

(European Commission Decision C(2021) 930 of 22/02/2021)

ERC Work Programme 2021



European Research Council

Established by the European Commission

About this document

This document is the annual Work Programme for the European Research Council funded by the European Union's Horizon Europe Framework Programme for Research and Innovation. It is the legal document which sets out how the ERC will allocate its funding for the corresponding year. It is established by the Scientific Council of the ERC and subsequently adopted by the European Commission.

DISCLAIMER: The launching of the calls for proposals contained in this draft Work Programme is conditional upon the final adoption without significant modifications by the legislative authority of the Regulation of the European Parliament and of the Council establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination (COM(2018)0435 – C8-0252/2018 – 2018/0224(COD)) and of the Decision of the Council on establishing the specific programme implementing Horizon Europe - the Framework Programme for Research and Innovation (COM(2018)0436 – C8-0253/2018 – 2018/0225(COD)), as well as to the final adoption without significant modifications by the European Commission of this Work Programme, of the European Research Council Rules of Submission, and the related methods and procedures for peer review and proposal evaluation relevant to the specific programme implementing Horizon Europe, and of the Commission Decision establishing the European Research Council.

How to apply for ERC grants

Principal Investigators who wish to apply for ERC grants need to do so through the EU Funding & Tenders Portal, which contains all information on each call:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

The Funding & Tenders Portal also contains information on National Contact Points that can provide support with applications in national languages. National Contact Points providing support specifically for Horizon Europe calls are not expected to be available before April 2021.

More information on the ERC in general, including its mission and organisation, a description of its funding schemes, a step-by-step application guide and details on funded projects is available at:

<http://erc.europa.eu/>

At the date of the publication of the work programme, there are no countries associated to Horizon Europe. Considering the Union's interest to retain, in principle, relations with the countries associated to Horizon 2020, most third countries associated to Horizon 2020 are expected to be associated to Horizon Europe by the time the first grant agreements under Horizon Europe are signed. In addition, other third countries may also become associated to Horizon Europe during the programme. For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.

Summary of main features in 2021

This ERC work Programme is the first under the 2021-2027 European Union Framework Programme for Research and Innovation, Horizon Europe.

The calls planning of this Work Programme differs from last year's planning due to the transition from the 2014-2020 Framework Programme for Research and Innovation to the 2021-2027 Framework Programme. Due to this transition, the Synergy Grants are not available under the 2021 Work Programme. The award of Synergy Grants is likely to resume as from Work Programme 2022. The ERC Proof-of-Concept Grant is currently under revision by the ERC Scientific Council and does not appear in this Work Programme.

The ERC Scientific Council has reviewed the ERC panel structure to redefine the contours of panels, enrich the descriptors and take into account previous application numbers. This also resulted in the addition of two new panels: SH7 - Human Mobility Environment and Space and PE11 – Materials Engineering. The updated panel structure is set out in Annex I of this work programme. A full list of the new descriptors is given in the Information for Applicants, which will be available when the calls under this work programme are published.

For Advanced Grant, applicant Principal Investigators whose proposals are retained for the second step of the evaluation will be invited to present their proposal to the evaluation panel.

Restrictions on applications will apply to the 2021 calls based on the outcome of the evaluation of previous calls – see restrictions on submission of proposals under “Admissibility and eligibility criteria”.

Finally, as from 2021 it is no longer possible for applicants to opt out of the submission of Research Data Management plans.

Indicative summary of main calls from the 2021 budget¹

	<i>Starting Grant</i>	<i>Consolidator Grant</i>	<i>Advanced Grant</i>
<i>Call identifier</i>	ERC-2021-StG	ERC-2021-CoG	ERC-2021-AdG
<i>Call Opens</i>	25/02/2021	11/03/2021	20/05/2021
<i>Call closes</i>	24/03/2021	20/04/2021	31/08/2021

¹ These opening dates and cut-off dates are indicative. The Director of the European Research Council Executive Agency may open a call up to one month prior to or after the envisaged opening date. The Director may delay the envisaged deadline by up to two months. The budget amounts for 2021 are subject to the availability of the appropriations provided for in the draft budget for 2021 after the adoption of the budget for 2021 by the budgetary authority or if the budget is not adopted as provided for in the system of provisional twelfths.

	<i>Starting Grant</i>	<i>Consolidator Grant</i>	<i>Advanced Grant</i>
<i>Budget million EUR (estimated number of grants)</i>	619 (413)	633 (317)	626 (250)
<i>Planned dates to inform applicants after each step</i>	26/08/2021	22/11/2021	28/01/2022
	20/12/2021	28/03/2022	13/05/2022
<i>Indicative date for signature of grant agreements</i>	19/04/2022	26/07/2022	10/09/2022

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Objectives and Principles of ERC Funding

The fundamental activity of the ERC is to provide attractive, long-term funding to support excellent investigators and their research teams to pursue ground-breaking, high-gain/high-risk research.

Research funded by the ERC is expected to lead to advances at the frontiers of knowledge and to set a clear and inspirational target for frontier research across Europe.

Scientific excellence is the sole criterion on the basis of which ERC frontier research grants are awarded

The evaluation of ERC grant applications is conducted by peer review panels composed of renowned scientists and scholars selected by the ERC Scientific Council. The panels may be assisted by independent external experts working remotely.

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 evaluation process ensures that Principal Investigators have the professional competences and qualifications required to complete their proposed action.² The

² Applicants whose proposals are recommended for funding are deemed to fulfil the operational capacity requirements of Article 198(3) of Regulation (EU, Euratom) No 1046/2018 (the 'Financial Regulation').

evaluations are monitored to guarantee transparency, fairness and impartiality in the treatment of proposals. ERC calls are expected to be highly competitive.

Applications can be made in any field of research

The ERC's frontier research grants operate on a 'bottom-up' basis without predetermined priorities.

The ERC puts particular emphasis on the frontiers of science, scholarship and engineering. In particular, it encourages proposals of a multi- or 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.

Independent researchers of any age and career stage can apply for attractive long-term funding

The ERC awards funding to excellent investigators looking to set up or consolidate their own independent research team or programme, as well as to already established research leaders.

The ERC awards flexible, long-term funding for a period of up to five years for the Starting, Consolidator and Advanced Grants³. The Scientific Council will review funding conditions regularly to make sure

³ Up to six years for the Synergy Grants, which are however not available under this Work Programme.

that grants remain competitive both at European and international level.

The maximum grant varies by grant type. An ERC grant can cover up to 100% of the total eligible direct costs of the research plus a contribution towards indirect costs, in accordance with the conditions set out in the Model Grant Agreement used for ERC actions.

ERC grants are portable⁴ as described in the Model Grant Agreement.

The ERC aims to use procedures that maintain the focus on excellence, encourage initiative and combine simplicity and flexibility with accountability⁵. The ERC is continuously looking for ways to improve its procedures in order to fulfil these principles.

Principal Investigators from anywhere in the world can apply for an ERC grant

ERC grants are open to researchers of any nationality who may reside in any country in the world at the time of the application.

⁴ *Portability* means that Principal Investigators may request to transfer their entire grant or part of it to a new beneficiary, under specific conditions included in the Model Grant Agreement used for ERC actions. These conditions may include provisions for the transfer of equipment purchased and used exclusively for the implementation of the project.

⁵ Beneficiaries of ERC research grants are not required to submit communication, and/or dissemination and exploitation plans during project implementation.

The ERC is particularly keen to encourage excellent proposals from Principal Investigators based in non-associated third countries wishing to carry out a project with a host institution in the EU or in one of the Associated Countries.

The host institution must be established in an EU Member State or Associated Country, although the team members of any Principal Investigator, may be based outside of the EU or an Associated Country (see “Eligible host institution”).

