

Regarding clinical trials, they must comply with the EU Directive on Clinical Trials⁵¹. Its purpose is to rationalise the procedure involving documentation and administration required for conducting clinical trials, and to ensure that patients are afforded the same protection in all EU Member States. On 17 July 2012, the Commission adopted a "Proposal for a Regulation of the European Parliament and of the Council on clinical trials on medicinal products for human use (and repealing Directive 2001/20/EC)". On 14 April 2014, the Council of the European Union approved a draft regulation on clinical trials, which is expected to enter into force in 2017, and should also be taken into account.

Please explain how your research will take into account the relevant ethics framework.

Human cells/tissues

Human cells and tissues used in the research should either be commercially available (please indicate the source) or, in case you produce them or they originate from another laboratory, you should demonstrate that their production is ethically authorized. If cells or tissues derive from clinical practice (e.g. operations), please make sure that donors have provided their informed consent to their use for research.

If your research implies use of human cells/tissues collected in the framework of another research project, please provide the adequate authorisations to secondary use.

Please specify if any material from existing biobanks will be used. Please specify if your project has the aim or effect of setting up a biobank. In that case you must ensure that there is strict compliance with appropriate European and national ethical standards (in particular, regarding data privacy).

You must confirm that informed consent has been obtained and demonstrate that you have obtained all necessary ethics approvals (or that you are exempted under national law).

Protection of personal data

_

⁴⁹ WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects

⁵⁰ The article on the purpose and object of the Convention states that the Parties "shall protect the dignity and identity of all human beings and guarantee everyone, without discrimination, respect for their integrity and other rights and fundamental freedoms with regard to the application of biology and medicine". The Convention also concerns equitable access to health care, professional standards, protection of genetic heritage and scientific research.

⁵¹ <u>Directive 2001/20/EC</u>. The Clinical Trials Directive is concretised further by <u>Commission Directive 2005/28/EC</u> of 8 April 2005 laying down principles and detailed guidelines for good clinical practice as regards investigational medicinal products for human use.

Please explain how you will ensure privacy and confidentiality in personal data collection and processing, in accordance with EU legislation, in particular:

<u>Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.</u>

However, the European legislation on data protection is evolving and the coming legislation should also be taken into consideration – (Reform of data protection legislation: http://ec.europa.eu/justice/data-protection/)

In any case, please **describe** in details **the specificity of data collection, storage, protection, retention and destruction**. Please provide as well an authorisation/confirmation of legal compliance from the university data protection controller or national data protection authority.

In case your research involves the collection/processing of **sensitive personal data** (e.g.: health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction, etc.) or **genetic information**, please justify the need for their collection, discuss the possible ethics implications and how you will address them.

In case your research involves **observation** of participants, please state whether any video or photo will be used publicly and describe the methods you will use to guarantee the privacy of the participants, including the informed consent provisions (if applicable).

In case you are planning to use **existing data**, please specify if these originate from any available sources, and whether the use of this data has been authorized for **secondary use** (by primary owner of the data who must also confirm that the informed consent included the possibility of a secondary use of data).

Regarding the transfer of personal data from/to non-EU countries, please refer to the chapter 'Third countries' below.

Animals

Animal welfare is a value of the Union (<u>Article 13 of the TFEU</u>). Animals have an intrinsic value which must be respected and they must be treated as sentient creatures. As a consequence, one of the main aims of the <u>Directive 2010/63/EU</u> is to improve the welfare of animals used in scientific procedures, taking into account that new scientific knowledge is available in respect of factors influencing animal welfare as well as the capacity of animals to sense and express pain, suffering, distress and lasting harm.

According to the Directive, it is compulsory to carry out ethical review based on the principles of replacement, refinement, reduction (**3Rs principle**) and all breeders, suppliers, users and the experiments with animals must be authorised.

