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The adoption of the work programme will be announced on the Horizon 2020 website and on the Funding and Tenders Portal.

Information and topic descriptions indicated in this draft may not appear in the final work programme; and likewise, new elements may be introduced at a later stage. Any information disclosed by any other party shall not be construed as having been endorsed by or affiliated to the Commission.

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EN

Horizon 2020 Work-Programme 2018-2020

Towards the next Framework Programme for Research and Innovation:

Enhanced European Innovation Council (EIC) pilot

(European Commission Decision C(2019)xxxx of xx Xxxx 2019)

IMPORTANT NOTICE ON THIS WORK PROGRAMME

This Work Programme covers 2018, 2019 and 2020. The parts of the Work Programme that relate to 2020 (topics, dates, budget) have, with this revised version, been updated. The changes relating to this revised part are explained on the Funding & Tenders Portal.

About this document

This is the Work Programme part for the three-year European Innovation Council (EIC) pilot under Horizon 2020, the EU's Framework Programme for Research and Innovation.

To prepare for applying to an EIC pilot call, please go to the 'EIC pilot Web Page', which will direct you to the most appropriate funding scheme for your needs.

http://ec.europa.eu/research/eic/index.cfm

The 'EIC pilot Web Page' will channel you through to the Horizon 2020 participant portal, which contains all the practical information you need to participate as well as details of your National Contact Point, who can give you support in your own language.

Summary

The European Innovation Council (EIC) pilot supports researchers and innovators developing breakthrough innovations with the potential to create new markets and boost jobs, growth and prosperity in Europe. It will pilot two new schemes:

(i) the EIC Pathfinder pilot (grant only)

FET-Open	*Early-stage, science and technology research by interdisciplinary consortia exploring visionary ideas for radically new future technologies that challenge current paradigms and venture into the unknown. Open to research into any area of technology, it aims to attract new, high-potential research and innovation players.*
FET-Proactive	*Cutting edge-high-risk/ high reward research and innovation projects that aim to firmly establish the future potential of a new and promising demonstrate a new technological paradigm within a pre-defined scope.*

(ii) the EIC Accelerator pilot (grant only and blended finance[1])

SME Instrument	*Close-to-market and projects with a potential to scale up of a single SME established in EU Member States or Horizon 2020 associated countries.*

Other Calls:

Fast Track to Innovation (FTI)	*Close-to-market projects of consortia with three to five entities from at least three different EU Member States or Horizon 2020 associated countries. Industry must participate. Interdisciplinary approaches encouraged.*

Other actions:

Horizon Prizes	*Horizon Prizes boost breakthrough innovation by fostering solutions to challenges which bring major benefits to society.*
Support Actions	*help to optimise the impact of EU investment in EIC innovators and innovations; they contribute to building an EIC community and a vision underpinning a possible future EIC.*

[1] Blended finance means a financial support to an action, consisting in a combination of a grant with an investment in equity. Applicants may apply for the blended finance option after the cut-off date of 5 June 2019.

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Introduction

The last decade saw the emergence of major new markets and a global platform economy. Today's successful, high-growth innovative enterprises often rely on new business models and technologies emerging at the intersection between different sectors and disciplines.

Despite early technology leads, the EU has supported the creation of few companies that shape and capture these new markets. While Europe compares relatively well internationally in terms of numbers of start-ups, too few of these succeed in scaling up and generating the new, high-skilled jobs on which Europe's future depends and which would strengthen Europe's position in the platform economy.

The EU needs to help improve the conditions enabling the emergence and rapid scale-up of highly innovative enterprises.

The interim evaluation of Horizon 2020 found that while the programme demonstrates potential in terms of fostering breakthrough, market-creating innovation, support for doing so needs to be substantially strengthened. Moreover, in its 28 June 2018 conclusions, the '*European Council invites the Commission to launch a new pilot initiative on breakthrough innovation within the remaining period of Horizon 2020'* in view of setting-up a fully-fledged European Innovation Council under the next Multiannual Financial Framework.

This part of the Horizon 2020 work-programme aims to do just that. It contains three main novelties: reformed and simplified funding instruments; a more flexible and pro-active approach to management (needed for high-risk projects and fast moving technologies and markets); and governance, with an EIC pilot Advisory Board.

These actions represent a new pilot phase for a European Innovation Council (EIC) that has been proposed for the next EU research and innovation programme. They provide support (including blended finance under the EIC Accelerator pilot – SME Instrument) to innovative firms and entrepreneurs with the potential to scale up rapidly at European and global levels. They are exclusively aimed at people and companies who have ideas that are radically different from existing products or services on the market or under development (not incremental improvements), are highly risky, and require significant investments to get to market. As such they complement the focus on a broader innovation dimension (e.g. sector-specific, incremental) in other parts of the work programme (such as Innovation in SMEs, Access to Risk Finance, Leadership in Industrial Technologies).

The objective is to strengthen breakthrough innovations and boost the number of high-growth companies. It is anticipated that this part of the work programme will support around 1000 projects to that effect. The overall budget of €3 billion broadly reflects the multiannual funding profile of the constituent elements.

The EIC Pilot tests two funding schemes: the EIC Pathfinder pilot, and the EIC Accelerator pilot. These two schemes build on and deepen the current Horizon 2020 instruments.

The **EIC Pathfinder pilot** targets high-risk cutting edge projects exploring new territories aiming at developing radical and innovative technologies. It encompasses FET-Open and FET-Proactive.

FET-Open uses interdisciplinary collaboration to tap into Europe's excellent science base for exploring radically new technologies, which may become the game-changers of the future. FET-Proactive aims to identify the future and emerging technological paradigms with highest potential for Europe's economy and society.

The **EIC Accelerator pilot** aims at creating and promoting co-investment by initiating support where market response is absent and/ or insufficient. It encompasses the SME Instrument and an optional blended finance component (combining grant and equity)[2]. The EIC Accelerator pilot (SME Instrument) addresses SMEs with a radically new highly risky, and thus, non-bankable idea underpinned by a business plan for rolling out marketable innovation solutions and with a potential to scale up. Bankable, commercially viable projects and projects that are ready or already in the scale-up phase will be redirected towards dedicated financial instruments.

Work is ongoing for the establishment, by summer 2019, of a Special Purpose Vehicle (SPV) which will be responsible for the management of the equity component under the EIC Accelerator pilot. Subject to a Commission decision, an Investment Strategy will be published before the SPV starts its operations.

Market-creating innovations are radically new, breakthrough products, services, processes or business models that open up new markets with the potential for rapid growth at European and global levels. Market-creating innovations take shape at the intersection between different technologies, industry sectors and scientific disciplines, linked to domains such as energy, health, ICT, space, transport and agriculture.

These schemes have been developed to support market-creating innovation more effectively.

The current programme/ projects management shall be refined to serve the

[2] Applicants may apply for the blended finance option following the cut-off date of 5 June 2019.

purposes of the EIC efficiently. The aim is to boost current processes by bringing in top-minds with a sense of urgency and committed to making an impact. This new approach to programme/ projects management will be run by programme managers, possibly entailing a portfolio approach, in particular under the EIC Pathfinder pilot, and will be introduced during 2019. The programme managers will be recruited as temporary Commission staff.

In addition, an EIC Pilot Advisory Board will be set up as a Commission expert group, in line with horizontal rules for establishment of such groups[3]. Its role will be to advise the European Commission on the overall strategy and implementation of the EIC.

Efforts continue to be made to help firms receiving grants access other forms and sources of finance appropriate to their scale-up and innovation development needs, such as crowdfunding, business angel investments, venture capital and loans via InnovFin[4] and other EU access to finance solutions under the Investment Plan for Europe[5] or COSME[6] or the European Structural and Investment Funds[7].

Other activities under this new pilot phase include the Fast Track to Innovation (FTI) and the Horizon Prizes.

FTI will continue to target industry-driven consortia seeking a quick market uptake of new solutions, and brings together actors with complementary backgrounds, knowledge and skills.

EIC Horizon Prizes will continue to boost breakthrough innovation by fostering solutions to challenges which bring major benefits to society.

The results of projects will be closely monitored. In terms of results, the Pathfinder's aim is to build up a wide portfolio of technological gems with clear potential to make a big difference in the future. For the Accelerator, performance indicators are the number of new products, services and processes for new markets being developed, the amount of private investment attracted during and after the project, and the turnover and employment of the companies that take part. These indicators will be gauged by reporting by the projects, by links to external databases on company performance, and by assessments by outside experts. For the latter, the EIC pilot will make use of the Innovation Radar[8], a tool to assess the market potential of innovations and the market-readiness of innovators. The Innovation Radar will also help communicate the results to potential investors.

Applicants may wish to look at other European support networks (such as the

[3] Commission Decision C(2016) 3301
[4] Cf. http://www.eib.org/products/blending/innovfin/index.htm
[5] Cf. https://ec.europa.eu/commission/priorities/jobs-growth-and-investment/investment-plan_en
[6] Cf. https://ec.europa.eu/growth/access-to-finance/cosme-financial-instruments_en
[7] Cf. https://ec.europa.eu/regional_policy/en/funding/financial-instruments.
[8] See https://www.innoradar.eu/about

Enterprise Europe Network) as well as at facilities funded by Horizon 2020 aimed at supporting open innovation, in particular for testing and demonstrating technologies (e.g. open innovation testbeds, or digital innovation hubs), or at Thematic Smart Specialisation Platforms. The use of space data from the EU's space programmes[9] is also encouraged.

[9] See http://copernicus.eu and https://gsa.europa.eu and https://ec.europa.eu/digital-single-market/en/digital-innovation-hubs

Note

The EIC pilot's actions will also connect with activities undertaken by the Eurostars-2 Programme, the European Institute of Innovation & Technology (EIT), COSME, Startup Europe, InvestHorizon, the EU's space programmes (Copernicus and Galileo/EGNOS) and European Structural and Investment Funds (ESI Funds), including the Seal of Excellence initiative and the Thematic Smart Specialisation Platforms.

With the exception of the SME Instrument phase 1, grant beneficiaries must **share research data** by default, as stipulated in Article 29.3 of the Horizon 2020 Model Grant Agreement (including the creation of a Data Management Plan). **Participants may opt out of these arrangements, both before and after the signature of the grant agreement.** For more information, see General Annex L of the work programme.

EIC Pathfinder pilot (FET-Open)

Novel ideas for radically new technologies

H2020-FETOPEN-2018-2020

This call ' is reflected in this WP section for the reasons outlined in the Introduction. However, only the text of this call as included in the work programme section on Future and Emerging Technologies (FET) has legal value.

Principles and characteristics of FET-Open, and who should apply

FET-Open aims to establish European leadership in the early exploration of future technologies. It looks for opportunities of long-term benefit for citizens, the economy and society. It aims to mobilise Europe's most creative and forward thinking researchers from all disciplines to work together and explore what may become the leading technology paradigms of the future.

FET Open supports early stage science and technology research exploring new foundations for radically new future technologies by challenging current paradigms and venturing into unknown areas. A bottom-up selection process widely open to any research idea builds up a diverse portfolio of new research directions. Early detection of promising new areas, developments and trends, along with attracting new and high-potential research and innovation players, are key factors.

FET Open combines high scientific ambition with concrete technological implications. It aims to attract interdisciplinary consortia that do not shy away from exploring connections between remote disciplines in order to open-up new and potentially game changing technological directions that FET as a whole aims to develop into the leading technology paradigms of the future, including through FET-Proactive projects and FET-Flagship initiatives. In spite of the high initial risk, the long-term impact can be enormous: these new technologies can become the core for new high-growth companies, for new industries or for radically new ways of tackling societal challenges.

The FET-Open call is a part of the European Innovation Council (EIC) pilot. It provides the EIC with a bold exploratory engine that shatters the frontiers of current thinking. All FET-Open projects, even if far from today's markets, are full of great ideas to inspire the entrepreneurial minds that the EIC attracts. While keeping its own identity of excellence in science and technology research, the exposure of FET-Open within the EIC allows new and sometimes unexpected opportunities to be detected and picked up early on. For those cases, the FET Innovation Launchpad is designed to assist in the first steps to accelerate the real-world impact of a result from FET research – a win-win for both research and for innovation. Other parts of the EIC provide further tools for achieving high-impact on society and/or the economy. Furthermore, by being part of the EIC pilot, FET-Open participants have access to the assistance, networking and financing possibilities offered by the EIC thus further increasing the leverage and increased impact from the initial high-risk investment in FET projects.

Proposals are invited against the following topics:

FET-Open Challenging Current Thinking

FETOPEN-01-2018-2019-2020

Specific Challenge

To lay the foundations for **radically new future technologies** of any kind from visionary interdisciplinary collaborations that dissolve the traditional boundaries between sciences and disciplines, including the social sciences and humanities. This topic also encourages the driving role of new actors in research and innovation, including excellent young researchers, ambitious high-tech SMEs and first-time participants to FET under Horizon 2020 from across Europe.

Scope

Proposals are sought for cutting-edge **high-risk / high-impact interdisciplinary research with all of the following essential characteristics** ("FET gatekeepers"):

- **Radical vision**: the project must address a clear and radical vision, enabled by a new technology concept that challenges current paradigms. In particular, research to advance on the roadmap of a well-established technological paradigm, even if high-risk, will not be funded.
- **Breakthrough technological target**: the project must target a novel and ambitious science-to-technology breakthrough as a first proof of concept for its vision. In particular, blue-sky exploratory research without a clear technological objective will not be funded.
- **Ambitious interdisciplinary research** for achieving the technological breakthrough and that opens up new areas of investigation. In particular, projects with only low-risk incremental research, even if interdisciplinary, will not be funded.

The inherently high risks of the research proposed shall be mitigated by a flexible methodology to deal with the considerable science-and-technology uncertainties and for choosing alternative directions and options.

The Commission considers that proposals requesting a contribution from the EU of up to €3 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact

- Scientific and technological contributions to the foundation of a new future technology.
- Potential for future social or economic impact or market creation.
- Building leading research and innovation capacity across Europe by involvement of key actors that can make a difference in the future, for example excellent young researchers, ambitious high-tech SMEs or first-time

participants to FET under Horizon 2020[10].