The ERC frontier research grants aim to empower individual researchers and provide the best settings to foster their creativity

The Starting, Consolidator and Advanced Grants will support projects carried out by individual teams which are headed by a single Principal Investigator. ERC Synergy Grants awarded under Work Programmes 2019 and 2020 supported small groups of two to four Principal Investigators and their teams.

The ERC supports individual Principal Investigators. Support for consortia is provided by other calls under Horizon Europe.

Host institutions must provide appropriate conditions for the Principal Investigator to independently direct the research and manage its funding

An ERC grant is awarded to the institution that engages and hosts the Principal Investigator⁶. Grants are awarded to the host institution with the explicit commitment that this institution offers appropriate conditions for the Principal Investigator to independently manage the ERC funded research. It is expected that Principal Investigators will be able to start their project within six months of receiving an invitation letter from the ERC.

The host institutions must engage the Principal Investigators for at least the duration of the grant.

The conditions⁷ offered by the host institution or institutions, including the '*portability*' of the grant, are the subject of a supplementary agreement between the Principal Investigator and the host institution⁸ and must ensure that the Principal Investigator is able to:

- apply for funding independently;
- manage the research and the funding for the project and make appropriate resource allocation decisions;

- publish independently as main author and include as co-authors only those who have contributed substantially to the reported work;
- select and supervise the work of team members, including doctoral candidates or others;
- have access to appropriate space and facilities for conducting the research
- meet the time commitments described in the grant agreement⁹.

Public or private institutions, including universities, research organisations and undertakings can host the Principal Investigator and their team as long as the principles indicated above are respected and the Principal Investigator is not constrained by the research strategy of the entity.

*The ERC welcomes applications from Principal Investigators **hosted by private for-profit research centres**, including industrial laboratories.*

⁶ Normally the Principal Investigator will be employed by the Host Institution, but cases where, for duly justified reasons, the Principal Investigator's employer cannot become the host institution, or where the Principal Investigator is self-employed, can be accommodated. 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 host institution.

⁷ These conditions are consistent with "The European Charter for Researchers" and "The Code of Conduct for the Recruitment of Researchers".

⁸ This is supplementary to the ERC Grant Agreement and is described in the ERC Model Grant Agreement.

⁹ Time commitments will be monitored, and in cases where the actual commitment is below the minimum levels set out in this Work Programme (see "Minimum Time Commitment"), or the levels indicated in the grant agreement (see "Proposal description" in the section "ERC Frontier Research Grants"), appropriate measures may be taken, up to and including grant reduction, suspension or termination in accordance with the grant agreement.

Host institutions are expected to make all appropriate efforts to provide the conditions to attract and retain scientists and scholars of the calibre to be awarded an ERC grant, within the framework provided by the Model Grant Agreement and any other available administrative and legal possibilities.

Open science

Open science is a core principle of the ERC. The ERC is committed to the principle of open access to the published output of research, including in particular peer-reviewed articles and monographs. It also supports the basic principle of open access to research data and data related products such as computer code. The ERC considers that providing free online access to all these materials can be the most effective way of ensuring that the fruits of the research it funds can be accessed, read and used as the basis for further research.

Under Horizon Europe, beneficiaries of ERC grants must ensure open access to all peer-reviewed scientific publications¹⁰ relating to their results as set out in the Model Grant Agreement used for ERC actions. Beneficiaries must ensure that they or the authors retain sufficient intellectual property rights to comply with their open access requirements.

In addition, beneficiaries of ERC frontier research grants funded under this Work Programme will automatically be covered

¹⁰ This includes peer-reviewed long-text publications such as monographs, book chapters, edited collections, critical editions, scholarly exhibition catalogues, or PhD theses.

by the provisions on research data management as set out in the Model Grant Agreement used for ERC actions. In particular, beneficiaries are required to submit a data management plan within the first six months of project implementation. These provisions are designed to facilitate access, re-use and preservation of the research data generated during the ERC funded research work.

Gender Balance

Under Horizon Europe, beneficiaries of ERC grants must take all measures to promote equal opportunities between men and women in the implementation of the action and aim for a gender balance at all levels of personnel assigned to the action, as set out in the Model Grant Agreement used for ERC actions. ERC Principal Investigators should also determine the relevance of integrating sex and gender analysis into their research. Specific activities promoting equal opportunities or gender balance or covering the gender dimension of research funded by the ERC can be considered as eligible costs where these costs are necessary for the implementation of the action.

Ethical principles

The proposed research and innovation activities must comply with ethical principles and relevant national, Union and international legislation, including the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights and its

Supplementary Protocols. Particular attention must be paid to the principle of proportionality, the right to privacy, the right to the protection of personal data, the right to the physical and mental integrity of a person, the right to non-discrimination and the need to ensure high levels of human health protection. The proposed research and innovation activities must have an exclusive focus on civil applications.

Funding of human embryonic stem cell research is possible within the ethical framework defined in the Horizon Europe Framework Programme for Research and Innovation 2021 – 2027¹¹.

Research Integrity

Research integrity is a core principle of the ERC. It is essential to maintain and promote a culture of research integrity at all stages of the evaluation and granting process to make ERC competitions fair and efficient and to maintain the trust of both the scientific community and society as a whole.

Cases of scientific misconduct such as fabrication, falsification, plagiarism or misrepresentation of data that may arise during the evaluation or throughout the life cycle of an ERC funded project will be addressed vigorously by the ERC within the applicable legal and procedural framework. Any breach of research integrity by Principal Investigators or beneficiaries may be sanctioned by measures such as the rejection of

proposals from evaluation, requests for measures to be taken by the host institution, reduction of the grant and suspension or termination of grants.

However, the host institutions that engage and host ERC Principal Investigators have the primary responsibility for the detection of scientific misconduct and for the investigation, and adjudication of any breaches of research integrity that may arise. Therefore host institutions are expected to have working structures in place to uphold research integrity and to make all appropriate efforts to verify that no allegations of scientific misconduct are pending against any Principal Investigator applying for or participating in an ERC grant and to bring to the attention of the ERC any such allegations or cases of scientific misconduct.

The ERC applies the same rigour to ensuring that its evaluation process is governed by principles of research integrity, in particular through rules on confidentiality and conflict of interest.

¹¹ As set out in the Horizon Europe Regulation.

ERC Frontier Research Grants

Grants

Objectives, maximum amount and duration

The objectives, maximum amount and durations of the frontier research grants awarded by the ERC are given in the table below.

The maximum amount of the grants is reduced *pro rata temporis*¹² for projects of a shorter duration¹³.

Additional funding¹⁴ up to the amounts set out in the table below can be requested in the proposal to cover the following eligible costs when these are necessary to carry out the proposed work: (a) "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 and/or (d) other major experimental and field work costs, excluding personnel costs.

Additional funding is not subject to *pro rata temporis* reduction for projects of shorter duration.

All funding requested is assessed during evaluation.

The profiles expected of applicant Principal Investigators for each frontier research grant are described below.

¹² For example, a maximum amount of EUR 2 500 000 for a duration of 5 years corresponds to a maximum amount of EUR 2 000 000 for a duration of 4 years.

¹³ This does not apply to ongoing projects.

¹⁴ Additional funding costs of ERC frontier research grants are a separate cost category in the Model Grant Agreement used for ERC actions.