Therefore, in addition to provide those authorisations if already available, please elaborate on **the need to use animals** and the justification to this; consider whether your project has been designed so that procedures involving animals are carried out in the most humane and environmentally sensitive manner possible; make sure that the 3Rs principle will be adequately implemented; reflect on appropriateness of veterinary care and husbandry, impact on animals in terms of pain and distress (mention the anaesthesia and euthanasia methods if any); perform a harm-benefit analysis. Please provide the number of animals to be used indicating the power calculation. Describe as well the measures ensuring animals welfare.

Please provide reference to **compliance with relevant EU and national legislation** (see in particular: <u>Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes</u>).

Third countries

International research raises several concerns, especially when they take place in developing or emerging—economy countries where participants may be more vulnerable due to economic or political reasons, and a significant disparity of power may exist between researchers and research participant.

Thus, the researcher must ensure that he/she will **comply with the relevant EU legislation in addition to the legislation of the host country**. He/she should also comply with international reference documents, such as the <u>Declaration of Helsinki</u>.

Therefore, if the Host Institution of the project is located in an **Associated Country**, please check the <u>H2020 Online Manual</u> and click on 'International cooperation' for up-to-date information on this topic.

If the project includes research activities taking place in a (non-EU country), the PI must provide a declaration that he/she will rigorously apply the ethical standards and guidelines of H2020, regardless of the country in which the research is carried out. An authorisation from local competent institutions (as appropriate) will also be required.

In case work is foreseen in <u>low or lower-middle income country(ies</u>) according to OECD classification, the researcher should also make sure that the **benefits of the research are shared** with relevant local actors.

In case of **exportation/importation of any materials outside/inside a non-EU country** – including personal data - documents are required, including an ethics approval/confirmation of legal compliance by data protection authority, the local authorisation for export/import, and a Material Transfer Agreement.

In addition to the authorization from a local competent institution (as appropriate), in case of use of local resources (and especially animal and/or human tissue samples, genetic material, live animals, human remains, materials of historical value, endangered fauna or flora samples), please explain which resources are used, why and what measures are foreseen on this specific aspect for benefit sharing.

Finally, if the situation in the country may put individuals taking part in the research – including research team - at risk, please provide details on the foreseen security measures, including insurance cover.

For further guidance, please see http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/ethics_en.htm

Environment & Health and Safety

Some types of research may imply a risk for the safety of the environment or of the staff involved. Examples include studies on pathogen agents and virus, or experiments that may lead to the release of dangerous substances or particles in the air/water/soil or in the human body.

If your research implies such risks, you are required to describe the foreseen security, health and safety measures, and their conformity with EU and national guidelines.

See: <u>Directive 2000/54/EC</u> (on the protection of workers from risks related to exposure to biological agents at work), <u>Directives 2009/41/EC</u> and <u>98/81/EC</u> (on the contained use of genetically modified micro-organisms – GMMs, and <u>European Commission Recommendation of 07/02/2008 on a Code of Conduct for Responsible Nanosciences and Nanotechnologies Research).</u>

If your research takes place in a protected area, please take into consideration the relevant Directives, namely <u>Directive 2008/56/EC</u> of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) – specifically its Annex III; <u>Council Directive 92/43/EEC</u> of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora; <u>Council directive 79/409 EEC</u> on the conservation of wild birds.

Malevolent use of research results

Dual use specifically refers to technologies that can be used for both peaceful and military aims (See Regulation No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items). The technologies might present a danger to participants, or to society as a whole, if they were improperly disseminated and must be correctly identified, mentioning as well if they are defensive or offensive.

In the bio-medical field, dual use refers for instance to research which may enhance the virulence of microorganisms causing diseases; diminish the immunity of the host; enhance the transmissibility of the pathogens (enhance the contagiousness); alter (enlarge) the host range of the pathogen; render a vaccine ineffective; confer resistance to life-saving antibiotics; prevent diagnosis of infection or detection of a pathogen; enable eventual weaponization, severity of disease/symptoms or mass casualty, see:

http://ec.europa.eu/research/participants/data/ref/fp7/89888/ethics-for-researchers en.pdf

In case your research may fall under the mentioned categories, please provide details on the project and on the measures that you foresee to prevent/address/mitigate the risks they might raise.