Type of action

Research and Innovation action.

The conditions related to this topic are provided at the end of this call and in the General Annexes.

[10] First time participation here refers to the individuals involved, not their institution or organisation.

FET-Open Coordination and Support Actions

FETOPEN-02-2018

Specific Challenge

To promote excellent collaborative research and innovation on future and emerging technologies to secure and renew the basis for future European competitiveness and growth, and that will make a difference for society in the decades to come.

Scope

Proposals for Coordination and Support Actions (CSA) should be driven by relevant actors in the research field and address only one of the following sub-topics:

a) FET Communication and Outreach

Support communication activities on the FET programme and its achievements and outreach actions targeting a wide range of audiences including the general public, and going well beyond the world of academia and research. This shall stimulate the emergence of a FET community and its connection to relevant multipliers and other stakeholder networks. The activities shall use a diversity of channels and interventions (for example news items, social media, interviews, workshops, exhibitions, competitions, code camps and participatory actions for wider engagement).

b) FET Innovation

Stimulate the impact on innovation from FET-funded research and improving the innovation readiness levels of FET results, for example by providing a kind of "market place" for FET technologies, by connecting the world of research with that of, potential users, technology leaders, technology transfer organisations, entrepreneurs, investors or alternative financing channels.

c) FET Observatory

Ongoing and systematic identification of new and emerging technologies from FET portfolio analysis, trends analysis (using for instance bibliometric tools, media watch, consultations and workshops) and broader horizon scanning (beyond research), including also consideration of ethical implications, gender differences and long-term impacts on society and humankind.

Specificity to the nature of FET is a must (e.g., upstream positioning, interdisciplinarity, high-risk, novelty, long-term impact…).

The Commission considers that proposals requesting a contribution from the EU of up to € 0.5 million (and up to 0.7 million for a.) would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact

- Strengthening globally recognised European leadership in the early exploration of visionary, new and

emerging technologies and with a strong engagement of scientists, citizens, innovators and policy makers.

- Improved long-term innovation potential in Europe both from the abundance of novel ideas and the range of actors ready to take them forward.
- Improved readiness across Europe to engage in inter-disciplinary research collaboration and to take up new, open and responsible research and innovation practices, with due attention to aspects such as education, gender differences and long-term societal, ethical and legal implications.

Type of action

Coordination and support action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

FET Innovation Launchpad

FETOPEN-03-2018-2019-2020

Specific Challenge

This topic aims at turning results from FET-funded projects into genuine societal or economic innovations.

Scope

Short individual or collaborative actions focused on the non-scientific aspects and the early stages of turning a result of an ongoing or recently finished project funded through FET under FP7 or Horizon 2020[11] into a genuine innovation with socio-economic impacts. The precise link with the relevant FET project and the specific result for which a FET Innovation Launchpad proposal is intended, are to be explicitly described in the proposal. This topic does not fund research or activities that are/were already foreseen in the original FET project. Activities proposed should reflect the level of maturity of the result to be taken up. They can include the definition of a commercialisation process, market and competitiveness analysis, technology assessment, verification of innovation potential, consolidation of intellectual property rights, business case development. Proposals can include activities with, for instance, partners for technology transfer, licence-takers, investors and other sources of financing, societal organisations or potential end-users. Limited low-risk technology development (for instance for demonstration, testing or minor adjustment to specific requirements) can be supported as long as it has a clear and necessary role in the broader proposed innovation strategy and plan.

The Commission considers that proposals for actions no longer than 18 months and requesting a contribution from the EU of up to € 0.1 million would allow this specific challenge to be addressed appropriately. For grants awarded under this topic as a result of proposals submitted for the final deadline of 14 October 2020, the costs will be declared based on the lump sums of a fixed total amount of EUR 0.1 million for each grant, as authorised by decision of the authorizing officer responsible.[12] Details of the lump sum funding pilot scheme are published on the Funding & Tenders Portal together with the specific Model Grant Agreement for Lump Sums applicable.

Expected impact

- Increased value creation from FET projects by picking up innovation opportunities.
- Improved societal and market acceptance of concrete high-potential innovations from FET projects.

[11] Research and Innovation Actions funded under any call in the FET work programmes under Horizon 2020 for 2014-2015, for 2016-2017, and for 2018-2019-2020; projects funded under the FET part of any of the LEIT-ICT work programmes under FP7. See the Call Conditions for specific eligibility conditions.

[12] 'Decsion authorising the use of reimbursement on the basis of lump sums for the FET Innovation Launchpad actions under the Horizon 2020 Framework Programme for Research and Innovation' (17/05/2019). See http://ec.europa.eu/research/participants/data/ref/h2020/other/legal/lump_sum/lumpsumdecision-fet-innovation-launchpad_en.pdf

- Stimulating, supporting and rewarding an open and proactive mind-set towards exploitation beyond the research world.
- Contributing to the competitiveness of European industry/economy by seeding future growth and the creation of jobs from FET research.

Type of action

Coordination and support action, Coordination and support action Lump sum.

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Conditions for the call
EIC Pathfinder pilot (FET-Open)
Novel ideas for radically new technologies

Opening dates, deadlines, indicative budgets[13]

Opening date: 7 November 2017	**Deadline of cut-offs** ***All deadlines are at 17.00 .00 Brussels local time***
FETOPEN-01-2018-2019-2020 (RIA)	**16 May 2018** **24 January 2019** **18 September 2019** **13 May 2020**

Budget of FETOPEN-01-2018-2019-2020 (RIA)	*€ millions*		
	2018	**2019**	**2020**
Overall indicative budget	181.20	163.30	354.20

Opening date: 7 November 2017	**Deadline of cut-offs** ***All deadlines are at 17.00.00 Brussels local time***

[13] The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
The Director-General responsible may delay the deadline(s) by up to two months.
The budget amounts for the 2020 budget are subject to the availability of the appropriations provided for in the draft budget for 2020 after the adoption of the budget 2020 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

FETOPEN-02-2018 (CSA)	**11 April 2018**
FETOPEN-03-2018-2019-2020 (CSA)	**16 October 2018** **08 October 2019**
FETOPEN-03-2018-2019-2020 (CSA-LS)	**14 October 2020**

Budget of FETOPEN (CSA)	*€ millions*		
	2018	**2019**	**2020**
Overall indicative budget FETOPEN-02-2018 (CSA)	2.00		
Overall indicative budget FETOPEN-03-2018-2019-2020 (CSA)	2.50	2.70	
Overall indicative budget FETOPEN-03-2018-2019-2020 (CSA-LS)			3.00

The call opens at 17.00.00 Brussels local time on the opening date.

The total indicative budget for the FET-Open topic FETOPEN-01-2018-2019-2020 is EUR 641.20 million. The indicative funding budgets available per cut-off date for this topic are as follows:

1. Cut-off date 16/05/2018: €123.70 million
2. Cut-off date 24/01/2019: €160.65 million
3. Cut-off date 18/09/2019: €160.65 million
4. Cut-off date 13/05/2020: €196.20 million

€57.50 million from the 2018 budget will be used to fund in part the last cut-off of the Horizon 2020 FETOPEN-2016-2017 call under the FET work-programme 2016-2017.

Indicative timetable for evaluation and grant agreement signature

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 5 months from the final date for submission; and
- Indicative date for the signing of grant agreements: Maximum 8 months from the final date for submission.

Eligibility and admissibility conditions

The conditions are described in General Annexes B and C of the work programme. The following exceptions apply:

FETOPEN-03-2018-2019-2020	Proposals must build on results from an ongoing or recently finished project, funded as a result of call in any FET topic under FP7 or Horizon 2020 and clearly identified in the proposal. For a project to be considered "recently finished" in the context of this call topic its actual end date must be at most one year before the deadline for proposal submission to this topic. For a project to be considered "ongoing" in the context of this call topic the deadline for proposal submission to this topic must be within the period limited by the contractual start date and end date of the project. Proposals must include a declaration by the coordinator of the necessary rights and ownership of results to be exploited, as described in the proposal. Applicants that are not the owner of the result to be taken up in the proposal must provide a letter from the relevant beneficiary or beneficiaries of the previous FET project that own(s) the result that confirms the existence of the necessary agreements with the coordinator of the current proposal, including on IPR.

Evaluation criteria, scoring and threshold

The criteria, scoring and threshold are described in General Annex H of the work programme. The following exceptions apply:

FETOPEN-01-2018-2019-2020	**Excellence** Adherence to the "FET gatekeepers" as described in the call text: • Clarity of the radical vision of a science-enabled

	technology and its differentiation from current paradigms. • Novelty and ambition of the proposed science-to-technology breakthrough that addresses this vision. • Range of and added value from interdisciplinarity for opening up new areas of research; non-incrementality of the research proposed. • High-risk, plausibility and flexibility of the research approach. **Threshold: 4/5, Weight: 60%** **Impact** • The extent to which the outputs of the project would contribute to the expected impacts listed in the work programme under this topic. • Effectiveness of measures and plans to disseminate and use the results (including management of IPR) and to communicate about the project to different target audiences. **Threshold: 3.5/5, Weight: 20%** **Quality and efficiency of the implementation** The following aspects are taken into account: • Coherence and effectiveness of the research methodology and work plan to achieve project objectives and impacts, including adequate allocation of resources to tasks and partners. • Role and complementarity of the participants and extent to which the consortium as a whole brings together the necessary expertise. **Threshold: 3/5, Weight: 20%**
FETOPEN-03-2018-2019-2020	**Excellence** The following aspects are taken into account: • Clarity and quality of the innovation idea and its link with the previous or ongoing FET project indicated in the proposal.

	• Concreteness of objectives and their pertinence for moving the output of FET research through the initial steps of a process leading to a commercial or social innovation. • Suitability and necessity of the proposed activities to reach the stated objectives, including their complementarity to actions already foreseen or expected from the previous or ongoing FET project. **Threshold: 3/5, Weight: 40%** **Impact** Contributions to the impacts listed under this topic in the work programme: • Added innovation potential with respect to the FET project from which this innovation originates. • Extent of economic and/or societal benefits resulting from this innovation as identified in the proposal. • Suitability of measures for taking the innovation beyond the research world, including through engagement with prospective exploitation partners, other stakeholders, users or society. **Threshold: 3.5/5, Weight: 40%** **Quality and efficiency of the implementation** The following aspects are taken into account: • Quality of work plan and management. • Relevance of expertise in the consortium. • Appropriate allocation of resources (person-months). **Threshold: 3/5, Weight: 20%**

Evaluation Procedure

The procedure for setting a priority order for proposals with the same score is given in General Annex H of the work programme. The following exceptions apply:

FETOPEN-01-2018-2019-2020	The following specific page limits apply. Sections 1 to 3 of the Part B of the proposal should consist of a maximum of 15 A4 pages. The limits will be clearly shown in the "proposal templates" in the Funding & Tenders Portal electronic

	submission system. Sections that are not subject to limits will be indicated. A proposal that, according to the evaluator's assessments, does not convincingly satisfy all FET gatekeepers as described under this topic will be declared out of scope. The communication to the applications will include the evaluators' assessments, or relevant extracts from them. At consensus stage, the consensus score for each evaluation criteria will be the median of the corresponding scores attributed by the individual evaluators. The consensus report will comprise a collation of the comments from individual reports, or extracts from them. The final review panel will decide on the final score based on its consensus discussions. The panel will also decide on any additional comments, possibly including advice not to resubmit the proposal.
FETOPEN-02-2018	Grants will be awarded to proposals according to the ranking list. However, in order to ensure a balanced portfolio of supported actions, at least the highest-ranked proposal per sub-topic will be funded provided that it attains all thresholds.
FETOPEN-03-2018-2019-2020	The following specific page limits apply. Sections 1 to 3 of the Part B of the proposal should consist of a maximum of 7 A4 pages. The limits will be clearly shown in the "proposal templates" in the Funding & Tenders Portal electronic submission system. Sections that are not subject to limits will be indicated. At consensus stage, the consensus score for each evaluation criteria will be the median of the corresponding scores attributed by the individual evaluators. The consensus report will comprise a collation of the comments from individual reports, or extracts from them. The final review panel will decide on the final score based on its consensus discussions. The panel will also decide on any additional comments, possibly including advice not to resubmit the proposal. For deciding the priority order for proposals with the same score, the procedure for Innovation actions will apply.

The full evaluation procedure is described in the relevant guide published on the Funding & Tenders Portal.

Grant Conditions

FETOPEN-03-2018-2019-2020	For grants awarded under this topic as a result of proposals submitted for the final deadline of 14 October 2020, the costs will be declared based on lump sums of a fixed total amount of EUR 0.1 million per grant, as authorised by decision of the authorizing officer responsible.[14] Details of the lump sum funding pilot scheme are published on the Funding & Tenders Portal together with the specific Model Grant Agreement for Lump Sums applicable.

Consortium agreement

FETOPEN-01-2018-2019-2020	Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.

[14] 'Decsion authorising the use of reimbursement on the basis of lump sums for the FET Innovation Launchpad actions under the Horizon 2020 Framework Programme for Research and Innovation' (17/05/2019). See http://ec.europa.eu/research/participants/data/ref/h2020/other/legal/lump_sum/lumpsumdecision-fet-innovation-launchpad_en.pdf

EIC Pathfinder pilot (FET-Proactive)[15]

Boosting emerging technologies

H2020-EIC-FETPROACT-2019-2020

FET Proactive aims to identify the future and emerging technological paradigms with highest potential for Europe's economy and society. For each of them, it looks to establish a broad and solid European basis in terms of knowledge, key technological building blocks and interdisciplinary communities. By reaching out well beyond the research world, it ensures that Europe has the best 'first mover' position to capitalise rapidly and effectively on emerging societal and industrial opportunities.

[15] The FET –Proactive topics under the call 2019 are detailed under the Enhanced EIC pilot. The FET-Proactive topics of 2020 calls will be detailed in the FET Work Programme and are included in this work programme section for information. Only the 2020 FET-Proactive topics as included in the work programme section on Future and Emerging Technologies (FET) have legal value. However, all topics mentioned below are part of the Enhanced EIC pilot.