Grant	Objectives	Maximum amount and duration of the grant
Starting Grant	<p>Support for excellent Principal Investigators at the career stage at which they are starting their own independent research team or programme.</p> <p>Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal.</p>	<p>Up to EUR 1 500 000 for a period of 5 years.</p> <p>Additional funding up to EUR 1 000 000.</p>
Consolidator Grant	<p>Support for excellent Principal Investigators at the career stage at which they may still be consolidating their own independent research team or programme.</p> <p>Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal.</p>	<p>Up to EUR 2 000 000 for a period of 5 years.</p> <p>Additional funding up to EUR 1 000 000.</p>
Advanced Grant	<p>Support for excellent Principal Investigators at the career stage at which they are already established research leaders with a recognised track record of research achievements.</p> <p>Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal.</p>	<p>Up to EUR 2 500 000 for a period of 5 years.</p> <p>Additional funding up to EUR 1 000 000.</p>

Profile of the ERC Starting Grant Principal Investigator

A competitive Starting Grant Principal Investigator must have already shown the potential for research independence and evidence of maturity, for example by having produced **at least one important publication as main author or without the participation of their PhD supervisor.**

Applicant Principal Investigators should also be able to demonstrate a promising

track record of early achievements appropriate to their research field and career stage, including significant publications (as main author) in major international peer-reviewed multidisciplinary scientific journals, or in the leading international peer-reviewed journals of their respective field. They may also demonstrate a record of invited presentations in well-established international conferences, granted patents, awards, prizes, etc.

Early achievements track record

In the Track record (see “Proposal description”) the applicant Principal Investigator should list (if applicable):

- 1. Up to five publications 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, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided);**
- 2. Research monographs and any translations thereof;**
- 3. Granted patent(s);**
- 4. Invited presentations to internationally established conferences and/or international advanced schools;**
- 5. Prizes, awards, academy memberships.**

Profile of the ERC Consolidator Grant Principal Investigator

A competitive Consolidator Grant Principal Investigator must have already shown research independence and evidence of maturity, for example by having produced **several important publications as main author or without the participation of their PhD supervisor**. Applicant Principal Investigators should also be able to demonstrate a promising track record of early achievements appropriate to their

research field and career stage, including significant publications (as main author) in major international peer-reviewed multidisciplinary scientific journals, or in the leading international peer-reviewed journals of their respective field. They may also demonstrate a record of invited presentations in well-established international conferences, granted patents, awards, prizes, etc.

Early achievements track record

In the Track Record (see “Proposal description”) the applicant Principal Investigator should list (if applicable):

- 1. Up to ten publications 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, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided);**
- 2. Research monographs and any translations thereof;**
- 3. Granted patent(s);**
- 4. Invited presentations to internationally established conferences and/or international advanced schools;**
- 5. Prizes, awards, academy memberships.**

Profile of the ERC Advanced Grant Principal Investigator

ERC Advanced Grant Principal Investigators are expected to be active researchers and to have a track record of significant research achievements **in the last 10 years** which must be presented in the application.

A competitive Advanced Grant Principal Investigator must have already shown a record which identifies them as an exceptional leader in terms of originality and significance of their research contributions.

Thus, in most fields, Principal Investigators of Advanced Grant proposals will be expected to demonstrate a record of achievements appropriate to the field and at least matching one or more of the following benchmarks:

- 10 publications as main author (or in those fields where alphabetic order of authorship is the norm, joint author) in major international peer-reviewed multidisciplinary scientific journals, and/or in the leading international peer-reviewed journals and peer-reviewed conferences proceedings of their respective field;
- 3 major research monographs. This benchmark is relevant to research fields where publication of monographs is the norm.

Other alternative benchmarks that may be considered (individually or in combination)

as indicative of an exceptional record and recognition in the last 10 years:

- 5 granted patents;
- 10 invited presentations in well-established internationally organised conferences and advanced schools;
- 3 research expeditions led by the applicant Principal Investigator;
- 3 well-established international conferences or congresses where the applicant was involved as a member of the steering and/or organising committee;
- International recognition through scientific or artistic prizes/awards or membership in well-regarded Academies or artefact with documented use (for example, architectural or engineering design, methods or tools);
- Major contributions to launching the careers of outstanding researchers;
- Recognised innovation leadership.

If a Principal Investigator so chooses, their achievements over a longer period than the past ten years can be considered in the following circumstances which should be highlighted in the CV.

For maternity, the track record considered can be extended by 18 months, or if longer by the amount of leave actually taken until the call deadline, for each child born **before or during** the last ten years.

For paternity leave, the track record considered can be extended by the amount of paternity leave actually taken until the call deadline for each child born **before or during** the last ten years.

For long-term illness¹⁵,

clinical qualification or national service the track record considered can be extended by the amount of leave actually taken until the call deadline and clearly explained in the career break section of their CV for each incident which occurred **during** the last ten years.

¹⁵ Over 90 days for the Principal Investigator or a close family member (child, spouse, parent or sibling).

Ten-year track record

In the Track Record (see “Proposal description”) the applicant Principal Investigator should list (if applicable):

- 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 peer-reviewed journals and peer-reviewed conference proceedings** of their respective research fields (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided);***
- 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 innovation leadership.***

Funding

Maximum amount of grant, grant assessment and Union contribution

The maximum grant amount varies by grant type (see "Grants").

During the peer review evaluation, evaluation panels will assess the funding requested by the applicant, including any request for additional funding (see "Objectives, maximum amount and duration of the awards"), against the needs of the project before making any recommendation for funding.

The funding requested must be fully justified by an estimation of the real project cost. The panels may suggest modifications to the indicative budgetary breakdown in the application, particularly where they consider funding requests to be not properly justified. In such cases they must explain in writing any such suggested modification.

The project budget is provided in EUR. Eligible project costs will be reimbursed at a funding rate of 100% for direct costs plus a flat-rate of 25% for indirect costs¹⁶. Reimbursements will be budget-based and will cover actual costs or unit costs depending on the cost category. The amount of the awarded grant represents a maximum overall figure – the final amount

to be paid must be justified on the basis of the costs incurred for the project and it may be lower than the budget requested.

Call budgets

For the Starting, Consolidator and Advanced Grant calls an indicative budget will be allocated to each panel in proportion to the budgetary demand of its assigned proposals in order to equalise the success rate across panels.

¹⁶ Excluding the direct eligible costs for subcontracting, financial support to third parties and any unit costs or lump sums which include indirect costs.

Admissibility and eligibility criteria

The beneficiaries (and their actions) must remain eligible for the entire duration of the action. Costs and contributions will be eligible only as long as the beneficiary and the action are eligible. Applicants must immediately inform the services of the European Research Council Executive Agency (ERCEA) at any point in time of any events or circumstances which would be likely to affect the fulfilment of the eligibility criteria.

The Principal Investigator will have the flexibility to modify the budgetary breakdown during the course of the project. Requests to modify the budgetary breakdown of additional funding¹⁷ may be accepted only provided that such modifications remain within the objectives for which the additional funding was awarded.

Admissible and eligible proposals

All proposals must be complete, readable, and accessible. They must be submitted by eligible Principal Investigators as defined below before the relevant call deadline. A complete proposal needs to include all parts or sections (see "Proposal submission and description"). Proposals which do not meet these criteria may be declared inadmissible.

The content of the proposal must relate to the objectives and to the grant type set

¹⁷ As defined in the section "Objectives, maximum amount and duration of the awards".

out in the call, as defined in this Work Programme. A proposal will only be deemed ineligible on grounds of 'scope' in clear-cut cases.

Applications where the Principal Investigator proposes to commit less time in the EU or an Associated Country or to the project than the minimum percentages set out in the section "Minimum time commitment" will be declared ineligible.

If it becomes clear before, during or after the peer review evaluation phase, that one or more of the admissibility or eligibility criteria have not been met, the proposal will be declared inadmissible or ineligible and it will be rejected.

Where there is a doubt on the admissibility or eligibility of a proposal, the peer review evaluation may proceed pending a decision following an admissibility and eligibility review committee¹⁸.

Eligible Scientific Fields

All scientific fields are eligible for ERC funding¹⁹.

¹⁸ For further information see applicable ERC rules for submission and evaluation which can be found on the EU Funding & Tenders Portal.