In general, potential **misuse** of research may be defined as "research involving or generating materials, methods or knowledge that could be misused for unethical purposes".

The main areas of concern regarding potential misuse are: research involving agents or equipment that could be directly misused for criminal or terrorist purposes; research which creates knowledge that could be used for criminal or terrorist purposes; research which can result in stigmatization and discrimination; application and development of surveillance technologies; data mining and profiling technologies. New and emerging risks also rise from the increasing use of big data and data mining tools as this implies a risk of re-identification and the use of personal data beyond the original scope of the research.

Other ethics issues

If any other ethically relevant issues apply to your project, please describe them here and explain how you address them.

ETHICS ISSUES TABLE - CHECKLIST Information and documents to be provided by the applicants

BOX 1: H	IUMAN EMBRYOS/FOETUSES	Information to be provided	Documents to be provided
Does you	ur research involve Human Embryonic Stem Cells (hESCs)? ⁱ		
If YES:	- Will they be directly derived from embryos within this project?	Research cannot be funded.	Research cannot be funded.
	- Are they previously established cells lines?	Origin and line of cells. Details on licensing and control measures by the competent authorities of the Member States involved.	Copies of relevant Ethics Approvals.
Does your research involve the use of human embryos?		Origin of embryos. Details on recruitment and informed consent procedures.	Copies of relevant Ethics Approvals. Informed Consent Forms. Information Sheets.
Does your research involve the use of human foetal tissues / cells?		Origin of human foetal tissues/cells. Details on informed consent procedures.	Copies of relevant Ethics Approvals. Informed Consent Forms. Information Sheets.

BOX 2: HUMANS		Information to be provided	Documents to be provided
Does you	ur research involve human participants?	Please provide information in one of the subcategories below:	
If YES:	- Are they volunteers for social or human sciences research?	Details on recruitment and informed consent procedures.	Copies of relevant Ethics Approvals. Informed Consent Forms. Information Sheets.
	- Are they persons unable to give informed consent?	Details on recruitment and informed consent procedures. Details on the procedures used to ensure that there is no coercion on participants.	Documents as above.
	- Are they vulnerable individuals or groups?	Details on the type of vulnerability. Details on recruitment and informed consent procedures.	Documents as above.
	- Are they children/minors?	Details on recruitment and informed consent procedures. Details on the age range. Details on children/minors assent procedures. Describe the procedures to ensure welfare of child/minor.	Documents as above.
	- Are they patients?	Details on the nature of disease/condition/disability. Details on recruitment and informed consent procedures.	Documents as above.
	- Are they healthy volunteers for medical studies?	Details on recruitment and informed consent procedures. Details on incidental findings. policy.	Documents as above.

Does yo	our research involve physical interventions on the study		
participants?			
If YES:	- Does it involve invasive techniques?	Risk assessment.	Copies of relevant Ethics Approvals.
	- Does it involve collection of biological samples?	Details on the type of samples to be collected.	Copies of relevant Ethics Approvals.
		Details on procedures for collection of biological samples.	

BOX 3: HUMAN CELLS / TISSUES		Information to be provided	Documents to be provided
Does your research involve human cells or tissues? (Other than from			
"Human I	Embryos/Foetuses" i.e. BOX 1)		
If YES:	- Are they available commercially?	Details on cell types and provider (company or other).	
	- Are they obtained within this project?	Details on origin and cell types.	Copies of relevant Ethics Approvals.
	- Are they obtained within another project?	Details on origin and cell types.	Authorisation by primary owner of cells/tissues (including references to ethics approval).
	- Are they deposited in a biobank?	Details on cell types.	Details on biobank and access to it.