FET Proactive: emerging paradigms and communities[16]

FETPROACT-EIC-05-2019

Specific Challenge: To explore and consolidate a new technological direction in order to put it firmly on the map as a viable **paradigm for future technology**. To foster the interdisciplinary communities that are able to drive this forward, extending from the participating consortia to a wider European pool of expertise. To stimulate the emergence of a European innovation eco-system around a new technological paradigm, well beyond the world of research alone.

Scope: proposals are sought for cutting-edge **high-risk / high-reward research and innovation projects** that aim to demonstrate a new technological paradigm within the scope of one of the following sub-topics:

a. Human-Centric AI. Artificial intelligence (AI) is gaining more and more footholds in various aspects of our life. However, machine learning algorithms are difficult to understand, opaque and may have implicit biases in their decision making. Explicability has become an essential element if users are to trust, accept and adopt the next generation of intelligent machines on a wider scale. This initiative seeks to advance to the next AI frontier with verifiable, evidence-based features of trustworthiness (i.e., reliable and unbiased alignment of values, goals and beliefs) and transparency (explainable performance), exploring radically new approaches (e.g., inspired from neuro-science, cognition or social science). For instance, explanation could be more tightly intertwined with the decision making process itself so that decisions can be challenged, interpreted, refined and adjusted through mutual exchange, introspection (e.g., self-awareness of biases, reflecting on the internal functioning of the learning system, or on what caused a wrong or unacceptable decision) and active learning of both system and user, for example through dialogue or other forms of multi-modal interaction aimed at establishing mutual trust. New data collection and ownership/governance models that go beyond the dominant off-line and centralised data processing should be investigated, and new avenues, such as for incremental, unsupervised, active, one-shot and 'small data' machine learning, should be explored. The projects are expected to contribute to the wider debate on the sociotechnical, organisational and AI-ethical dimensions of such technologies and systems, and link to the 'Commission's broader AI strategy[17].

b. Implantable autonomous devices and materials. Radically new biomedical technologies that will lead to enhanced life quality for people are urgently needed, particularly for

[16] This topic is part of the European Innovation Council Enhanced Pilot (2019-2020) and funded from budget line 08.020102. In accordance with article 6.5 of Horizon 2020 regulation No 1291/2013, credits from budget line 08.020202 will be transferred to budget line 08.020102.
[17] See Artificial Intelligence for Europe (COM(2018) 237 final, 25.4.2018) and Coordinated Plan on Artificial Intelligence (COM(2018) 795 final, 7.12.2018).

mitigating the impact of chronic health conditions that are placing a rapidly growing and ultimately unsustainable burden on healthcare systems. A key goal will be to demonstrate dramatically extended functional lifetimes of implantable devices, for example, through incorporation of smart sensing, self-awareness, adaptation (form and/or function) and self-repair capabilities. Included are mobile micro/nano devices based on biological models that can perform advanced functions e.g. site specific automigration, ability to distinguish tissue types (diseased, normal) and perform highly localised actions (e.g., delivery of therapeutic agents). Entities incorporating (bio)materials that provide instances of totally autonomous biomimetic behaviour and in-situ integration and adaptation are particularly welcome, such as an ability to blend-in with the native biological environment, to independently generate power, synthesise active agents or sense and respond to changes in the local molecular environment. Work on ethical implications should be included.

c. Breakthrough zero-emissions energy generation for full decarbonization. Clean and sustainable energy is one of the major challenges of our time. This sub-topic aims at the multidisciplinary exploration of new directions (starting from TRL 1-3) for power generation that is clean, compact and low-cost, aimed at stand-alone, mobile or portable uses in specific application contexts, for instance, in the transport sector (road, air, sea and either for motive or auxiliary needs), for portable uses, in remote places or in emergency situations. Breakthrough concepts and techniques for energy generation have to be explored for generating heat and/or electricity efficiently with zero emissions and with a minimal use of rare or toxic materials. Research areas could include, for example, long duration high heat sources from hydrogen-metal systems (e.g., using nickel), energy generation in plasma and cavitation systems. These or any other concepts with similar compact, high energy density and low-cost energy generation capabilities should be harnessed to make them usable for specific application contexts. Clear and ambitious performance targets and milestones to achieve them shall be provided.

FET Proactive projects should establish a solid baseline of knowledge and skills and assemble the interdisciplinary communities around them. They should further foster the emergence of a broader innovation ecosystem and create a fertile ground for future take-up of its new technological paradigm (e.g., public engagement, informal education, policy debate).

The Commission considers that proposals requesting a contribution from the EU of up to EUR 4 million and with a duration of up to 4 years would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts or duration.

This topic allows for the provision of financial support to third parties established in an EU member state or country associated with Horizon 2020 in line with the conditions set out in General Annex K, either to enhance impacts through punctual small scale experimentation and use of project results by third parties, or to award a prize following a contest organised by the beneficiaries.

Expected Impact:

- Scientific and technological contributions to the foundation and consolidation of a radically new future technology.
- Potential for future returns in terms of societal or economic innovation or market creation.
- Spreading excellence and building leading innovation capacity across Europe by involvement of key actors that can make a difference in the future, for example excellent young, researchers, ambitious high-tech SMEs or first-time participants to FET under Horizon 2020[18].
- Build-up of a goal oriented interdisciplinary community (within and beyond the consortium).
- Emergence of an innovation ecosystem around a future technology in the theme addressed from outreach to and partnership with high potential actors in research and innovation, and from wider stakeholder/public engagement, with due consideration of aspects such as education, gender differences and long-term societal, ethical and legal implications.

Type of action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

[18] First time participation here refers to the individuals involved, not to their institution or organisation.

EIC Transition to Innovation Activities[19]

FETPROACT-EIC-06-2019

Specific Challenge: to turn promising results from FET-funded projects into genuine technological or societal breakthrough and disruptive innovations. Since the typical researchers' mind-set is to identify further opportunities for research, promising research results that could be the basis for breakthrough and disruptive innovation risk to remain unexploited. The challenge is to create a fertile ground for those results to mature, to a level where exploitation and investment opportunities can start to be discussed, and ultimately towards future market uptake. While recognising that this may still take further research and development, it is crucial to complement research excellence with a focus on entrepreneurial ambition and commitment at an early stage.

Scope: The EIC Transition Activities pilot aims at bringing promising technologies as they are at the end of a typical FET-Open or FET Proactive project (i.e., TRL 2/3) to a level of development, validation and demonstration where they become a credible basis for entrepreneurship, business creation, investment and, ultimately, economic and/or societal returns. The project shall be driven by a partner with the vision, ambition and commitment to bring the technology to actual use (possibly through the creation of a start-up or spin-off).

Proposals must build on results from an ongoing or finished project (Research and Innovation Action), funded as a result of a FET-Open or FET Proactive call under Horizon 2020[20]. The targeted technology should be in one of the following areas:

- Micro- and Nano-technologies;
- Artificial Intelligence and advanced robotics;
- Technologies for the life sciences, health and treatment;
- Low-carbon energy and climate change technologies;
- Interaction technologies (including virtual-, augmented- and mixed reality, …).

The precise link(s) with the relevant FET project(s) is to be explicitly described in the proposal. This topic does not fund research or activities that are/were already foreseen in the original FET project(s).

[19] This topic is part of the European Innovation Council Enhanced Pilot (2019-2020) and funded from budget line 08.020102. In accordance with article 6.5 of Horizon 2020 regulation No 1291/2013, credits from budget line 08.020202 will be transferred to budget line 08.020102.

[20] Any Research and Innovation Action funded as a result of Horizon 2020 call H2020-FETOPEN-2014/2015, call H2020-FETPROACT-2014, call H2020-FETOPEN-2016-2017, call H2020-FETPROACT-2016-2017, call H2020-FETOPEN-2018-2020 or call H2020-FETPROACT-2018-2020

Participants must have essential capabilities to increase the maturity of the targeted technology. Activities proposed should reflect the level of maturity of the result to be taken up. Proposals can include activities with, for instance, partners for technology transfer, licence-takers, investors and other sources of financing, user/client organisations or potential end-users.

Proposals should specify the intended outcome(s) of the project and describe its key performance indicators/success criteria. Proposals must also include an exploitation plan describing the market or societal potential (potential users/customers and benefits for them; targeted European/global markets, etc.), measures to enhance the probability of take-up and a credible development strategy that identifies next steps, possibly using the services and funding/financing opportunities offered in the context of the EIC Accelerator pilot. Particular attention should be paid to IP protection and ownership and to the possibility of commercial exploitation ('freedom to operate').

The Commission considers that proposals for actions up to 24 months and requesting a contribution from the EU of between EUR 1.00 and 2.00 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

- Increased value creation from FET projects and contributing to the competitiveness of European industry/economy by developing further promising technologies and innovation opportunities.
- Fast development, demonstration and economical/societal take-up of promising FET technologies.
- Increased H2020 first time participation of high tech SMEs (including Spin-offs and Start-ups) and industry.
- Leveraging more private investment into research and/or innovation.

Type of action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

FET Proactive: emerging paradigms and communities[21]

FETPROACT-EIC-07-2020

Specific Challenge: To explore and consolidate a new technological direction in order to put it firmly on the map as a viable **paradigm for future technology**. To foster the interdisciplinary communities that are able to drive this forward, extending from the participating consortia to a wider European pool of expertise. To stimulate the emergence of a European innovation eco-system around a new technological paradigm, well beyond the world of research alone.

Scope: proposals are sought for cutting-edge **high-risk / high-reward research and innovation projects** that aim to demonstrate a new technological paradigm within the scope of one of the following sub-topics:

a. Future technologies for social experience. This sub-topic explores new technologies for interaction that are based on new kinds of immersion for virtualised or augmented social interaction and that will lay the basis for the social media in 10-20 years from now. Virtual, Augmented and Mixed Reality (XR) will be as ubiquitous as Smart Phones are today. XR will serve as a starting point for new kinds of social media in which some of the participants may not be real people, where time differences are abolished, and where information and experiences will be shared in radically new ways. It is currently not known whether the sociocultural parameters implicit in natural social interaction carry over to virtual or hybrid settings or whether this leads to adaptations, new potential conflicts requiring recalibration of affective signals, cues carrying trust, empathy, conflict resolution. The sub-topic thus addresses the redefinition of the personal and social interaction space in light of increasing virtualisation, space-time displacement, information pressure, ubiquitous intelligence, uncertainty and trust issues (dis- and mis-information, anomaly detection in information sources and content, unwanted information, and similar concepts in the social realm, like opinion dynamics and social believe formation). Technologically this will be driven by a more active role of the interaction environment and an ever tighter coupling of the technologies with sensori/motor- and cognitive processes through advanced and multimodal XR setups, including for instance spatial audio, smart skins, haptics, wearable or other minimally invasive interfaces. Impacts on a 'person's self-perception and behaviour, gender differences, the formation of knowledge and believes, the theory of mind and brain and the ability to act and interact should also be studied, especially in scenarios of extensive and always-on use.

[21] This topic is part of the European Innovation Council (EIC) Enhanced Pilot (Horizon 2020, 2019-2020). This topic and the associated call conditions are included in this work programme section for information. Only the 2020 FET-Proactive topics as included in the work programme section on Future and Emerging Technologies (FET) have legal value.

b. Measuring the unmeasurable — Sub-nanoscale science for Nanometrology. This sub-topic seeks to find and test new approaches for nano- and sub-nano metrology. Proposals should target new techniques, for example, physics-, biochemistry- and chemistry-based methods incorporating nano- and picometre-length scales in the spatial domain with femto- and atto-seconds in the temporal domain. The proposal must address research from a novel measurement concept up to a technique and/or method including prototype measuring devices/setups and procedures, and sound metrological aspects like quantification of uncertainty or traceability. Proposals should seek to approach theoretical limits in challenging domains (physical, chemical, biological) while minimising any potential damage or change to the object being measured. Full three-dimensional characterisation (tomography) or the application of metrological procedures to transient phenomena on a sub-nanosecond time-scale could push the limits in metrology. Research on refining existing techniques is excluded. Proposals will address emerging issues of nano-metrology in spatial and temporal dimensions, including for example morphology, composition, reactivity, energy, dynamics or relevant optical, electronic, chemical and biochemical properties. Challenges in measurement that could be used as test cases are, e.g., understanding and controlling changing morphology impacting chemical properties in nano-photonic devices or battery electrodes; integrating metrology with sub-nanoprinting, nano-engineering or self-characterisation techniques; the measurements of heat transfer across interfaces down to the atomic size level; or the characterisation of the dynamics of molecular interactions in or with biological systems for health or smart materials. The use of advanced modelling, statistical methods, big data and machine learning methods is welcome where appropriate.

c. Digital twins for the life-sciences. The sub-topic aims at the close integration and real-time interaction of dynamical models of biological structures (from biochemical pathways to cells, tissues, organs and individuals), with imaging and sensing technologies for biological mechanisms and processes. It extends concepts and technologies of digital twins beyond their industrial versions, which are typically supporting the life-cycle of engineered products, into the domain of the life sciences. The core challenge is to derive and update the digital twin using information from the imaging, sensing and monitoring of its biological counterpart, taking the achievements of systems biology, metabolomics and systems medicine into account. This can be done in vivo at whole-body (e.g., using wearable and implantable sensors) or organ level or in vitro – e.g., for interacting cells and organoids, 3D cell co-cultures, organ/body-on-chip). Beyond the development of static and structural models, a further challenge is to include dynamics at multiple temporal scales (e.g. for deriving adaptive, predictive values), through new principles of imaging and sensing that take the time-dimension into account. Biological dynamics can be observed in the unmanipulated state or under manipulation by chemical, biological, physical agents such as pharmaceuticals, viruses, acoustic waves, electromagnetic fields, light, forces, or altered temperature. This will offer unprecedented insights into the molecular and cellular dynamics underlying human disorders such as metabolic, cardiovascular, neurological, oncological or rare pathologies, where personalised precision medicines and advanced diagnostic and

therapeutic approaches but also prevention measures (lifestyle, nutrition, environmental factors) are needed to make healthcare more effective, more convenient, cheaper and uniquely tailored to each patient. Work on ethical implications should be included.