¹⁹ Research proposals within the scope of Annex I to the Euratom Treaty, namely those directed towards nuclear energy applications, must be submitted to relevant calls under the Euratom Framework Programme.

Eligible Principal Investigator

The ERC actions are open to researchers of any nationality who intend to conduct their research activity in any EU Member State or Associated Country²⁰. Principal Investigators may be of any age and nationality and may reside in any country in the world at the time of the application.

Starting, Consolidator and Advanced Grant proposals are submitted by the Principal Investigator taking scientific responsibility for the project, on behalf of the host institution. There are specific eligibility criteria for a Principal Investigator applying to the Starting or Consolidator Grants based on the date of award of their first PhD (or equivalent doctoral degree²¹) as set out in the table below. This “streaming” allows applicants to be compared with researchers at a similar career stage.

²⁰ See Annex 3.

²¹ See ERC Scientific Council's note on 'PhD and Equivalent Doctoral Degrees' at Annex 2, including specific provisions for holders of medical degrees.

Starting Grant	Consolidator Grant	Advanced Grant
<p>> 2 and ≤ 7 years</p> <p>prior to 1 January 2021</p> <p>Cut-off dates: PhD awarded from 1 January 2014 to 31 December 2018 (inclusive)</p>	<p>> 7 and ≤ 12 years</p> <p>prior to 1 January 2021</p> <p>Cut-off dates: PhD awarded from 1 January 2009 to 31 December 2013 (inclusive)</p>	<p>No specific criteria</p>

The date of the first PhD considered for the calculation of the eligibility period is the date of the actual award according to the national rules of the country where the degree was awarded.

The eligibility periods set out in the table above can be extended beyond 7 and 12 years for the Starting and Consolidator Grants respectively for the following properly documented circumstances²², provided they started before the call deadline:

- **Maternity:** 18 months extension for each child born before or after the PhD award. If the applicant can document a longer maternity leave, the eligibility period will be extended by the documented amount of actual leave taken until the call deadline.
- **Paternity:** extension by the documented time of paternity leave taken until the call deadline for each child born before or after the PhD award.
- **Long-term illness²³ or national service:** extension by the documented amount of leave taken by the Principal Investigator until the call deadline for each incident which occurred after the PhD award date.
- **Clinical training:** extension by the documented amount of clinical training received by the Principal Investigator **after** the award of the first eligible degree and until the call deadline, **up to a maximum of 4 years.**

²² For applicants whose first eligible degree is their medical degree such incidents can be considered from the date of completion of their medical degree.

²³ Over 90 days for the Principal Investigator or a close family member (child, spouse, parent or sibling).

Minimum time commitment

Principal Investigators funded through the ERC frontier research grants must spend a minimum percentage of their working

time on the ERC project and a minimum percentage of their working time in an EU Member State or Associated Country as set out in the table below.

Minimum percentage of the working time of a Principal Investigator that must be spent	Starting Grant	Consolidator Grant	Advanced Grant
On the ERC project	50%	40%	30%
In an EU Member State or Associated Country²⁴	50%	50%	50%

²⁴ See section "Eligible Host Institutions" regarding field work.

Eligible Host Institution

The host institution (Applicant Legal Entity²⁵) must engage and host²⁶ the Principal Investigator for at least the duration of the project, as defined in the grant agreement. It must either be established in an EU Member State or Associated Country²⁷ as a legal entity created under national law, or it may be an international European research organisation (such as CERN, EMBL, etc.), the European Commission's Joint Research Centre (JRC) or any other entity created under EU law. International organisations with headquarters in a Member State or associated country will be deemed to be established in this Member State or associated country. Any type of legal entity, public or private, including universities, research organisations and undertakings can host Principal Investigators and their teams.

It is expected that the research project will be implemented within the territory of the Member States or Associated Countries. This does not exclude field work or other research activities in cases where these must necessarily be conducted outside the

²⁵ The applicant legal entity must have stable and sufficient resources to successfully implement the projects and contribute their share. Organisations participating in several projects must have sufficient capacity to implement all these projects. Information on financial capacity checks is provided in the ERC Rules for Submission. Please see also important information on possible exclusion and registration of economic operators in the Commission's Early Detection and Exclusion System (EDES) respectively in Annex 4 and on final page of this Work Programme.

²⁶ See footnote 5 above.

²⁷ See Annex 3.

European Union or the Associated Countries in order to achieve the scientific objectives of the project/activity²⁸.

It is also expected that the host institution will be the only participating legal entity in the case of a Starting, Consolidator or Advanced Grant.

Where they bring scientific added value to the project, additional team members may also be hosted by additional legal entities²⁹ which may be established anywhere, including outside the European Union or Associated Countries, or international organisations.

Legal entities established outside the European Union or Associated Countries are eligible for funding when they host additional team members, provided that they are not covered by Council sanctions as set in Annex 3 to this Work Programme.

Other legal entities established outside the European Union or Associated Countries may be eligible for funding provided that their participation is deemed essential for carrying out the action and that they are not covered by Council sanctions (indicatively set in Annex 3 to this Work Programme).

Please also refer to Annex 3 - Countries Associated to Horizon Europe and Restrictions Applying to Some Legal Entities.

²⁸ Time spent on such field work or other research activities may count as time spent in the EU or the Associated Countries for the purpose of the Principal Investigator's time commitments.

²⁹ Consortium agreements are not required for ERC multi-beneficiary grants.

Restrictions on submission of proposals

Thousands of high quality proposals are received each year and only outstanding proposals are likely to be funded. In order to maintain the quality and integrity of ERC's evaluation process the Scientific Council decided to introduce restrictions on applications from 2009. These restrictions were extended from 2015.

The following restrictions apply:

- A researcher may participate as Principal Investigator³⁰ in only one ERC frontier research project at any one time³¹;
- A researcher participating as Principal Investigator in an ERC frontier research project may not submit a proposal for another ERC frontier research grant, unless the existing project ends³² no more than two years after the call deadline;
- A Principal Investigator who is a serving Panel Member for a 2021 ERC call or who served as a Panel Member for a 2019 ERC call may

not apply to a 2021 ERC call for the same type of grant³³;

- A Principal Investigator may submit proposals to different ERC frontier research grant calls published under the same Work Programme, but only the first eligible proposal will be evaluated.

Further restrictions for submission under the ERC Work Programme 2021 are set out in the table below. **The Scientific Council may decide in the light of experience that different or comparable restrictions will apply in subsequent years.**

The restrictions related to the outcome of the evaluation in previous calls are designed to allow unsuccessful Principal Investigators the time necessary to develop a stronger proposal.

The year of an ERC call for proposals refers to the Work Programme under which the call was published and can be established by its call identifier. A 2020 ERC call for proposals is therefore one that was published under the Work Programme 2020 and will have 2020 in the call identifier (for example ERC-2020-StG).

Inadmissible, ineligible or withdrawn proposals do not count against any of the restrictions in the table below.

³⁰ Including all Principal Investigators supported under the Synergy Grant.

³¹ A new frontier research project can only start after the duration of the project fixed in a previous frontier research ERC grant agreement has ended.

³² According to the duration of the project fixed in the previous frontier research grant agreement.

³³ The members of the ERC panels alternate to allow panel members to apply to the ERC calls in alternate years.