BOX 4: PROTECTION OF PERSONAL DATA ^{II}		Information to be provided	Documents to be provided	
Does your research involve personal data collection and/or				
processing?				
If YES:	- Does it involve the collection and/or processing of	Details on protection of privacy/confidentiality.	Copies of relevant Ethics Approvals for the	
	sensitive personal data (e.g. health, sexual lifestyle,	Details of procedures for data collection, storage, protection,	collection of personal data.	
	ethnicity, political opinion, religious or philosophical	retention, destruction or re-use.	Informed Consent Forms.	
	conviction)?	Explicit confirmation of compliance with national and EU	Information Sheets.	
		legislation.		
		Data Management Plan		
	- Does it involve processing of genetic information?	Information as above.	Copies of relevant Ethics Approvals for the	
			processing of genetic information.	
	- Does it involve tracking or observation of participants?	Information as above plus:	Copies of relevant Ethics Approvals for the	
		Details on methods used for tracking or observing participants.	collection of personal data.	
Does your research involve further processing of previously		Details of the database used or to the source of data.	Document confirming open public access to the	
collected personal data (secondary use)?		Confirmation of open public access to the data or of	data (e.g. print screen from Website) or	
		authorisation for secondary use.	authorisation by primary owner of data	
			Informed Consent Form (if applicable).	

BOX 5: ANI	MALS ⁱⁱⁱ	Information to be provided	Documents to be provided
1	research involve animals? (Maximum number of characters allowed: 1000)	Confirmation of compliance with relevant EU and national legislation. Number of animals to be used, nature of the experiments, procedures, anticipated impact and how this will be minimised. Details on species and rationale for their use. Details on procedures to ensure animal welfare. Details on implementation of the 3Rs Principle.	Copies of all appropriate authorisations for the supply of animals and the project experiments. Copies of training certificates/ personal licences of the staff involved in animal experiments.
If YES:	- Are they vertebrates?	Information as above.	Documents as above.
	- Are they non-human primates?	Information above plus: Confirmation of compliance with Art. 8, 10, 28, 31, 32 (Directive 2010/63/EU). Discussion of specific ethics issues related to their use.	Documents as above. Animal's individual history file (See art. 31 of Directive 2010/63/EU).
	- Are they genetically modified? ^{iv}	Confirmation of compliance with relevant EU and national legislation. Number of animals to be used, nature of the experiments, procedures, anticipated impact and how this will be minimised. Details on species and rationale for their use. Details on procedures to ensure animal welfare. Details on implementation of the 3Rs Principle.	Copies of all appropriate authorisations for the supply of animals (including the authorization to work with GMOs) and the project experiments. Copies of training certificates/ personal licences of the staff involved in animal experiments
	- Are they cloned farm animals?	Information as above	Copies of all appropriate authorisations for the supply of animals and the project experiments. Copies of training certificates/ personal licences of the staff involved in animal experiments. Copies of specific authorisation for cloning.
	- Are they endangered species?	Information as above plus: Confirmation of compliance with Art. 7 - Directive 2010/63/EU. Discussion of specific ethics issues related to their use.	Copies of all appropriate authorisations for the supply of animals and the project experiments. Copies of training certificates/ personal licences of the staff involved in animal experiments.

BOX 6: THIRD COUNTRIES	Information to be provided	Documents to be provided
Does your research involve non-EU countries? Countries: (Maximum number of characters allowed: 1000)	Details on activities carried out in non-EU countries.	Signed declaration to confirm compliance with ethical standards and guidelines of H2020. Copies of relevant Ethics Approvals from EU country host and non-EU country (double ethics review, if possible).
Do you plan to use local resources (e.g. animal and/or human tissue samples, genetic material, live animals, human remains, materials of historical value, endangered fauna or flora samples, etc.)?	· ·	In case of human resources, copies of relevant Ethics Approvals, as above. In case of animals, plants, micro-organisms and