FET Proactive projects should establish a solid baseline of knowledge and skills and assemble the interdisciplinary communities around them, including from the social sciences and humanities. They should further foster the emergence of a broader innovation ecosystem and create a fertile ground for co-design of the new technological paradigm and its future take-up (e.g., wider stakeholder/public engagement, informal education, policy debate), in line with the discussion on Responsible Research and Innovation (RRI) in the introduction to this FET work programme.

The Commission considers that proposals requesting a contribution from the EU of EUR 4 to 5 million and with a duration of up to 4 years would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts or project duration.

This topic allows for the provision of financial support to third parties established in an EU member state or country associated with Horizon 2020 in line with the conditions set out in General Annex K, either to enhance impacts through punctual small scale experimentation and use of project results by third parties, or to award a prize following a contest organised by the beneficiaries.

Expected Impact:

- Scientific and technological contributions to the foundation and consolidation of a radically new future technology.
- Potential for future returns in terms of societal or economic innovation or market creation.
- Spreading excellence and building leading innovation capacity across Europe by involvement of key actors that can make a difference in the future, for example excellent young, researchers, ambitious high-tech SMEs or first-time participants to FET under Horizon 2020.[22]
- Build-up of a goal oriented interdisciplinary community (within and beyond the consortium).
- Emergence of an innovation ecosystem around a future technology in the theme addressed from outreach to and partnership with high potential actors in research and innovation, and from wider stakeholder/public engagement, with due consideration of

[22] First time participation here refers to the individuals involved, not to their institution or organisation.

aspects such as education, gender differences and long-term societal, ethical and legal implications.

Type of Action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

FET Proactive: Environmental Intelligence[23]

FETPROACT-EIC-08-2020

Specific Challenge: new synergies between the distant communities of environmental modelling, advanced sensor research, social sciences, and artificial intelligence can lead to radically new approaches to creating and using dynamic models of the environment, including predictive modelling and scenario testing and tracking. The ultimate vision is to use the fusion and analysis of this rich, dynamic data coming from a variety of sensing modalities and their characteristic locations to build a deeper understanding of the socio-environmental inter-relationships, for example, by testing and validating complex theoretical models.

Scope: Proposals are expected to have their main focus in only one of the following sub-topics:

a. new techniques for creating and using dynamic models of environmental evolution that combine, analyse and interpret data provided by in-situ sensing technologies with satellite remote sensing/earth observation and other environmental data sources, including human behaviour and gender differences, and economics and social sciences. The focus is on a better understanding of the interplay dynamics of natural and societal systems, for example on how policies and economics modelling predict human behaviours' impact on the environment, how social norms interact with the environment evolution and exploitation, or how the decisions based on changes in the environment in turn affect the state of the natural environment and vice-versa.

b. radically novel approaches to resilient, reliable and environmentally responsible in-situ monitoring. In-situ sensing technologies (physical, chemical, biological, behavioural) for environmental monitoring, in particular favouring sensors for parameters and environments that are currently under-sampled but at the same time critical for improving predictive models for understanding environmental processes. Proposals should look for ground-breaking concepts of affordable sensor deployment, spanning maintenance, communication and retrieval, possibly based on concepts like self-deployment, self-awareness, self-repair and controlled decomposition; or using new concepts from micro-robots to optimise sensing or increase monitoring frequency. Advanced research on the networking aspects is not addressing the topic.

Projects are to focus on one or a few critical resources (e.g., water, air) and to establish fundamental advances on the most critical challenges that will underpin a step improvement

[23] This topic is part of the European Innovation Council (EIC) Enhanced Pilot (Horizon 2020, 2019-2020). This topic and the associated call conditions are included in this work programme section for information only. Only the 2020 FET-Proactive topics as included in the work programme section on Future and Emerging Technologies (FET) have legal value.

in monitoring, analysis and management of important social/environmental processes for improving quality of life and environmental sustainability (possibly including aspects of waste, noise, …). Citizen involvement, for example for prioritizing resource challenges, data collection, raising awareness towards environmental issues or better understanding of behavioural change in relation to environmental sustainability, is encouraged, in line with the discussion on Responsible Research and Innovation (RRI) in the introduction to this FET work programme. The collected and simulated data should adhere to the FAIR data principle and be compliant with European Standards.

Selected projects under this topic will be expected to collaborate, jointly aiming at delivering a blueprint for a full-fledged system for environmental intelligence.

The Commission considers that proposals requesting a contribution from the EU of up to EUR 4 million and with a duration of up to 4 years would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts or project duration.

Expected Impact:

- Enabling new approaches to monitoring, analysis and management of critical resources in Europe;
- Availability of reliable data and models at multiple levels of granularity for environmental policy making;
- Reduced environmental footprint for environmental ICT;
- Increased local and citizen awareness of environmental impacts.

Type of Action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Conditions for the Call

EIC Pathfinder pilot (FET-Proactive)

Boosting emerging technologies

Opening date(s), deadline(s), indicative budget(s)[24]

Topics under the Enhanced European Innovation Council pilot (2019-2020) (Type of action)	Budgets (EUR million)			Deadline
	2018	2019	2020	***All deadlines are at 17.00.00 Brussels local time***
Opening: 19 Mar 2019				
FETPROACT-EIC-05-2019 (RIA)		87.40		**8 Oct 2019**
FETPROACT-EIC-06-2019 (RIA)		26.00		
Opening: 19 Nov 2019				
FETPROACT-EIC-07-2020 (RIA)[25]			50.00	**22 Apr 2020**
FETPROACT-EIC-08-2020 (RIA) [26]			18.00	
		113.40	68.00	

From the budget for FETPROACT-EIC-05-2019, at least EUR 35.40 million and up to EUR 52.40 million will be allocated to sub-topic 'c. Breakthrough zero-emissions energy generation for full decarbonisation'.

From the budget for FETPROACT-EIC-06-2019, at least EUR 10.00 million and up to EUR 13.00 million will be allocated to area 'Low-carbon energy and climate change technologies'.

[24] The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening. The Director-General responsible may delay the deadline(s) by up to two months.
All deadlines are at 17.00.00 Brussels local time.
The budget amounts for the 2020 budget are subject to the availability of the appropriations provided for in the draft budget for 2020 after the adoption of the budget 2020 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

[25] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.

[26] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.

Indicative timetable for evaluation and grant agreement signature

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 5 months from the final date for submission; and
- Indicative date for the signing of grant agreements: Maximum 8 months from the final date for submission.

Eligibility and admissibility conditions

The conditions are described in General Annexes B and C of the work programme. The following exceptions apply:

FETPROACT-EIC-06-2019	Proposals must build on results from an ongoing or finished project, funded as a result of call in any FET topic under Horizon 2020 and clearly identified in the proposal. Proposals must include a declaration by the coordinator of the necessary rights and ownership of results to be exploited, as described in the proposal. Applicants that are not the owner of the result to be further developed in the proposal must provide a letter from the relevant beneficiary or beneficiaries of the previous FET project that own(s) the result that confirms the existence of the necessary agreements with the coordinator of the current proposal, including on IPR.

Evaluation criteria, scoring and threshold

The criteria, scoring and threshold are described in General Annex H of the work programme. The following exceptions apply:

FETPROACT-EIC-05-2019, FETPROACT-EIC-07-2020[27], FETPROACT-EIC-08-2020[28]	**Excellence** The following aspects are taken into account: • Clarity of long-term vision of a science-enabled technology. • Concreteness and ambition of the proposed science-to-technology breakthrough.

[27] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.
[28] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.

	• Range and added value from interdisciplinarity, novelty and non-incrementality of the research proposed. • High-risk of the research proposed and plausibility and flexibility of the approach. **Threshold: 4/5, Weight: 60%** **Impact** • The extent to which the outputs of the project would contribute to the expected impacts mentioned in the work programme under the relevant FET topic. • Effectiveness of measures and plans to disseminate and use the results (including management of IPR) and to communicate the project to different target audiences. **Threshold: 3.5/5, Weight: 20%** **Quality and efficiency of the implementation** The following aspects are taken into account: • Coherence and effectiveness of the work plan to achieve project objectives and impacts, including adequate allocation of resources to tasks and partners. • Appropriateness of the research and innovation management structures and procedures. • Role and complementarity of the participants and extent to which the consortium as a whole brings together the necessary expertise. **Threshold: 3/5, Weight: 20%**
FETPROACT-EIC-06-2019	**Excellence** The following aspects are taken into account: • Clarity, quality and level of ambition of the innovation idea and its link with the vision and results of the previous or ongoing FET project, as indicated in the proposal. • Concreteness of the research and innovation objectives and intended outcomes, and their pertinence for moving results of the previous FET research to a level of development,

	validation and demonstration where they become a credible basis for entrepreneurship, business creation, investment and, ultimately, economic and/or societal returns. • Suitability and necessity of the proposed research and innovation activities to reach the stated objectives, including their complementarity to actions already foreseen or expected from the previous or ongoing FET project. **Threshold: 4/5, Weight: 40%** **Impact** Contributions to the impacts listed under this topic in the work programme: • Added innovation potential with respect to the FET project from which this innovation originates. • Extent of economic and/or societal benefits resulting from this innovation; clarity, concreteness and credibility of the proposed exploitation strategy and next steps. • Suitability of innovation measures to enhance the probability of success, including through engagement with prospective exploitation partners, other stakeholders, users or society. **Threshold: 4/5, Weight: 40%** **Quality and efficiency of the implementation** The following aspects are taken into account: • Quality of work plan and management (including IP protection, ownership and freedom to operate). • Ambition and commitment from at least one partner driving the technology to actual use. • Relevance of expertise in the consortium to reach the research and innovation objectives. • Appropriate allocation of resources (person-months). **Threshold: 3/5, Weight: 20%**

Evaluation Procedure

The procedure for setting a priority order for proposals with the same score is given in General Annex H of the work programme. The following exceptions apply:

FETPROACT-EIC-05-2019, FETPROACT-EIC-06-2019; FETPROACT-EIC-07-2020[29], FETPROACT-EIC-08-2020[30]	Grants will be awarded to proposals according to the ranking list. At least each of the two highest-ranked proposals for each sub-topic or area will be funded provided that it attains all thresholds. Then, respecting the ranking, the third ranked proposals (if any) from each sub-topic or area is awarded within available funding budget. Finally, any remaining funding budget is allocated according to the ranking list, respecting where applicable the minimal and maximal budget allocation per sub-topic or area.
FETPROACT-EIC-05-2019, FETPROACT-EIC-07-2020[31], FETPROACT-EIC-08-2020[32]	The following specific page limits apply. Sections 1 to 3 of the part B of the proposal should consist of a maximum of 30 A4 pages. The limits will be clearly shown in the 'proposal templates' in the Funding & Tenders Portal electronic submission system. Sections which are not subject to limits will be indicated.
FETPROACT-EIC-06-2019	The following specific page limits apply. Sections 1 to 3 of the part B of the proposal should consist of a maximum of 70 A4 pages. The limits will be clearly shown in the 'proposal templates' in the Funding & Tenders Portal electronic submission system. Sections which are not subject to limits will be indicated.

The full evaluation procedure is described in the relevant guide published on the Funding & Tenders Portal.

Grant Conditions

FETPROACT-EIC-05-2019, FETPROACT-EIC-07-2020[33]	For grants awarded under this topic, beneficiaries may provide support to third parties established in an EU member state or country associated with Horizon 2020 and as described in General Annex K of the Work Programme either in form of grants or prizes

[29] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.
[30] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.
[31] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.
[32] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.
[33] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.

	and within the limitations as described in the call text of this topic. The respective options of Article 15 of the Model Grant Agreement will be applied.
FETPROACT-EIC-05-2019	For grants awarded under sub-topic a of this topic for Research and Innovation Actions the Commission or Agency may object to a transfer of ownership or the exclusive or non-exclusive licensing of results to a third party established in a third country not associated to Horizon 2020. The respective option of Article 30.3 of the Model Grant Agreement will be applied.
FETPROACT-EIC-06-2019	For grants awarded under this topic for Research and Innovation Actions the Commission or Agency may object to a transfer of ownership or the exclusive or non-exclusive licensing of results to a third party established in a third country not associated to Horizon 2020. The respective option of Article 30.3 of the Model Grant Agreement will be applied.

Consortium agreement

FETPROACT-EIC-05-2019, FETPROACT-EIC-06-2019, FETPROACT-EIC-07-2020[34], FETPROACT-EIC-08-2020[35]	Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.

[34] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.
[35] Any call conditions for this topic are included in this work programme section for information. Only the call conditions in the work programme section on Future and Emerging Technologies (FET) have legal value.

EIC Accelerator pilot (SME Instrument)

H2020-EIC-SMEInst-2018-2020

Who should apply to the EIC Accelerator pilot (SME Instrument)?

Are you an innovative, high-flying small or medium-sized business with European and global ambitions?

Have you got an idea for an innovation that targets new markets and could boost the growth of your company?

Are you looking for substantial funding to support you in the last stages of development?

And could you make use of business development resources and coaching to take your company forward? Then the EIC Accelerator pilot (SME Instrument) is for you.

The EIC Accelerator pilot (SME Instrument) supports high-risk, high-potential small and medium-sized enterprises to develop and bring to market new products, services and business models that could drive economic growth.

The EIC Accelerator pilot (SME Instrument) is for innovators with ground-breaking concepts that could shape new markets or disrupt existing ones in Europe and worldwide.

Competition for support under the EIC Accelerator pilot (SME Instrument) is tough.

The EIC Accelerator pilot (SME Instrument) is very selective.

Following the cut-off date of 5 June 2019, only ground-breaking concepts at the last stage before scale-up can be funded.

The highest risk, most convincing and excellent proposals can be funded after a thorough evaluation by multinational panels of technology, business and finance experts.