Call to which the Principal Investigator applied under previous ERC Work Programmes and proposal evaluation outcome		2021 ERC calls to which a Principal Investigator is <i>not</i> eligible
2019 and 2020 Starting, Consolidator, Advanced Grant or Synergy Grant	Rejected on the grounds of a breach of research integrity	Starting, Consolidator and Advanced Grant
2019 Starting, Consolidator or Advanced Grant	C at Step 1	Starting, Consolidator and Advanced Grant
2020 Starting, Consolidator or Advanced Grant	A, or B at Step 2	No restriction
	B, or C at Step 1	Starting, Consolidator and Advanced Grant
2020 Synergy Grant	A, or B at Step 3	No restriction
	B at Step 1 or Step 2	No restriction
	C at Step 1	Advanced Grant

Proposal submission and description

Proposal Submission

Starting, Consolidator and Advanced Grant proposals are submitted by the Principal Investigator who has scientific responsibility for the project, on behalf of the host institution.

Proposal submission is made electronically. Early registration and submission is strongly recommended and should be done as early as possible in advance of the call deadline.

For each call, Information for Applicants³⁴ is published on the ERC website and EU Funding & Tenders Portal, which describes in detail how the electronic forms should be completed.

Proposal description

A complete proposal consists of the following elements³⁵, with the following page limits³⁶.

³⁴ As well as other relevant documents, including the ERC rules for submission and evaluation.

³⁵ Proposals shall not include a plan for the dissemination and exploitation of the results in the sense of Article 35(6) of the Horizon Europe regulation.

Extended Synopsis: 5 pages

Curriculum Vitae: 2 pages

Track Record: 2 pages

Scientific Proposal: 14 pages

Resources and Time Commitment: 2 pages

Host Institution Binding Statement of Support

Ethics Review Table

PhD record and supporting documentation for eligibility checking (for Starting and Consolidator Grants only).

Only the material that is presented within these limits will be evaluated (peer reviewers will only be asked to read, and will be under no obligation to read beyond, the material presented within the page limits).

³⁶ Incomplete proposals may be declared inadmissible, see “Admissibility and eligibility criteria”. References and the funding ID section are not counted towards these page limits.

The host institution must confirm its association with and its support to the project and the Principal Investigator. As part of the application, the institution must provide a binding statement that the conditions of independence are already fulfilled or will be provided to the Principal Investigator if the application is successful, according to the template provided in the Information for Applicants. Proposals that do not include this institutional statement may be declared inadmissible.

Extended Synopsis: This should be a concise presentation of the full scientific proposal, with particular attention to the ground-breaking nature of the research project and the feasibility of the outlined scientific approach. At step 1 the full scientific proposal is not assessed so all essential information must be covered in the synopsis. The applicant will choose a primary evaluation panel and may also indicate a secondary evaluation panel. The applicant should indicate when he or she believes that the proposal is of a cross-panel or cross-domain nature.

Curriculum Vitae: The CV should include the standard academic and research

record as well as a succinct "funding ID" which must specify any current research grants and their subject, and any on-going application for work related to the proposal. Any research career gaps and/or unconventional paths should be clearly explained so that they can be fairly assessed by the evaluation panels.

Track Record: Each Principal Investigator must provide a list of achievements reflecting their track record. The type of achievements expected for Starting, Consolidator and Advanced Grant applicant Principal Investigators are set out in the relevant profiles above.

Scientific Proposal: Description of the scientific and technical aspects of the project, demonstrating the ground-breaking nature of the research, its potential impact and research methodology.

Resources and Time Commitment: The proposal should also clearly specify the percentage of the applicant's working time that will be spent in the EU or an Associated Country and the percentage of the applicant's working time that will be devoted to the project, as well as a full estimation of the real project cost, including a breakdown of personnel costs, whenever possible by team members category.

Evaluation procedure and criteria

Evaluation procedure³⁷

A **single submission of the full proposal** will be followed by a **two-step evaluation**.

The evaluation will be conducted by means of a structure of high level peer review panels as listed in Annex 1. The panels may be assisted by independent external experts working remotely.

The applicant Principal Investigator can request during the electronic proposal submission that up to three specific persons should not act as an evaluator in the evaluation of their proposal³⁸.

At step 1, the extended synopsis and the Principal Investigator's track record and CV will be assessed (and **not** the full scientific proposal). Proposals will be retained for step 2 based on the outcome of the evaluation at step 1 and a budgetary cut-off level of up to three times the panel's indicative budget.

At step 2 the complete version of the retained proposals will be assessed (including the full scientific proposal).

The allocation of the proposals to the various panels will be based on the expressed preference of the applicant Principal Investigator (see "Proposal

description" above). Proposals may be allocated to a different panel with the agreement of both Panel Chairs concerned.

The panel to which a proposal is allocated may request additional reviews by appropriate members of other panel(s) or additional remote evaluators.

*The ERC strongly encourages **multi and interdisciplinary research proposals**. Proposals of this type are evaluated by ERC's regular panels with the appropriate external expertise.*

Principal Investigators whose proposals are retained for step 2 of the evaluation will be invited for an interview to present their proposal to the evaluation panel meeting.

Evaluation criteria

For all ERC frontier research grants, **scientific excellence is the sole criterion of evaluation**. It will be applied in conjunction to the evaluation of both: the ground-breaking nature, ambition and feasibility of the research project; and the intellectual capacity, creativity and commitment of the Principal Investigator.

During the evaluation, the phase of the Principal Investigator's transition to independence, possible breaks in the research career of the applicant and/or unconventional research career paths should be taken into account.

³⁷ Procedural aspects that are not specified in this work programme are established in the ERC rules for submission.

³⁸ The persons identified may be excluded from the evaluation of the proposal concerned, as long as it remains possible to have the proposal evaluated.

In general, projects wholly or largely consisting in the collation and compilation of existing material in new databases, editions or collections are unlikely to constitute ground-breaking or "frontier" research in themselves, however useful such resources might be to subsequent original research. Such projects are therefore unlikely to be recommended for funding by the ERC's panels.

Plagiarism detection software may be used to analyse proposals submitted to the ERC.

The detailed evaluation elements applying to the excellence of the research project and the Principal Investigator are set out below.

1. Research Project

Ground-breaking nature, ambition and feasibility

Starting, Consolidator and Advanced

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 (i.e. if successful the payoffs will be very significant, but there is a high risk that the research project does not entirely fulfil its aims)?

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 (based on the Extended Synopsis)?

To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project (based on the full Scientific Proposal)?

To what extent does the proposal involve the development of novel methodology (based on the full Scientific Proposal)?

To what extent are the proposed timescales, resources and PI commitment adequate and properly justified (based on the full Scientific Proposal)?

2. Principal Investigator

Intellectual capacity and creativity

Starting and Consolidator

To what extent has the PI demonstrated the ability to conduct ground-breaking research?

To what extent does the PI provide evidence of creative independent thinking?

To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?

Intellectual capacity and creativity

Advanced

To what extent has the PI demonstrated the ability to conduct ground-breaking research?

To what extent does the PI has/have the required scientific expertise and capacity to successfully execute the project?

To what extent has the PI demonstrated sound leadership in the training and advancement of young scientists?

Evaluation outcome

At each evaluation step, each proposal will be evaluated and marked for each of the two main elements of the proposal: the ground-breaking nature, ambition and feasibility of the research project; and the intellectual capacity, creativity and commitment of the Principal Investigator.

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

At the end of **step 1** of the evaluation the proposal will receive one of the following scores:

- 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 the proposal will receive one of the following scores:

- 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.

Once the evaluation of their proposal has been completed, applicants to all schemes will receive an evaluation report which will include the final panel score and ranking range, the panel comment and the assessment of individual criteria by each external expert.

Projects recommended for funding will be funded by the ERC if sufficient funds are available. Proposals will be funded in priority order based on their rank.

Applicants may also be subject to restrictions on submitting proposals to future ERC calls based on the outcome of the evaluation. Applicants will need to check the restrictions in place for each call (for 2021 calls see restrictions on submission of proposals under “Admissibility and eligibility criteria”).

Other Actions

The different actions described in this chapter aim to allow the Scientific Council of the ERC to carry out its duties and mandate, including its obligations to establish the ERC's overall strategy and to monitor and quality control the programme's implementation from the scientific perspective.