Do you plan to import any material, from non-EU countries into the EU? For data imports, please fill in Box 4. For imports concerning human cells or tissues, fill in also Box 3.		Details on type of materials or data to be imported.	associated traditional knowledge, document showing compliance with Convention on Biodiversity (e.g. access permit and benefit sharing agreement) As above (use of local resources) and: Material Transfer Agreement (MTA).
If YES:	- Specify material and countries involved (maximum number of characters allowed: 1000)		
Do you plan to export any material from the EU to non-EU countries? For data exports, please fill in Box 4. For exports concerning human cells or tissues, fill in also Box 3.		Details on type of materials or data to be exported.	Authorisation for export from EU. Material Transfer Agreement (MTA).
If YES:	- Specify material and countries involved (maximum number of characters allowed: 1000)		
If your research involves <u>low and/or lower middle income countries</u> , are benefit-measures foreseen?		Details on benefit sharing measures. Details on responsiveness to local research needs. Details on procedures to facilitate effective capacity building.	As above (use of local resources) and narrative document describing benefit sharing, responsiveness to local research needs and capacity building.
Could tl	ne situation in the country put the individuals taking part in the research at risk?	Details on safety measures to be implemented, including training.	Insurance cover

vii viii	BOX 7: ENVIRONMENT & HEALTH and SAFETY vi	Information to be provided	Documents to be provided
Does your research involve the use environment, to animals or plants? For research involving animal experim	se of elements that may cause harm to the ents, please fill in also box 5.	Confirmation of compliance with national/local guidelines/legislation Details on safety measures to be implemented.	Safety classification of laboratory. GMO authorisation, if applicable.
Does your research deal with endange For research involving animal experim	ered fauna and/or flora and/or protected areas? ents, please fill in also box 5.	Confirmation of compliance with international/national/local guidelines/legislation ^{ix}	Specific approvals, if applicable.

Does your research involve the use of elements that may cause harm to human including research staff? For research involving human participants, please fill in also box 2.	s, Details on health and safety procedures. Confirmation of compliance with national/local guidelines/legislation	University safety procedures. Safety classification of laboratory.
BOX 8: DUAL USE ^x Does your research have the potential for military applications?	Information to be provided	Documents to be provided Narrative document describing the potential dual use implications of the research.
BOX 9: MISUSE	Information to be provided	Documents to be provided
Does your research have the potential for malevolent/criminal/terrorist abuse?		Narrative document describing the potential dual use implications of the research.

BOX 10: OTHER ETHICS ISSUES	Information to be provided	Documents to be provided
Are there any other ethics issues that should be taken into consideration?	Any relevant information.	Any relevant document.
Please specify:		
(Maximum number of characters allowed: 1000)		

I confirm that I have taken into account all ethics issues described above and that, if any ethics issues apply, I will complete the ethics self-assessment and attach the required documents.

ⁱ REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying down the rules for the participation and dissemination in 'Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020) and REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020)

ii Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data

iii DIRECTIVE 2010/63/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 September 2010 on the protection of animals used for scientific purposes

DIRECTIVE 2009/41/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 May 2009 on the contained use of genetically modified micro-organisms and REGULATION (EC) No 1946/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 July 2003 on transboundary movements of genetically modified organisms – see specifically its articles 4 to 11 and its annexes III to V

Year a list of low and/or lower middle income countries, see http://www.oecd.org/development/stats/49483614.pdf

vi DIRECTIVE 2000/54/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 September 2000 - On the protection of workers from risks related to exposure to biological agents at work – see specifically its Chapter II and article 16

vii DIRECTIVE 2009/41/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 May 2009 on the contained use of genetically modified micro-organisms – see specifically its annex IV and REGULATION (EC) No 1946/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 July 2003 on transboundary movements of genetically modified organisms – see specifically its articles 4 to 11 and its annexes III to V DIRECTIVE 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms COUNCIL DECISION 2002/628/EC: of 25 June 2002 concerning the conclusion, on behalf of the European Community, of the Cartagena Protocol on Biosafety COUNCIL DECISION 93/626/EEC of 25 October 1993 concerning the conclusion of the Convention on Biological Diversity

VIII DIRECTIVE 2008/56/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) – specifically its Annex III COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora Council directive 79/409 EEC on the conservation of wild birds and http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997R0338&from=en

ix See, in particular: Directive 2008/56/EC; Council Directive 92/43/EEC; Council Directive 79/409/EEC, Council Regulation (EC) No 338/97, Council Decision 93/626/EEC, Council Decision 2002/628/EC

^{*} COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items