Selected companies receive business coaching to further develop their innovation idea, and can also receive mentoring. They are helped in networking with other EIC Accelerator pilot (SME Instrument) clients, with other companies of all sizes, and with potential co-investors and follow-up investors across Europe. As an SME Instrument client, you will gain visibility and boost your chances of success in European and international markets.

Europe needs more radical, market-creating innovations to improve productivity and international competitiveness and generate new jobs and higher standards of living.

These innovations must meet user and customer needs and tackle societal, technological and business challenges in a sustainable way.

Have you got what it takes? Then apply now!

Principles and funding of the EIC Accelerator pilot (SME Instrument)

Who can apply?

For-profit SMEs, including young companies and start-ups, from any sector. You must be established in an EU Member State or a Horizon 2020 associated country.

Following the cut-off date of 5 June 2019, only **individual**[36] for-profit SMEs established in an EU Members State or a Horizon 2020 associated country.

What topics are covered?

There are no set topics. Negative impacts on climate and the environment should be avoided.

How does it work?

The EIC Accelerator pilot (SME Instrument) provides full-cycle business innovation support. In Phase 2 support is provided in the form of grant only or, following the cut-off date of 5 June 2019, blended finance (combining grant and equity). The EIC Accelerator pilot (SME Instrument) also includes coaching and mentoring.

➔ *Feasibility study: Phase 1*

Phase 1 helps you get a grip on the R&D, technical feasibility and commercial potential of a ground-breaking, innovative idea and develop it into a credible business plan.

Activities can include, for example, risk assessment, market research, user involvement, analysis of regulatory constraints or standards regimes, intellectual property management, partner search, or feasibility assessment.

Your goal in Phase 1 is to formulate a solid, high-potential innovation project with a European or global growth-oriented strategy

Your proposal must be based on an initial business plan and outline the specifications of a more elaborate one, which will be the outcome of the project.

Phase 1 funding is a lump sum of €50 000[37]. Projects should last around 6 months.

Please note Phase 1 will be discontinued[38]. The final deadline for applications will be 5 September 2019.

[36] The EIC Accelerator pilot is a mono-beneficiary scheme. This approach has been taken so to pave the way towards a fully-fledged EIC Accelerator under Horizon Europe (where it is proposed to target individual entrepreneurs).

[37] Commission Decision C(2013)8198 authorising the reimbursement of cost under the form of a lump sum for SME Instrument Phase 1 actions under Framework Programme Horizon 2020 states that the total eligible cost for a Phase 1 project is €71 249. Applying the co-financing rate of 70%, the amount of the grant is established at €50 000.

[38] The phase 1 of the SME Instrument was conceived to allow for funding and business support under the phase 2 and phase 3 of the SME Instrument respectively. Phase 1 projects last around six months. Phase 2 is very competitive (around 5% of success rate) and normally takes 12 to 24 months for project completion. Phase 1 proposals funded from mid-2019 on, would have limited opportunities to exploit the next phases of the SME Instrument.

➔ *From concept to market: Phase 2*

Phase 2 helps you develop your business concept further into a market-ready product, service or process aligned with your company's growth strategy. Activities could, for example, include product/service development, trials, prototyping, validation, demonstration and testing in real-world conditions, and market replication. If the activity concerns a primarily technological innovation, a Technology Readiness Level (TRL) of 6 or above is required for primarily technological innovation or the equivalent for non-technological innovation. You can subcontract work essential for your innovation project.

Phase 2 offers a grant only support to SMEs in need of one last push before the scaling-up phase; and it will offer blended finance (combining grant and equity)[39] to SMEs looking to further develop their idea.

Beneficiaries of the EIC Accelerator pilot (SME instrument) have access to Business Acceleration Services as described below.

You can apply to Phase 1 as a means of preparing for Phase 2, or you can apply directly to Phase 2.

Your proposal must be based on a strategic business plan that was either developed in Phase 1 or by another means. Your proposal must specify the expected outcome of the project and criteria for success, as well as the expected impacts on your company in both qualitative and quantitative terms (e.g. on turnover, employment, market size, IP management, sales, return on investment, profitability, and particularly the level of risk/ de-risking factor associated with support under the EIC Accelerator pilot).

You must pay particular attention to IP protection and ownership, and present convincing evidence or measures to ensure the possibility of commercial exploitation (often known as 'freedom to operate'). You should also address regulatory and standardisation issues.

Grant only funding is provided (funding rate 70%) of between €0.5 million and €2.5 million.

Under **the blended finance option**, the grant component is limited to €2.5 million combined with an equity component of up to €15 million. You can request a higher or lower amount, duly justified, when applying.

Proposals with activities up to TRL 8 will be funded by grants or a blended finance option. Close to market activities (i.e. TRL 9 or above) included in a proposal, will only be financed by equity participation as long as the proposal remains non-bankable.

Your project should normally take 12 to 24 months to complete, but could be longer in exceptional and well-justified cases.

[39] Applicants may apply for the blended finance option following the cut-off date of 5 June 2019 for Phase 2.

➔ *Business Acceleration Services*

The Business Acceleration Services (SME Instrument Phase 3) help you take advantage of additional EU support extended via a range of business support services offered on the EIC Community Platform, open to researchers and innovators benefiting from the different EIC calls for proposals.[40] This support can take the form of coaching, training, links to investors, partnering and networking with other EIC beneficiaries. The Business Acceleration Services provide specific support to EIC clients that are SMEs, mainly to help them access new markets or customers and link with investors. It does not provide direct funding.

All Business Acceleration Services are accessible through a single, dedicated entry point, which serves as an information portal and networking space. *[See 'EIC Support Actions']*

Coaching

If you are benefiting from funding from the EIC Pathfinder pilot, the EIC Accelerator pilot or FTI, you will receive business coaching to help your business scale up and grow. Up to 12 coaching days are available.[41]

Coaching covers business development, organisational development, cooperation, and financing.

Up to 3 coaching-days, per funded project, are available in Phase 1 of the EIC Accelerator pilot. Under the EIC Pathfinder pilot, the Accelerator or FTI up to 12 coaching-days, per funded project, are available.

The impact driven coaching service, supported by the European Commission, is facilitated by the Enterprise Europe Network (EEN). Coaching is delivered by one or more qualified, experienced business coaches recruited from a database managed by the European Commission. All coaches meet stringent criteria regarding business experience and coaching skills. Throughout your project, the EEN will complement the coaching support. EEN offers a service package covering an assessment of your firm's innovation management capacities and the identification of a suitable coach or consulting package to address the gaps, EEN also provides access to its innovation and internationalisation services.

Mentoring

If you are benefiting from funding from the EIC Pathfinder pilot, the EIC Accelerator pilot or FTI, we will offer mentoring to individual founders, CEOs and leaders.

Mentoring aims to develop leadership skills such as resilience, tenacity and strategic insight.

The mentoring scheme will involve one-to-one meetings with an experienced

[40] The provision of Business Acceleration Services, under conditions to be agreed, will also be tested for (a maximum of 2) EIT KICs under the EIC Pathfinder pilot and under the Accelerator.

[41] Coaching services are only available to SMEs, including natural persons, or for the purpose of setting-up such a company.

entrepreneur, who will share expertise and provide impartial guidance and support.

Mentors will be CEOs of firms that have moved beyond the start-up stage. To begin with, mentors will be drawn from a pool of SME Instrument Phase 2 current and former clients willing to act as mentors on a *pro bono* basis.

Mentors and mentees will be matched up via the EIC Community Platform and during EIC Events and other suitable events.

Conditions for the call EIC Accelerator pilot

(SME Instrument)

Type of funding: SME instrument Phase 1/ Phase 2

Opening dates, deadlines, indicative budgets

Opening date: 7 November 2017	**Deadline of cut-off** ***All deadlines are at 17.00.00 Brussels local time***
phase 1	**08 February 2018** **03 May 2018** **05 September 2018** **07 November 2018** **----------** **13 February 2019** **07 May 2019** **05 September 2019 – Final deadline**
phase 2	**10 January 2018** **14 March 2018** **23 May 2018** **10 October 2018** **Grant only:** **09 January 2019** **03 April 2019** **05 June 2019** **Grant only and blended finance[42]:** **09 October 2019** **----------** **08 January 2020** **18 March 2020** **19 May 2020** **07 October 2020**
The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening. The Director-General responsible may delay the deadline(s) by up to two months.	

[42] Applicants may apply for the blended finance option following the cut-off date of 5 June 2019 for Phase 2. First cut-off date for such proposals is 9 October 2019.

Budget of the EIC Accelerator pilot (SME Instrument)[43]	€ million		
	2018	**2019**	**2020**
Overall indicative budget[*/**]	479.74	689.26	654
Phase 1 *divided equally between cut-off dates in each year*	10%	6%	-
Phase 2 Grants *divided equally between cut-off dates in each year*	87%	85.6%	89%
Phase 2 Equity support	-	5.4%	8%
Phase 3	1%	1%	1%
Coaching and mentoring[***]	1%	1%	1%
Evaluation[44]	1%	1%	1%

**** of which an aggregated EUR 100 million from the 'Access to Risk Finance' WP part in 2019 and 2020.***

***** of which at least an aggregated EUR 100 million for equity support under the Accelerator in 2019 and 2020.***

****** will be provided under EIC Pathfinder pilot, EIC Accelerator pilot and FTI.***

Who can benefit from EIC Accelerator pilot (SME Instrument) funding?

A proposal will be considered **eligible** if:

- Its content corresponds, wholly or in part, to the description of the EIC Accelerator pilot (SME Instrument) call[45].
- The single beneficiary, or every beneficiary of a consortium[46], is a for-profit SME located in an EU Member State or a Horizon 2020 associated country.
- There is no concurrent submission or implementation with another EIC Accelerator pilot (SME Instrument) Phase 1 or Phase 2 project (before and after the introduction of the EIC Accelerator pilot).
- If an applicant is involved in two proposals that were formally submitted but not yet reviewed under phase 1 and/or 2, only the proposal that was submitted first will be considered eligible.

[43] The budget amounts for the 2020 budget are subject to the availability of the appropriations provided for in the draft budget for 2020 after the adoption of the budget 2020 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

[44] In order to ensure equal opportunities to all applicants to present their proposal during step 2 of the evaluation of the SME instrument phase 2, the applicants invited to interview will receive a contribution to travel, accommodation and subsistence expenses. An amount of € 2 million financed out of this budget will be used for this purpose.

[45] As from the cut-off date of 5 June 2019, activities of a TRL (or its equivalent for non-technological innovation) above 8 can only be financed by blended finance option. Grant component will only apply to the activities with a TRL (or its equivalent for non-technological innovation) of 6 to 8.

[46] Not applicable after the 5 June 2019 cut-off for Phase 2.

What are the requirements for an EIC Accelerator pilot (SME Instrument) proposal to be admissible?

A proposal will be considered **admissible** if the following conditions are met:

- ☐ it was submitted in the electronic submission system before the final cut-off deadline;
- ☐ it is readable, accessible and printable;
- ☐ it is complete and includes the requested administrative data, the proposal description (including detailed information about the TRL level (or equivalent for non-technological innovation) for Phase 2), and the obligatory supporting documents specified below;
- ☐ for a Phase 2 proposal, it includes a mandatory first commercialisation plan.

How long can my EIC Accelerator pilot (SME Instrument) proposal be?

In **Phase 1**, the maximum length of a proposal (proposal description, sections 1 to 3) is **10 pages**.

In **Phase 2**, the maximum length of a proposal (proposal description, sections 1 to 3) is **30 pages**.

The page limits, the sections subject to the limits and the formatting applicable are shown in the 'proposal templates' in the Funding & Tender Portal electronic submission system.

If your proposal exceeds the page limits, you will receive an automatic warning and be advised to resubmit a version that conforms to the limits.

After the cut-off deadline, excess pages will automatically be made invisible, and will not be taken into consideration by the experts evaluating your proposal.

Evaluation rules for the EIC Accelerator pilot (SME Instrument)

Selection criteria

- ***Financial capacity:*** Applicants for mono-beneficiary grants (single SME applicants) are not subject to an automatic financial viability check.

  Coordinators of consortia[47] of several SMEs will be invited, at proposal stage, to complete a self-assessment using an online tool.

- ***Operational capacity***: During the evaluation of the award criterion 'Quality and efficiency of implementation', experts will judge whether each individual participant has, or will have in due time, sufficient operational capacity to successfully carry out their tasks in the proposed work-plan. This assessment will be based on the competence and experience of the applicant, including their operational resources (human, technical, other) and, if applicable and on an exceptional basis, the measures proposed to secure these resources by the time of the implementation of the tasks.

[47] Not applicable after 5 June 2019 for Phase 2.

The operational capacity of each applicant is determined on the basis of the following supporting documents, which are required when submitting a proposal:

- ☐ A CV or description of the profile of the persons who will be primarily responsible for carrying out the proposed activities.
- ☐ A brief description of relevant products, services (including widely used datasets or software) or other achievements (which may also include previous projects or activities connected to the subject of the proposal).
- ☐ A description of any significant infrastructure and/or any major items of technical equipment relevant to the proposed work.
- ☐ A description of any third parties that are not represented as project partners but who will nonetheless be contributing towards the work, for example by providing facilities or computing resources.

Award criteria

Phase 1 and Phase 2 – grant only and blended finance[48] [49] - proposals are evaluated by experts on the basis of **three award criteria:** 'impact', 'excellence', and 'quality and efficiency of implementation'. The aspects examined under each criterion are described in the table below.