Support to call and programme monitoring, and evaluation

1. Evaluation of proposals and project monitoring

The ERC uses appointed independent experts during the evaluation of proposals and the preparation of the ERC calls, for ethics review and for the monitoring of ongoing projects. The ERC also reimburses the costs of Principal Investigators invited to attend interviews during the evaluation of their proposals.

Type of action: Expert contract action.

Indicative budget: EUR 16 028 368 from the 2021 budget.

2. Support to programme monitoring and evaluation

The ERC Scientific Council is tasked with reviewing and assessing the ERC's achievements and the quality and impact of the research funded by the ERC. For the performance of this task the Scientific Council has adopted a monitoring and evaluation strategy. As part of this strategy, experts will be contracted to perform:

- Thematic analyses and longitudinal studies on specific research areas

in order to detect the footprint of ERC-funded activities on scientific progress;

- Case studies on how ERC-funded research has influenced and contributed to the development of a selection of major innovations;
- Small-scale exploratory studies to test novel methodologies for portfolio analysis (in relation to quality, interdisciplinarity, novelty, risk profiles) or for the analyses of the indirect impacts of ERC funding (such as on national research systems or on policy-making).

Type of action: Expert contract action.

Indicative budget: EUR 300 000 from the 2021 budget.

Support to open science

3. Support to the implementation of Open Science by the ERC

To follow up on the conclusions of the "Study on open access to publications and research data management and sharing within ERC projects" that was funded under the ERC Work programme 2016 and finalised in 2019, experts in the areas covered by that study will be contracted to

- 1) perform the collection and in-depth analysis of factual information on costs in the context of ERC projects, both during and after the end of the grant, related to
 - a) open access to publications (including long-text publications and

publications after the end of the grant) and

- b) research data management and sharing, data storage and curation, taking into account recent developments in these areas;

- 2) investigate different models for the provision of financial support to ERC grantees and their institutions for these activities, including an analysis of their legal and administrative feasibility, and a cost-benefit analysis concerning both the beneficiaries and the ERCEA;
- 3) carry out other focused small-scale studies on topics from the broad area of Open Science, as the need arises.

Type of action: Expert contract action.

Indicative budget: EUR 100 000 from the 2021 budget.

Support to the ERC Scientific Council

4. ERC Scientific Council Standing Identification Committee

Future members of the Scientific Council will be appointed by the Commission following an independent and transparent procedure for their identification agreed with the Scientific Council, including a consultation of the scientific community and a report to the European Parliament and the Council. For this purpose, a high level standing Identification Committee of independent experts has been set up as a

special expert group with special allowances of EUR 450 per day charged to the operational budget allocated to the ERC.

Type of action: Expert Contract action. This activity will be directly implemented by the Commission services (DG RTD).

Indicative budget: EUR 40 000 from the 2021 budget.

5. Support to the Vice-Chairs

Support will be provided to the three Vice-Chairs of the Scientific Council to ensure adequate local administrative assistance at their home institutes for their tasks of assisting the President of the ERC in representing the ERC and organising its work. For this purpose, the ERC Executive Agency will provide a grant to an identified beneficiary awarded by an evaluation committee fully composed of representatives of Union institutions or bodies.

The maximum duration of this grant will be 24 months.

Type of action: Coordination and support action.

Form of funding: Grant to an identified beneficiary.

Legal entities³⁹: Erasmus Universiteit Rotterdam, Burgemeester Oudlaan 50, 3062 PA Rotterdam, The Netherlands;

³⁹ This grant will be awarded without call for proposals in line with Article 195(e) of Regulation (EU, Euratom) No 1046/2018 (the 'Financial Regulation') and with the Horizon Europe regulation.

IDRYMA TECHNOLOGIAS KAI EREVNAS (FORTH), N. Plastira 100, Vassilika Vouton Heraklion 70013, Crete, Greece; Akademia Górniczo-Hutnicza im. Stanisława Staszica w Krakowie, al. Mickiewicza 30, 30-059 Krakow, Poland

Indicative budget: EUR 600 000 from the 2021 budget.

6. Honoraria and meeting expenses for Scientific Council members

In recognition of their personal commitment, the Scientific Council members will be compensated for the tasks they perform by means of an honorarium for their attendance at Scientific Council plenary meetings, reflecting their responsibilities and benchmarked against similar provisions in similar entities and Member States. The honoraria and those travel and subsistence expenses related to the performance of tasks of the Scientific Council will be charged to the operational budget allocated to the ERC.

Type of action: Expert contract action.

Indicative budget: EUR 555 000 from the 2021 budget.

Other Actions Grants: Union Contribution

The project budget is provided in EUR. Project costs will be reimbursed at a funding rate of 100% for direct costs plus a flat-rate of 25% for indirect costs⁴⁰.

⁴⁰ Excluding the direct costs for subcontracting, the costs for financial support to third parties and the

Reimbursements will be budget-based and will cover actual costs or unit costs depending on the cost category. The level of the awarded grant represents a maximum overall figure – the final amount to be paid must be justified on the basis of the costs incurred for the project and it may be lower than the budget requested.

Other Actions Grants: Proposal Evaluation

Proposals for grants under this part will be evaluated as follows.

Admissibility and Eligibility Criteria

Proposals under this part must be focused on requirements specified in the work programme and/or call for proposals.

Actions under this part are open to legal entities⁴¹ established in a Member State or an Associated Country as a legal entity created under national law, international European research organisations (such as CERN, EMBL, etc.), the European Commission's Joint Research Centre (JRC) or an entity created under EU law

Please also refer to Annex 3 - Countries Associated to Horizon Europe and Restrictions Applying to Some Legal Entities.

costs of resources made available by third parties which are not used on the premises of the host institution.

⁴¹ Please see important information on possible exclusion and registration of economic operators in the Commission's Early Detection and Exclusion System (EDES) respectively in Annex 4 and on final page of this Work Programme.

All proposals must be readable, accessible, complete and be submitted before the relevant deadline. A complete proposal entails all requested elements. Incomplete proposals may be declared inadmissible.

The content of the proposal must relate to the objectives of the grant and/or call for proposals, as defined in this work programme and/or call. A proposal will only be deemed ineligible on grounds of 'scope' in clear-cut cases.

Where there is a doubt on the admissibility or eligibility of a proposal, the evaluation may proceed pending a decision following an admissibility and eligibility review committee. If it becomes clear before, during or after the evaluation phase, that one or more of the admissibility or eligibility criteria has not been met, the proposal will be declared inadmissible or ineligible and will be rejected.

Evaluation Criteria

1. Excellence related to the objectives of the grant and/or call for proposals

Are the objectives of the proposed project consistent with the requirements specified in the work programme and/or call for proposals? Do they, where appropriate, correspond to, or go beyond, best current practice?

2. Impact

Will the project have a substantial impact in the context of the ERC objectives?

3. Quality and efficiency of the implementation

Is the proposed methodology and work plan effective in reaching the goals of the project? Do they ensure the highest quality and/or utility of results?

Application of Evaluation Criteria

Each evaluation criterion will be marked on a scale of 0 to 5 and an overall quality threshold of 80% will be used to establish the retained list of proposals which will be ranked in order of priority for funding.⁴²

⁴² Applicants whose proposal is marked above the 80% quality threshold are deemed to fulfil the operational capacity requirements of article 198(3) of Regulation (EU, Euratom) No 1046/2018 (the 'Financial Regulation').

Public Procurement

1. Support to ERC call management

Under Horizon Europe, the ERCEA is set to continue using the European Commission's corporate IT eGrants suite which was used under Horizon 2020. At the same time, the ERC needs to customise these applications to ERC requirements following the guidance of the ERC Scientific Council, in line with the decision of the European Parliament and Council on establishing the Horizon Europe specific programme.