Impact
50% WEIGHTING – following the cut-off date of 5 June 2019 1/3 WEIGHTING for Phase 2
Convincing specification of the potential to create new markets or create market disruption together with a convincing specification of the **substantial demand** (including willingness to pay) for the innovation. Total **market size** envisaged.
Convincing description of **targeted users or customers** of the innovation, how their needs have been addressed, why the users or customers identified will want to use or buy the product, service or business model, including compared to what is currently available if anything at all.
Phase 1 (only): Good understanding of need for a realistic and relevant analysis of **market conditions**, total potential market size and growth-rate, competitors and competitive offerings, key stakeholders, clear identification of opportunities for market introduction: potential for market creation is particularly sought after. *Phase 2 (only):* Realistic and relevant analysis of **market conditions and growth-rate,** competitors and competitive offerings, key stakeholders, clear identification of opportunities for market introduction, market creation or disruption (e.g. via new value-chains).
Realistic and relevant description of how the innovation has the **potential to scale-up the applicant company (or companies).** This should be underpinned by a convincing business

[48] Applicants may apply for the blended finance option following the cut-off date of 5 June 2019 for Phase 2.
[49] Following the cut-off date of 5 June 2019 for Phase 2, during the electronic proposal submission process, activities of a TRL (or its equivalent for non-technical innovation) above 8 can only be funded by blended finance option.

plan with a clear timeline, and complemented, where possible, by a track-record that includes financial data (*following the cut-off date of 5 June 2019:* including financial needs to ensure the company's success).

The 'potential to scale-up' aspect and associated financial needs are particularly examined in Step 2.

Alignment of proposal with overall strategy of applicant SME (or SMEs) and commitment of the **team** behind them. Demonstration of need for commercial and management experience, including understanding of the financial and organisational requirements for **commercial exploitation** (*Phase 2 only*) as well as key third parties needed.

Phase1 (only): Outline of **initial commercialisation plan** and how this will be developed further (in-house development, licensing strategy, etc.).

Phase 2 (only): Realistic and relevant **strategic plan for commercialisation**, including approximate time-to-market or deployment. Activities to be undertaken after the project.

The 'commercial strategy' aspect is particularly examined in Step 2 of the evaluation of Phase 2 proposals.

European/global dimension of innovation with respect to both commercialisation and assessment of competitors and competitive offerings.

Phase 1 (only): Realistic and relevant description of **knowledge protection** status and strategy**,** need for **'freedom to operate'** (i.e., possibility of commercial exploitation), and current IPR situation or a plan for obtaining this information. Where relevant, description of potential regulatory requirements.

Phase 2 (only): Evidence of or realistic measures to ensure **'freedom to operate'** (i.e., possibility of commercial exploitation), convincing **knowledge-protection strategy**, including current IPR filing status, IPR ownership and licensing issues. **Regulatory and/or standards requirements** addressed.

Taken as whole, to what extent the above elements are **coherent and plausible.**

Excellence

25% WEIGHTING – following the cut-off date of 5 June 2019 1/3 WEIGHTING for Phase 2

High-risk/high-potential innovation idea that has something that nobody else has. It should be **better and/or significantly different** to any alternative. Game-changing ideas or breakthrough innovations are particularly sought after.

Its **high degree of novelty** comes with a high chance of either success or failure.

Realistic description of **current stage of development** (*Phase 2 only:* at least TRL 6, or something analogous for non-technological innovations[50]), and clear outline of **steps planned to take this innovation to market**.

Highly innovative solution that goes beyond the state of the art in comparison with existing or competing solutions, including on the basis of costs, ease of use and other relevant features as well as issues related to climate change or the environment, the gender

[50] Following the cut-off date of 5 June 2019 for Phase 2, proposals with a TRL (or its equivalent for non-technological innovation) above 8 will only be funded by blended finance option. Grant component will only apply to the activities with a TRL (or its equivalent for non-technological innovation) of 6 to 8.

dimension, any other benefits for society, or (*Phase 1 only*) includes plans for obtaining this information.

Very good understanding of both risks and opportunities related to successful market introduction of the innovation from both technical and commercial points of view or (*Phase 1 only*) includes convincing plans for obtaining this information.

Phase 2 only: Documentation on the **technological, practical and economic feasibility of the innovation**.

The 'feasibility' aspect is particularly examined in Step 2 of the evaluation of Phase 2 proposals.

Phase 1 (only): **Objectives for the feasibility study** and the **approach and activities** to be developed are consistent with the expected impact of the project.

Phase 2 (only): **Objectives for the innovation proposal** as well as the **approach and activities** to be developed are **consistent with the expected impact** (i.e. commercialisation or deployment resulting in company growth). Appropriate definition provided of specifications for outcome of project and criteria for success.

Taken as whole, to what extent the above elements are **coherent and plausible.**

Quality and efficiency of implementation

25% WEIGHTING - following the cut-off date of 5 June 2019 1/3 WEIGHTING for Phase 2

Following the cut-off date of 5 June 2019 and for Phase 2 only: Evidence that the applicant company **cannot leverage sufficient investments** from the market and/ or, particularly for applicant companies requesting blended finance support, evidence that the applicant company is **deemed 'non- bankable'** by the market, in view of the activities to be developed.

The 'leveraging of investments' and 'bankability' aspects are particularly examined in Step 2 of the evaluation of Phase 2 proposals.

Technical/business experience of the team, including management capacity to lead a growing team

Only Phase 1: If relevant, the proposal includes a plan to acquire missing competences.

Only Phase 2: If relevant, the proposal includes a plan to acquire missing competences, namely through partnerships and/or subcontracting*****, and explains why and how they are selected (*subcontractors must be selected using 'best value-for-money' principles*).

The 'team' aspect is particularly examined in Step 2 of the evaluation of Phase 2 proposals.

Availability of resources required (personnel, facilities, networks, etc.) to develop project activities in the most suitable conditions.

Where relevant, complementarity of partners in a consortium.

Only Phase 2:

Where relevant, realistic description of how key stakeholders / partners / subcontractors could be involved***** (*subcontractors must be selected using 'best value-for-money' principles*).

Where relevant, the estimated budget and the procedure planned for selecting the

subcontractors are appropriate*.
Realistic timeframe and comprehensive description of implementation (work-packages, major deliverables and milestones, risk management) taking the company's or applicant's innovation ambitions and objectives into account.
**Subcontracting is acceptable to the extent required for the implementation of the proposed activities. Subcontracting may be an essential part of the implementation of the project, but should not be a disproportionate part of the total estimated eligible costs. Subcontractors must be selected using 'best value-for-money' principles.*
Taken as whole, to what extent the above elements are **coherent and plausible.**

Evaluation procedure

After each Phase 1 cut-off

- Proposals are evaluated in one step.
- A proposal is evaluated remotely by a number of evaluators with a mixture of technology, industry sector, business and finance expertise.
- Each evaluator scores each of the three award criteria from 0 to 5. Scores with a resolution of one decimal place may be given.
- The quality threshold of each criterion is 4 out of 5. The overall quality threshold, applying to the weighted sum of the three individual scores, is 13 out of 15.
- The consensus score at the level of the three evaluation criteria is the median of the scores given by each evaluator. The overall consensus score is the weighted sum of these separate scores. Proposals that have passed all thresholds are ranked in the order of their final score.
- If necessary, a panel review is organised remotely.

After each Phase 2 cut-off for both, grant only or blended finance applications[51]

- Applicants are required to provide detailed information about the TRL level (or its equivalent for non-technological innovations). In that context, applicants should be aware that activities above TRL 8 can only be funded as equity through blended finance option[52].
- The process of evaluation can recommend three outcomes: 'Go' decision, 'No Go' decision or 'change into blended finance' decision. Applicants that apply for grant only option will have the opportunity at the time of submission to give the European Commission consent to provide the requested amount of funding in the form of blended finance, should the evaluation conclude there are activities above TRL 8.[53]

[51] Following the cut-off date of 5 June 2019 for Phase 2, during the electronic proposal submission process, applicants will choose to apply for grant only or for blended finance (combined grant and equity). .
[52] As from 5 June 2019 (for Phase 2) the grant component will only apply to the activities with a TRL (or its equivalent for non-technological innovation) of 6 to 8.
[53] The criteria for providing funding as blended finance for activities above TRL8 will be specified in the guide for applicants.

- Only the proposals with activities above TRL 8 will be subject to such possibility. The blended finance could replace the initial grant requested at the time of submission. Applicants that do not express such consent will not be considered for a blended finance and will be rejected.
- For blended finance proposals, the evaluation for the grant component will follow the same steps described below as evaluation of proposals for grant only
- In the case of proposals with 'Go' decision for grant only, Commission will initiate the grant agreement preparation process with SMEs.
- In the case of proposals for blended finance (with 'Go' decision or 'change into blended finance' decision) Commission will initiate the grant agreement preparation process with SMEs for the grant component. The grant agreement will be then signed between the Commission and the company. These companies will be referred to the SPV team for a due diligence process for the equity component. The SPV will check whether the company is fit for receiving this equity component.[54]
- If the result of the due diligence is negative, equity component will not be funded and the grant agreement may be terminated. If the due diligence is positive, the equity contract will be signed between the SPV and the company.
- In the case of applicants to whom the Commission proposed funding as blended finance, the grant amount initially requested for the activities of TRL 9 or above will be directly transferred to equity amount. In the case of negative outcome of the due diligence, it will not be funded (neither as grant nor as equity).
- Proposals with 'No Go' decision will be rejected. However proposal rejected on the basis of the bankability assessment but assessed as viable for other types of EU financing will be invited to consider other European Union financial instruments.

Applications are evaluated in two steps.

Step 1: remote evaluation

- A proposal is evaluated remotely by a number of evaluators with a mixture of technology, industry sector, business and finance expertise.
- Each evaluator scores each of the three award criteria from 0 to 5. Scores with a resolution of one decimal place may be given.
- The quality threshold of each criterion is 4 out of 5. The overall quality threshold, applying to the weighted sum of the three individual scores, is 13 out of 15.
- The consensus score of a proposal at the level of the three evaluation criteria is the median of the scores given by each evaluator. The overall consensus score is the weighted sum of these scores.
- Proposals that pass all quality thresholds will be considered for step 2.

[54] After the diligence process European investors will be approached for their possible interest to invest into the company. If an investor is to be found on the market, the equity component of the blended finance will not be implemented as foreseen.

Step 2: face-to-face interview

- Starting with the highest-scoring proposal and in descending, sequential order, proposals are passed to Step 2 until, as a batch, either the total amount of EU funding requested is as close as possible to twice the grant budget available, or all proposals eligible for funding have been accounted for. The actual threshold to pass to Step 2 will therefore be dynamic and depend on the volume of proposals received that pass all quality thresholds.

- Each applicant whose proposal has passed to Step 2 is invited to a face-to-face interview in Brussels. In exceptional cases, interviews may be organised via video-conference.
- Only staff of applicants can represent them. Representation by third parties is forbidden.
- The interview is conducted by evaluators with a mixture of technology, industry sector, business and finance expertise.
- During the interview, the applicant will be asked questions designed to clarify aspects of the proposal evaluated in Step 1, in particular those indicated above under 'award criteria'.
- In Step 2, proposals will receive, in addition to the score in Step 1, an 'A' mark or a 'B' mark from the final panel review.
- Only proposals that have passed all quality thresholds and receive an 'A' mark are proposed for funding, including blended finance when applicable.

For both Phase 1 and Phase 2

- During the electronic proposal submission process, you can provide up to three names of persons that should not act as an evaluator of your proposal, for commercial or other reasons. The persons identified may be excluded from the evaluation of the proposal, as long as it remains possible to have the proposal evaluated.
- To set a priority order for proposals given the same consensus score in Phase 1, the following method is used:
  - Proposals are first prioritised according to scores given for the award criterion 'impact'.
  - Where those scores are equal, priority is then determined using scores for the award criterion 'excellence'.
  - If necessary, a further prioritisation is based on the degree of gender balance among the personnel named in the proposal as primarily responsible for carrying out the project.

Communication to applicants after evaluation procedure

Phase 1

For each proposal, applicants receive an **evaluation summary report** with the scores obtained and a qualitative assessment with respect to each of the aspects considered under each of the three award criteria.

Phase 2

Each applicant invited to an interview in Step 2 receives an invitation at the end of Step 1.

For each proposal, applicants receive an **evaluation summary report** with the scores obtained and a qualitative assessment with respect to each of the aspects considered under each of the three award criteria (Step 1 of the evaluation). For proposals that have passed to Step 2, the report will contain an A or B mark and an additional qualitative assessment including a possible recommendation on resubmission. Successful applicants will be informed.

Phase 1 and Phase 2 applicants meeting all quality thresholds but not receiving funding will receive a Seal of Excellence.

Consortium agreement

Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.[55]

Indicative timetable for evaluation and grant agreement signature[56]

- Information about the outcome of the evaluation: Maximum 2 months after the corresponding cut-off date set out above for phase 1 and maximum 4 months after the corresponding cut-off date set out above for phase 2.
- Indicative date for the signing of grant agreements: Maximum 3 months from the final date for submission in phase 1 and maximum 6 months from the final date for submission in phase 2.

[55] Not applicable after the 5 June 2019 cut-off for Phase 2.
[56] Due to the launch of the new enhanced EIC pilot the first applications under the EIC Accelerator pilot may experience processing delays. For these cases, Horizon 2020 TTI and TTG timeframes shall be observed.

OTHER CALLS

Fast Track to Innovation (FTI)

H2020-EIC-FTI-2018-2020

Who should apply to FTI, the Fast Track to Innovation?

Are you looking for partners that can help you with a fast go-to-market of an industry-driven, innovative concept that has strong potential to make your company grow and scale-up?

Do you see co-creation or open innovation as ways to advance your innovation cycle and enter the market within three years?

Are you looking for substantial funding to test, demonstrate and validate your innovation with users before full commercial roll-out, potentially via a spin-off company or a joint venture?

Then FTI is the scheme for you.

Innovation is fostered when new ideas can emerge and easily translate into socio-economic value, shaping new markets and laying the foundations of a stronger, high-tech industrial base for Europe.

Working together, partners with complementary backgrounds, knowledge and skills, in both new and established value-chains, can turn ideas into world-beating products, processes and services that tackle societal challenges.

FTI accelerates the market uptake of ground-breaking innovations by providing funding in an open, accessible scheme that nurtures ideas from consortia of innovators of all types and sizes from across Europe.

Participation by industry — defined as private-for-profit organisations — is mandatory; industry is best-placed to ensure the due commercial exploitation of the innovation developed; in addition, company growth and development in order to strengthen Europe's industrial leadership are explicitly pursued with FTI support.

Principles and funding of FTI

FTI supports actions undertaking innovation from the demonstration stage through to market uptake, including activities such as piloting, test-beds, systems validation in real-world working conditions, validation of business models, pre-normative research, and standard-setting.

The maximum EU contribution per action is €3 million (funding rate: 70% for for-profit entities; 100% for not-for-profit entities).

FTI targets relatively mature, ground-breaking new technologies, concepts, processes and business models that need final development to be able to shape a new market and achieve wider deployment.

If your proposal involves technological innovation, your consortium should declare that the technology or the technologies concerned are at least at Technology Readiness Level (TRL) 6. The intention will be to bring the TRL up to 8 for technological innovations and to an analogous level of maturity for non-technological innovations during the lifetime of the FTI action. TRLs are described in General Annex G of the work programme.

FTI actions are encouraged to be interdisciplinary, cutting across different sectors and technologies. Actions supporting innovative concepts that have the potential to disrupt or to create new markets are particularly welcome.

In your proposal, you should:

- ☐ Specify the intended outcome and describe key performance indicators and success criteria.
- ☐ Make reference to and incorporate a business plan clearly describing the market potential, business opportunities for participants, measures to enhance the probability of eventual commercial take-up, and a credible commercialisation strategy that identifies next steps and specifies other actors to be involved.
- ☐ Pay particular attention to IP protection and ownership and to the possibility of commercial exploitation (often known as 'freedom to operate').
- ☐ Specify the expected impact in terms of competitiveness and growth of the business partners in the consortium, measured in terms of turnover and job creation.
- ☐ Clearly describe the expected impact in both qualitative and quantitative terms, with factors such as time sensitivity and international competitiveness considered in the light of the technology field, innovation area and industry sectors concerned.

The time to initial market take-up should be no more than 3 years from the start of your FTI action.

In very well-justified cases linked to the specific characteristics of a particular innovation field or industry sector, the time to initial market take-up could be longer.

Possible impacts on sustainability or climate change, in particular, or on other cross-cutting objectives of Horizon 2020, must be highlighted.

Participation from industry in your consortium is mandatory. Universities and research and technology organisations can also participate. Actors with an important role in commercialisation are encouraged to take part, such as cluster organisations, end-users, industry associations, incubators, investors, and the public sector. Including start-ups with ground-breaking ideas that could create new markets is encouraged.

Conditions for the Call FTI

Type of funding: Innovation Action

Opening date, deadlines, indicative budgets

Opening date: 07 November 2017	**Deadline of cut-offs** ***All deadlines are at 17.00.00 Brussels local time***
FTI	**21 February 2018** **31 May 2018** **23 October 2018** --- **21 February 2019** **23 May 2019** **22 October 2019** --- **19 February 2020** **09 June 2020** **27 October 2020**
The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening. The Director-General responsible may delay the deadline(s) by up to two months.	

Budget of the FTI[57]	€ millions		
	2018	**2019**	**2020**
Overall indicative budget	100.00	100.00	100.00
	divided equally between cut-off dates in each year		

Who can benefit from FTI funding?

The **eligibility conditions** described in General Annex C of the work programme apply, with the following exceptions:

- Participation of three to no more than five different legal entities, independent of each other, in a consortium.
- Allocation of at least 60% of the overall budget to consortium partner(s) from industry; *or* a minimum of 2 industry partners out of a consortium of 3 or 4; *or* a minimum of 3 industry partners out of a consortium of 5.
- Requested EU contribution not more than €3 million.
- All consortium members established in EU Member States or in countries associated to Horizon 2020.

What are the requirements for an FTI proposal to be admissible?

The **admissibility conditions** described in General Annex B of the work programme apply.

How long should an FTI proposal be?

The maximum length of a proposal is **30 pages** (proposal description, sections 1 to 3).

Evaluation rules for the FTI

Award criteria, scoring and threshold

The criteria, scoring and threshold described in General Annex H of the work programme apply, with the following exceptions:

- Evaluation scores are awarded for each criterion. Each criterion is scored from 0 to 5. Scores with a resolution of one decimal place may be awarded.

[57] The budget amounts for the 2020 budget are subject to the availability of the appropriations provided for in the draft budget for 2020 after the adoption of the budget 2020 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

- The threshold for the criteria 'Impact' and 'Excellence' is 4. The threshold for the criterion 'Quality and efficiency of the implementation' is 3. The overall threshold, meaning the sum of the three individual scores, is 13.
- The consensus score of a proposal at the level of the three evaluation criteria is the mean (average) of the separate scores given by each evaluator. The overall consensus score is the weighted sum of these separate scores.
- The consensus report comprises the individual reports or key extracts from them, and will provide a summary of the main weaknesses of your proposal.
- The aspects to be considered for each evaluation criterion are set out below.

Impact
50% WEIGHTING
The objectives of the proposed action are in line with the expected impacts of the FTI, notably **fast development, commercial take-up and/or wide deployment of innovative solutions, time to initial market take-up, leveraging of private investment in research and/or innovation**. In addition, in line with the objectives of the European Innovation Council Pilot, proposals that can create a new market are particularly sought after.
The proposed innovation will lead to **enhanced innovation capacity of the consortium partners, and in particular of the industry partners**.
The proposed innovation/solution has a clear European or global dimension, in the sense that it is set to create **substantial demand from European and global markets and/or can create a new market or disrupt an existing one at European or global level**, which is well documented and supported with evidence on customer/user/market needs that can be translated into sales. The proposal provides a realistic and convincing analysis of the targeted market(s) and client/user base and how the innovation will meet their needs.
The way the project will strengthen the **growth/ scale-up and competitiveness of the industry partners** involved is well documented.
Framework conditions such as **regulation and standards, market size, prospects for growth, competitive edge and intended positioning of the solution towards possible others (competitor analysis)** are documented, and the outlook can be described as positive for market launch within 3 years' of time.
The **commercialisation plan is realistic and convincing** – containing a clear description of the new business opportunity and the way to capitalise on it. The plan includes effective measures to **exploit and disseminate the action's results** (including with respect to IPR management and standards). There is a broader strategy for knowledge management and protection with regards to the proposed innovation/solution, ensuring **"freedom to operate"**. Key stakeholders that can help with market introduction are identified, and a convincing strategy to get them on board exists. Communication, marketing and sales efforts are planned in a coordinated way, on the basis of a realistic timetable, and fit into a solid commercial strategy.
Based on the provided market analysis and the projected commercialisation strategy, the likely **return on investment** of the proposed innovation (for instance in the form of

projected rapid scale-up leading to job creation and/or company growth) is sufficiently attractive to justify EU funding under FTI.
The proposed innovation is expected to generate a positive **impact at the European level other than economic** (societal, environmental, scientific, etc.). Wherever appropriate, the minimisation of impacts on climate and the environment is pursued.
The proposed **financing plan** for further roll-out of the innovation is realistic and convincing and offers a sufficient guarantee and coverage to allow for further scale-up of the action and companies involved.
Excellence
25% WEIGHTING
The **objectives** of the proposal are defined **in a clear and pertinent way**, support Horizon 2020 objectives, and are directed towards fast, wide market uptake.
The proposed activities to be executed will contribute to a **credible, realistic and optimal development of the innovation** to the level of market uptake.
The underlying, jointly developed business innovation concept of the proposed innovation is sound, and has already been tested in an operational/production environment. It has a potential to **bring important progress to or revolutionise an existing industrial sector, business practice and/or societal challenge.**
The proposed innovation is ambitious and is set to **add substantial value to Europe (e.g. considerably contribute to Europe's industrial leadership or the solution of Horizon 2020 societal challenges)**, and this is well identified and elaborated in the proposal. Game-changing ideas or breakthrough innovations are particularly sought after. **A high degree of novelty comes with a high chance of either success or failure.**
The proposed innovation has successfully been tested in an operational or production environment (stage of development at TRL 6 or similar for non-technological innovations) and **can move to market take-up (B2B or B2C) within maximum 36 months.**
The proposal demonstrates that **the intrinsic quality of the innovation will be significantly higher than current state-of-the-art solutions**, in terms of value for money, problems solved, new applications, sustainability, etc.
Quality and efficiency of implementation
25% WEIGHTING
The **work plan is coherent and effective**. It takes into account the project's ambition and objectives, includes a realistic and relevant time-frame, and refers to a sound and comprehensive implementation plan, in particular in relation to major deliverables. Tasks and resources are allocated in an appropriate and cost-effective way.
The proposal demonstrates that the **partners** of the consortium are **complementary**, and **together have what it takes** (personnel, facilities, skills, networks, access to markets…) **to deliver on ground-breaking innovation and fast, wide market uptake**. Implementation risks and threats are well identified; the proposal contains a **risk mitigation plan**, with detailed actions.

Both the **organisational framework/governance structure** underpinning the action and the **decision-making processes** are established in a **clear and efficient** way.

Evaluation procedure

The procedure for setting a priority order for proposals with the same score is given in General Annex H of the work programme. The full evaluation procedure is described in the relevant guide published on the Funding & Tender Portal.

Consortium agreement

Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.

Indicative timetable for evaluation and grant agreement signature

- Information about the outcome of the evaluation: maximum 3 months after the corresponding cut-off date set out above.
- Indicative date for the signing of grant agreements: maximum 6 months from the final date for submission.

EIC Horizon Prizes

EIC Horizon Prizes

Who should apply

EIC Horizon Prizes aim to boost breakthrough innovation across sectors by fostering cutting-edge solutions which bring major benefits to citizens and society.

Are you an innovator, an academic, a start-up, an entrepreneur or a business willing to think out of the box, across sectors and disciplines?

Do you want to use your creativity and expertise to bring breakthrough solutions to the market faster or to develop cutting-edge solutions to address the problem?

Are you ready to engage with other innovators to develop close-to-market solutions which will answer major societal problems?

Have a go!

Principles of EIC Horizon Prizes

EIC Horizon Prizes set an ambitious goal, without saying how that goal should be achieved or who should achieve it. The prize is awarded to whoever can most effectively meet a defined challenge.

EIC Horizon Prizes are particularly ambitious with regards to the societal problems to be addressed.

EIC Horizon Prizes call for breakthrough solutions from innovators, aiming to demonstrate the feasibility or potential of particular technologies and promote uptake.

The objectives of the prize contests are to solve a problem, without prescribing a specific solution to be implemented. The contests are built on simple, clear, comprehensive and objective targets that must be reached to win the contest. They address challenges to be solved by 2021 at the latest (see specific conditions for each contest).

Specific characteristics for each Prize are defined in the individual rules of contest, which lay down conditions for submission and participation, detailed award criteria (scoring and the weighting methodology), and the evaluation process.

Prizes are awarded to whoever can most effectively meet the defined challenge as set out in the rules of contest. The amount of the prize is not linked to the costs of the activities incurred by the winner; the principles of eligible costs, co-financing, non-retroactive award and no-profit do not apply.

For more information, please see the Horizon 2020 Model of Rules of Contest for Prizes.

1. EIC Horizon Prize for 'Innovative Batteries for eVehicles'

Challenge

The challenge is to develop a safe and sustainable battery for electric-vehicles through the development of new materials and chemistries making use of abundant, sustainable low cost materials, which are easily available in Europe. Solutions are required to provide the same or better performance than vehicles with internal combustion engines and to be capable of recharging the electric vehicle within a time equivalent to fill a conventional gasoline/diesel fuel tank.

This prize will contribute significantly to the decarbonisation of Europe for the benefit of the EU's economy and its citizens.

This prize will:

- Foster knowledge, innovation and competitiveness in e-vehicle battery/ energy storage technologies.
- Enhance the European manufacturing base for e-vehicle batteries.
- Strengthen the European Industrial value chain (e.g. through exploitation or synergies with existing European industrial infrastructures).
- Strengthen European value added in the supply and knowledge of advanced materials and chemistries for batteries.
- Encourage electro-mobility, opening up new markets and incentivising technological innovations.
- Enhance employment prospects along the entire electro-mobility value chain.
- Contribute to a significant drop in CO2 and NOx emissions in line with global environmental policies.

The specific rules of the contest will be published in the fourth quarter of 2017 by the European Commission, which will directly launch and manage the contest and award the prize based on the judgement of independent experts[58].

Expected results

A prototype battery with fast repowering and long-distance range, high recyclability, and long life cycle.

Eligibility criteria

The contest is open to any legal entity (including natural persons) or group of legal entities established in an EU Member State or in a country associated to Horizon 2020.[59]

[58] A pre-selection phase may be done by Commission services in case of numerous applications received.

[59] For reasons of fostering Europe's competitiveness in the innovative battery sector, participation to this prize contest will be limited to EU Member States and Countries Associated to Horizon 2020.

Essential award criteria

The prize will be awarded, after closure of the contest, to the contestant(s) who in the opinion of the jury demonstrates a solution that best meets the following cumulative criteria for a prototype battery (demonstrated and tested in adequate environment):

- Provides high standards for safety, sustainability and recyclability;
- Provides the same experience and user convenience, in terms of range and time required to recharge, as a conventional gasoline/diesel car;
- Has whole-life costs (in terms of battery materials and its functionality) equivalent or better than gasoline/diesel car;
- Demonstrates reliable power delivery without significant loss of performance for an economically acceptable life time (power delivery to be demonstrated for a life time higher than batteries currently available);
- Ensures that other performance criteria (car acceleration, safety, etc.) are maintained in comparison to a combustion engine powered vehicle,
- Demonstrates a significant advance in new material technologies while avoiding dependence on import materials (e.g. expensive, rare, and unsustainable materials);

Type of action

Inducement prize

Indicative timetable	
Opening of contest	**Fourth quarter of 2017**
Deadline to submit applications	**Fourth quarter of 2020**
Award of prize	**Fourth quarter of 2021**

Indicative budget

€10 million from the 2020 budget[60]

[60] of which EUR 5.00 million from the 'Access to Risk Finance' WP part, EUR 5.00 million from the 'Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing' WP part.