In the transition of the ERC from Horizon 2020 to Horizon Europe, the European Commission is planning to introduce changes to eGrants IT applications, which will require the ERC to ensure the continuity of its operations by customising corporate IT tools in light of the Horizon Europe specific programme requirements and of Scientific Council decisions on ERC implementation.

In the context of the corporate governance of the European Commission's IT solutions, the ERCEA and the European Commission have committed to a co-development and co-editing approach of corporate eGrants such that the ERCEA is able to respond to the ERC Scientific Council's strategic decisions in an agile manner⁴³, while contributing to the

⁴³ *Building on a European Success Story to Further Empower European Researchers - Statement by the ERC Scientific Council on the position of the European Research Council in the next European Union Framework Programme for Research and Innovation*, published on 15 May 2017; *ERC Scientific Council Note on the Delegation Package of ERC in Horizon Europe*, adopted on 22 October 2019.

common needs of the corporate eGrants suite.

Technical assistance will be required in order to customise IT tools to ERC requirements in support of call publication, proposal submission and evaluation.

Type of action: Public procurement.

Indicative budget: €500 000 from the 2021 budget.

2. Support for the identification of potential independent external experts for the evaluation of proposals

The ERC Scientific Council is tasked⁴⁴ with proposing the appointment of independent external experts for the peer review evaluation of frontier research projects. The Scientific Council is equally responsible for ensuring the quality of the ERC's scientific operations by establishing positions on the selection of experts. The Scientific Council directly proposes the appointment of panel members, while the identification of independent external experts assisting the panels by working remotely has been delegated to Panel Chairs. Each year, about 25 000 independent experts are selected to take part in the evaluation of proposals.

The latest developments in machine learning algorithms and semantic technologies can now be harnessed to improve the efficiency and effectiveness of this identification process.

⁴⁴ Horizon Europe Specific Programme, Annex I, Pillar 1, Point 1.3.1(2).

The objective is to contract an artificial intelligence-based service to assist the Scientific Council and the Panel Chairs with the identification of potential independent experts with suitable expertise profiles.

The expected outcome is the implementation, provision and maintenance of the software or IT solution providing lists of potential experts⁴⁵, based on panel recruitment needs and on submitted proposals.

Type of action: Public procurement

Indicative budget: EUR 900 000 from the 2021 budget.

⁴⁵ Any personal data will be processed under the principles and safeguards set by Regulation (EU) No 2018/1725.

Indicative Budget

	<i>2021 budget in EUR million (rounded)</i>
Main Calls	
ERC-2021-StG	619
ERC-2021-CoG	633
ERC-2021-AdG	626
Other Actions	
Experts	17.023 ⁴⁶
Grants to identified beneficiaries	0.6
Other calls for proposals	-
Public procurement	1.4
Estimated total budget	1897

The budget amounts for 2021 are subject to the availability of the appropriations provided for in the draft budget for 2021 after the adoption of the budget for 2021 by the budgetary authority or if the budget is not adopted as provided for in the system of provisional twelfths.

Budgetary figures given in this work programme are indicative. Unless

⁴⁶ EUR 16.028 million of this amount corresponds to the cost of experts involved in the evaluation of proposals, project monitoring and the reimbursement of costs incurred by applicants invited by evaluation panels for interviews.

otherwise stated, final budgets may change following the evaluation of proposals.

The final figures may change by up to 20% compared with the total budget indicated in this work programme. Cumulated changes to the allocations to specific actions not exceeding 20% of the maximum Union contribution set in this

Work Programme will not be considered to be substantial for the purposes of Article 110(5) of the EU Financial Regulation, where those changes do not significantly affect the nature of the actions and the objective of the Work Programme.

If additional credits become available the Scientific Council will set the rules by

which they will be allocated to the calls based on a judgement of the scientific need, number of applications and predicted success rates of the calls.

The budget figures given in this table are rounded to two decimal points.

Annexes

Annex 1

Primary panel structure

Physical Sciences & Engineering

PE1 Mathematics

All areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics.

PE2 Fundamental Constituents of Matter

Particle, nuclear, plasma, atomic, molecular, gas, and optical physics.

PE3 Condensed Matter Physics

Structure, electronic properties, fluids, nanosciences, biological physics.

PE4 Physical and Analytical Chemical Sciences

Analytical chemistry, chemical theory, physical chemistry/chemical physics.

PE5 Synthetic Chemistry and Materials

New materials and new synthetic approaches, structure-properties relations, solid state chemistry, molecular architecture, organic chemistry.

PE6 Computer Science and Informatics

Informatics and information systems, computer science, scientific computing, intelligent systems.

PE7 Systems and Communication Engineering

Electrical, electronic, communication, optical and systems engineering.

PE8 Products and Processes Engineering

Product and process design, chemical, civil, environmental, mechanical, vehicle engineering, energy processes and relevant computational methods.

PE9 Universe Sciences

Astro-physics/-chemistry/-biology; solar system; planetary systems; stellar, galactic and extragalactic astronomy; cosmology; space sciences; astronomical instrumentation and data.

PE10 Earth System Science

Physical geography, geology, geophysics, atmospheric sciences, oceanography, climatology, cryology, ecology, global environmental change, biogeochemical cycles, natural resources management.

PE11 Materials Engineering

Advanced materials development: performance enhancement, modelling, large-scale preparation, modification, tailoring, optimisation, novel and combined use of materials, etc.

Life Sciences

LS1 Molecules of Life: Biological Mechanisms, Structures and Functions

For all organisms: Molecular biology, biochemistry, structural biology, molecular biophysics, synthetic and chemical biology, drug design, innovative methods and modelling.

LS2 Integrative Biology: From Genes and Genomes to Systems

For all organisms: Genetics, epigenetics, genomics and other 'omics studies, bioinformatics, systems biology, genetic diseases, gene editing, innovative methods and modelling, 'omics for personalised medicine.

LS3 Cellular, Developmental and Regenerative Biology

For all organisms: Structure and function of the cell, cell-cell communication, embryogenesis, tissue differentiation, organogenesis, growth, development, evolution of development, organoids, stem cells, regeneration, therapeutic approaches.

LS4 Physiology in Health, Disease and Ageing

Organ and tissue physiology, comparative physiology, physiology of ageing, pathophysiology, inter-organ and tissue communication, endocrinology, nutrition, metabolism, interaction with the microbiome, non-communicable diseases including cancer (and except disorders of the nervous system and immunity-related diseases).

LS5 Neuroscience and Disorders of the Nervous System

Nervous system development, homeostasis and ageing, nervous system function and dysfunction, systems neuroscience and modelling, biological basis of cognitive processes and of behaviour, neurological and mental disorders.

LS6 Immunity, Infection and Immunotherapy

The immune system, related disorders and their mechanisms, biology of infectious agents and infection, biological basis of prevention and treatment of infectious diseases, innovative immunological tools and approaches, including therapies.

LS7 Prevention, Diagnosis and Treatment of Human Diseases

Medical technologies and tools for prevention, diagnosis and treatment of human diseases, therapeutic approaches and interventions, pharmacology, preventative medicine, epidemiology and public health, digital medicine.

LS8 Environmental Biology, Ecology and Evolution

For all organisms: Ecology, biodiversity, environmental change, evolutionary biology, behavioural ecology, microbial ecology, marine biology, ecophysiology, theoretical developments and modelling.

LS9 Biotechnology and Biosystems Engineering

Biotechnology using all organisms, biotechnology for environment and food applications, applied plant and animal sciences, bioengineering and synthetic biology, biomass and biofuels, biohazards.

Social Sciences & Humanities

SH1 Individuals, Markets and Organisations

Economics, finance, management.

SH2 Institutions, Governance and Legal Systems

Political science, international relations, law.

SH3 The Social World and its Diversity

Sociology, social psychology, social anthropology, education sciences, communication studies.

SH4 The Human Mind and Its Complexity

Cognitive science, psychology, linguistics, theoretical philosophy.

SH5 Cultures and Cultural Production

Literary studies, cultural studies, study of the arts, philosophy.

SH6 The Study of the Human Past

Archaeology and history.

SH7 Human Mobility, Environment, and Space

Human geography, demography, health, sustainability science, territorial planning, spatial analysis.

Annex 2

ERC policy on PhD and equivalent doctoral degrees

1. The necessity of ascertaining PhD equivalence

In order to be eligible to apply to the ERC Starting or Consolidator Grant a Principal Investigator must have been awarded a PhD or equivalent doctoral degree. First-professional degrees will not be considered in themselves as PhD-equivalent, even if recipients carry the title "Doctor". See below for further guidelines on PhD degree equivalency.

2. PhD Degrees

The research doctorate is the highest earned academic degree. It is always awarded for **independent research** at a professional level in either academic disciplines or professional fields.

Regardless of the entry point, doctoral studies involve several stages of academic work. These may include the completion of preliminary course, seminar, and laboratory studies and/or the passing of a battery of written examinations. The PhD candidate selects an academic adviser and a subject for the dissertation, is assigned a dissertation committee, and designs their research (some educators call the doctoral thesis a dissertation to distinguish it from lesser theses). The dissertation committee consists usually of 3-5 faculty members in the candidate's research field, including the adviser.

3. Independent research

Conducting the research and writing the dissertation usually requires one to several years depending upon the topic selected and the research work necessary to prepare the dissertation. In defending their thesis, **the PhD candidate must establish mastery of the subject matter, explain and justify their research findings, and answer all questions put by the committee.** A successful defence results in the award of the PhD degree.

4. Degrees equivalent to the PhD:

It is recognised that there are some other doctoral titles that enjoy the same status and represent variants of the PhD in certain fields. All of them **have similar content requirements.** Potential applicants are invited to consult the following for useful references on degrees that will be considered equivalent to the PhD:

- EURYDICE: "Examinations, qualifications and titles - Second edition, Volume 1, European glossary on education" published in 2004⁴⁷. Please note that some titles that belong to the same

⁴⁷ <http://bookshop.europa.eu/en/european-glossary-on-education-pbEC3212292/>

category with doctoral degrees (ISCED 6 – 1997 classification or ISCED 8 – 2011 classification⁴⁸) may correspond to the intermediate steps towards the completion of doctoral education and they should not be therefore considered as PhD-equivalent.

- List of research doctorate titles awarded in the United States that enjoy the same status and represent variants of the PhD within certain fields. These doctorate titles are also recognised as PhD-equivalent by the U.S. National Science Foundation (NSF)⁴⁹.

5. First Professional Degrees (for applicants holding a degree in medicine please see below):

It is important to recognise that the initial professional degrees in various fields are **first degrees, not graduate research degrees**. Several degree titles in such fields include the term "Doctor", **but they are neither research doctorates nor equivalent to the PhD**.

6. Applicants holding a degree in medicine:

A first degree in medicine will not be accepted by itself as equivalent to a PhD award. To be considered an eligible Principal Investigator, applicants holding a degree in medicine need to provide **the certificates of both the medical degree and the PhD or proof of an appointment that requires doctoral equivalency** (e.g. post-doctoral fellowship, professorship appointment). Additionally, candidates must also provide information on their research experience (including peer reviewed publications) in order to further substantiate the equivalence of their overall training to a PhD.

In these cases, the certified date of the medical degree completion plus two years is the reference date of the actual award used for the calculation of the eligibility period established for Starting and Consolidator Grants in the section "Eligible Principal Investigator".

For applicants holding both a degree in medicine and a PhD, **the date used for the calculation of the eligibility period** (i.e. medical degree plus two years or PhD award date) **is the date of the earliest degree that makes the applicant eligible**.

⁴⁸

<http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>

⁴⁹

<http://www2.ed.gov/about/offices/list/ous/international/usnei/us/edlite-structure-us.html>

Annex 3

Countries associated to Horizon Europe and restrictions applying to some legal entities

At the date of the publication of the work programme, there are no countries associated to Horizon Europe. Considering the Union's interest to retain, in principle, relations with the countries associated to Horizon 2020, most third countries associated to Horizon 2020 are expected to be associated to Horizon Europe by the time the first grant agreements under Horizon Europe are signed. In addition, other third countries may also become associated to Horizon Europe during the programme. For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.

Please check the Horizon Europe Programme Guide on the EU Funding & Tenders Portal for up-to-date information on the current position for Associated Countries.

Special rules apply for entities from certain countries (e.g. entities subject to EU restrictive measures under Article 29 of the Treaty on the European Union (TEU) and Article 215 of the Treaty on the Functioning of the EU (TFEU) and entities covered by Commission Guidelines No

2013/C 205/05). Such entities are not eligible to participate in any capacity, including as beneficiaries, affiliated entities, associated partners, third parties giving in-kind contributions, subcontractors or recipients of financial support to third parties (if any).

Some entities from third countries are covered by the Council sanctions in place and are not eligible to participate in Union programmes. Please see: the consolidated list of persons, groups and entities subject to EU financial sanctions⁵⁰.

Given that the EU does not recognise the illegal annexation of Crimea and Sevastopol, legal persons established in the Autonomous Republic of Crimea or the city of Sevastopol are not eligible to participate in any capacity. This criterion also applies in cases where the respective action involves financial support given by grant beneficiaries to third parties established in the Autonomous Republic of Crimea or the city of Sevastopol in accordance with Article 204 of the EU's Financial Regulation. Should the illegal annexation of the Autonomous Republic of Crimea and the City of Sevastopol end, this Work Programme shall be revised.

⁵⁰

<https://webgate.ec.europa.eu/europeaid/fsd/fsf>

Annex 4

Exclusion

Applicants that are subject to **EU administrative sanctions** (i.e. exclusion or financial penalty decision)⁵¹ or are in one of the **exclusion situations** set out by EU Financial Regulation 2018/1046 are banned from receiving EU grants⁵² and can NOT participate.

⁵¹ See Article 136 EU Financial Regulation 2018/1046.

⁵² See Article 141 EU Financial Regulation 2018/1046.

Prior Information of Candidates, Tenderers, Grant Applicants and remunerated experts - registration of information in the Early Detection and Exclusion System (EDES).

The Commission operates the EDES, a system established under Articles 135, 142 and 143 of the Regulation (EU, Euratom) No 1046/2018⁵³ ('the Financial Regulation'). The EDES is used for the early detection of risks related to candidates, tenderers, grant applicants, beneficiaries of contracts and grants and linked third parties, as well as remunerated external experts, with a view to protecting the EU's financial interests.

Candidates, tenderers, grant applicants, remunerated external experts and, if they are legal entities, persons who have powers of representation, decision or control over them, are informed that, should they be in one of the situations mentioned in Article 136(1) of the Financial Regulation⁵⁴, their personal details (name, given name if natural person, address, legal form and name and given name of the persons with powers of representation, decision-making or control, if legal person) may be registered in the EDES, and communicated to the persons and entities referred to in Article 142 (1), (2), (4) and (5) of the Financial Regulation, in relation to the award or the execution of a procurement contract, a grant agreement or an expert contract.

NB: The EDES has replaced the Early Warning System (EWS) and the Central Exclusion Database (CED) as of 1 January 2016.

⁵³ Regulation (EU, Euratom) No 1046/2018 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012, OJ L 193, 30.7.2018, p. 1.

⁵⁴ See Annex 4.