2. EIC Horizon Prize for 'Fuel from the Sun: Artificial Photosynthesis'

Challenge

The challenge is to build a fully functional, bench-scale prototype of an artificial photosynthesis based system which is able to produce a useable synthetic fuel.

Artificial photosynthesis is widely considered to be among the most promising new technologies to deliver sustainable alternatives to current fuel supplies. Due to its ability to use a combination of sunlight, water and carbon from the air to produce energy, artificial photosynthesis is regarded as a potential breakthrough energy technology. It can be used to produce hydrogen or carbon-based fuels – collectively referred to as "solar fuels" – which offer an efficient and transportable means of storage of solar energy. Solar energy, in turn, can be used as an alternative to fossil fuels and as a feedstock for a wide range of industrial processes.

The device to be built needs to integrate the whole process from light capture to fuel production and be capable of powering a small engine. The production of fuel in the form of hydrogen and the use of conventional photovoltaic cells for the light harvesting process or to collect light and electrolysers are not permitted.

For the purpose of this prize, artificial photosynthesis (AP) is understood to be a process that aims at mimicking the physical chemistry of natural photosynthesis by absorbing solar energy in the form of photons. The solution is required to use this energy to generate fuel molecules through a synthetic system to be delivered as a single integrated device that utilises either biomimetic, nanotechnology, synthetic biology or a combination of these systems.

Meeting the challenge will stimulate innovation and focus research and development towards energy applications in a new energy technology through increased public and commercial interest. Moreover, it will accelerate the development of new innovative energy conversion systems using solar light and natural elements to produce renewable fuels to be used in industry, housing and transport.

The challenge will also create a stimulus for industrial participation and creation of start-ups, pushing the artificial photosynthesis technology for fuel production to the next level of development.

Considering the innovative approach and the novelty of using artificial photosynthesis for fuel production, the prize will generate interest in the subject and foster interdisciplinary collaboration among potential applicants, such as students, young researchers and engineers. The competition is expected to highlight the diversity of potential solutions.

The specific rules of the contest will be published in the fourth quarter of 2017 by the European Commission, which will directly launch and manage the contest and award the prize based on the judgement of independent experts[61].

Expected results

A number of innovative devices and systems demonstrating the use of sunlight to produce a fuel ready to be used.

Eligibility criteria

The contest is open to all legal entities (i.e. natural or legal persons, including international organisations) or groups of legal entities.

Essential award criteria

The prize will be awarded to the contestant(s) who will, in the opinion of the jury, demonstrate a solution that best meets the following cumulative criteria:

- Degree of system integration from light capture to fuel production;
- Device/system performance;
- Production of fuel that will be used in an engine.
- Widest market potential.
- Commercial potential of the device

Type of action

Inducement prize

Indicative timetable	
Opening of contest	**Fourth quarter of 2017**
Deadline to submit applications	**First quarter of 2021**
Award of prize	**Fourth quarter of 2021**

Indicative budget

€5 million from the 2020 budget[62]

[61] A pre-selection phase may be done by Commission services in case of numerous applications received.

[62] of which EUR 5.00 million from the 'Access to Risk Finance' WP part.

3. EIC Horizon Prize for 'Early Warning for Epidemics'

Challenge

The challenge is to develop a scalable, reliable, and cost-effective early-warning system prototype to forecast and monitor vector-borne diseases in order to contribute to the prevention of outbreaks, mitigating their impact on local, regional and global scales, and providing support to existing elimination efforts.

According to the World Health Organisation (WHO), vector-borne diseases such as malaria, Zika, dengue or yellow fever cause more than 1 million deaths globally each year. Vectors are living organisms that can transmit infectious diseases between humans or from animals to humans. Vector-borne diseases are a global threat to public health and can have far-reaching economic and social impacts.

Climate and environmental phenomena contribute to creating the necessary conditions for these kinds of diseases to thrive. Variables such as rainfall, temperature and humidity affect the number and survival rate of mosquitoes and other vectors of diseases.

The 2030 Agenda for Sustainable Development, in the context of its Sustainable Development Goal 3 "Ensure healthy lives and promote well-being for all at all ages", aims to end the epidemics of malaria and neglected tropical diseases (amongst others) by 2030. It calls for strengthening the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

The Earth Observation domain is changing with increasing amounts of data being generated from space-borne, air-borne, in-situ and citizen observatories. Effective management of big data in this domain shall be an essential element in improving the 'early warning' capabilities of any system which aims to mitigate epidemics related to vector-borne diseases. The full potential of combining all the available data is not yet harnessed and innovative solutions are needed to enable the system's wider use and exploitation in this context. Such solutions would not only help to improve the 'preparedness' and response related to vector-borne disease outbreaks, but also foster the creation of a digital solution marketplace in the domain of environmental and climate health risks.

The specific rules of the contest will be published in the fourth quarter of 2017 by the European Commission, which will directly launch and manage the contest and award the prize based on the judgement of independent experts[63].

[63] A pre-selection phase may be done by Commission services in case of numerous applications received.

Expected results

- A reliable, cost-effective and scalable early warning system prototype to forecast and monitor vector-borne diseases, which should encompass innovative technological solutions integrating big data derived from different sources (e.g. space-borne, airborne, in-situ and citizen observations) in Earth observation domain, including climate data, vector-related modelling, meteorology, and geo-located information related to vector-borne disease outbreaks and behaviour. These should be interoperable with public health data and other socio-economic data.
- Demonstration of the prototype at local level, taking into account any relevant societal factors in the chosen geographical area. It should be compatible for use with data coming from existing multi-disciplinary networks comprising health, humanitarian aid and emergency management actors, in order to leverage data and information from these networks, as well as to showcase the operational potential and added value of the solution.

Eligibility criteria

The contest is open to all legal entities (i.e. natural or legal persons, including international organisations) or groups of legal entities.

Essential award criteria

The prize will be awarded, after closure of the contest, to the contestant(s) who, in the opinion of the jury, demonstrates a solution that best meets the following cumulative criteria:

- Operational capability and data integration.
- Demonstrated Implementation within an affected community.
- Scalability and sustainability of the Early-Warning Concept.
- Focus on European technology demonstration.

Type of action

Inducement prize

Indicative timetable	
Opening of contest	**Fourth quarter of 2017**
Deadline to submit applications	**Third quarter of 2020**
Award of prize	**First quarter of 2021**

Indicative budget

€5 million from the 2020 budget[64]

[64] of which EUR 5.00 million from the 'Access to Risk Finance' WP part.

4. EIC Horizon Prize for 'Blockchains for Social Good'

Challenge

The challenge is to develop scalable, efficient and high-impact decentralized solutions to social innovation challenges leveraging Distributed Ledger Technology (DLTs), such as the one used in blockchains.

DLT in its public, open and permissionless forms is widely considered as a ground-breaking digital technology supporting decentralized methods for consensus reaching as well as sharing, storing and securing transactions and other data with fewer to no central intermediaries.

In the wake of the widespread public attention for Bitcoin, several financial applications based on blockchains are already under development. However

, the potential of DLTs to generate positive social change by decentralising and disintermediating processes related to local or global sustainability challenges is still largely untapped.

Social application areas in which decentralized solutions based on DLTs have shown clear benefits over conventional centralised platform solutions include, but are not limited to:

- demonstrating the origin of raw materials or products and supporting fair trade and the fair monetization of labour;
- allowing for a greater visibility of public spending and a greater transparency of administrative and production processes;
- participation in democratic decision-making by enabling accountability, rewarding of participation and/or anonymity;
- enabling the development of decentralized social networks or clouds, or of decentralized platforms for the collaborative economy;
- managing property, land registry or other public records; and
- contributing to financial inclusion.

This challenge is targeted at a wide range of actors: individuals, social entrepreneurs, civil society organisations, research centres from technological and social disciplines, creative industries, students, hackers, start-ups and SMEs. Tackling this challenge requires a multidisciplinary expertise.

The specific rules of the contest will be published in the fourth quarter of 2017 by the European Commission, which will directly launch and manage the contest and award the prize based on the judgement of independent experts[65]. The indicative budget for this prize is €5 million. This is

[65] A pre-selection phase may be done by Commission services in case of numerous applications received.

expected to be allocated in five awards of €1 million each, corresponding to different social application areas.

Expected results

- Pioneering decentralized solutions to global and/or local sustainability challenges.
- Generating positive social change by making available novel solutions for decentralizing and disintermediating processes.
- Demonstrating the viability of solutions enabling a more even distribution and sharing of information and resources which respects privacy while providing levels of transparency.
- Stimulating the emerging community of developers and practitioners of "blockchains for social good" applications.

Eligibility criteria

The contest is open to all legal entities (i.e. natural or legal persons, including international organisations) or groups of legal entities.

While entrants are free to commercially exploit applications and services based on the developed solutions, their source code is required to be released under an Open Source Licence.

Essential award criteria

The prize will be awarded, after closure of the contest, to the contestants who in the opinion of the jury demonstrate a solution that best meets the following criteria:

- Social impact: both potential and already achieved by the implementation of the solution (e.g. size of the community of users engaged by the actual implementation).
- Decentralisation and governance: improvements in transparency and accountability (while respecting privacy and/or anonymity).
- Usability and inclusiveness;
- Viability at large scale: cost-efficiency (including energy consumption), scalability, security, and sustainability;
- Clear added value of the demonstrated implementation for European citizens, in societal, economic or environmental terms.

These criteria, scoring and the weighting methodology, as well as the detailed timetable and conditions for participation, will be further defined in the Rules of Contest.

Type of action

Inducement prize

Indicative timetable	
Opening of contest	**Fourth quarter of 2017**
Deadline to submit applications	**Second quarter of 2019**
Award of prize	**First quarter of 2020**

Indicative budget

€5 million from the 2020 budget[66]

[66] of which EUR 5.00 million from the 'Access to Risk Finance' WP part.

5. EIC Horizon Prize for 'Low-Cost Space Launch'

Challenge

The challenge is to develop a European technologically non-dependent solution for launching light satellites[67] into Low-Earth Orbit (LEO), which will enable dedicated low-cost launches with committed schedule and orbit.

The solution needs to be innovative, implementable, affordable in development and exploitation phases, and commercially viable. Applicants are required to take a holistic approach and produce results that move beyond (but are complementary to) existing solutions. Moreover, the solution will enhance on European access to space and associated technological non-dependence and thereby will provide strategic and competitive advantages for European companies, SMEs, universities and research organisations.

Space technologies, data and services have become indispensable to the daily lives of European citizens. Moreover, development of space technology boosts jobs, growth and investments in Europe and strengthens its role in the world. Space solutions can help Europe to respond better to new global and societal challenges: climate change, disaster management, security threats, migration, farming, transport, energy and many more.

While Europe has a world-class space sector, innovation in space and changing demands are leading to an increased appearance of light and agile satellites. Consequently, space solutions will increasingly consider this trend. Small satellites are well-suited for most kinds of institutional and commercial use: wireless communications networks, Internet services, broader connectivity, scientific observation, data gathering, Earth imaging and positioning. In terms of size, light satellites rely on a lower mass in comparison with conventional satellites. Their production is more cost-effective due to series manufacturing, agility and flexibility in operations. However, light satellites will also lead to an exponential increase in launch needs by 2020-2025.

Launch opportunities in Europe for this type of satellites are currently being standardised through auxiliary payload or rideshare solutions on the European launcher fleet. However, according to market studies, light satellites are expected to lead to a significant increase in launch needs by 2020-2025.

An established service for regular launches dedicated to light satellites will contribute to achieve the following goals:

- internal market growth in the manufacturing sector of small

[67] Class 1 (mini sats): 200.1Kg – 400Kg, Class 2 (micro sats): 60.1Kg – 200Kg, Class 3 (nano sats, including 12U+): 25.1Kg – 60Kg, Class 4 (cubesats, including 1U, 3U, 6U): 1Kg – 25Kg.

launchers and satellites and the downstream services sector;

- European leading position in export markets globally in the field of light satellites and small launchers;
- space-enabled seamless solutions for European citizens thanks to operational light satellites and small launchers.

The specific rules of the contest will be published in the fourth quarter of 2017 by the European Commission, which will directly launch and manage the contest and award the prize based on the judgement of independent experts[68].

Expected results

- European low-cost access to space infrastructure and services solution dedicated to light satellites.

Eligibility criteria

The contest is open to all legal entities (i.e. natural or legal persons, including international organisations) or groups of legal entities established in an EU Member State or in a country associated to Horizon 2020[69].

Essential award criteria

The prize will be awarded, after closure of the contest, to the contestant(s) who in the opinion of the jury demonstrates a solution that best meets the following cumulative criteria:

- Excellence;
- Technical implementation;
- Service sustainability.

Type of action

Inducement prize.

Indicative timetable	
Opening of contest	**Fourth quarter of 2017**
Deadline to submit applications	**Fourth quarter of 2020**
Award of prize	**Fourth quarter of 2021**

Indicative budget

€10 million from the 2020 budget[70]

[68] A pre-selection phase may be done by Commission services in case of numerous applications received.

[69] The prize relates to the development of European critical space infrastructure, which is of strategic importance and security-critical for the Union and its Member States. Therefore: (1) participation in this prize contest will be limited to legal entities established in EU Member States and Countries Associated to Horizon 2020; (2) the rules of contest will: (a) stipulate that a proposal may be rejected for security reasons; (b) provide further details on the obligation to develop and deploy the solution in an EU Member State.

[70] of which EUR 5.00 million from the 'Leadership in Enabling and Industrial Technologies - Space' WP part, EUR 5.00 million from the 'Access to Risk Finance' WP part.

6. EIC Horizon Prize for 'Affordable High-Tech for Humanitarian Aid'

Challenge

The challenge consists of developing innovative solutions for the delivery of humanitarian aid based on frugal application of advanced technologies.

The European Union and its Member States are major humanitarian donors. Humanitarian crises and disasters have increased in number, complexity and severity over the last 25 years. Given the scale of today's crises and disasters, funding to cover humanitarian needs cannot keep up. The humanitarian system is being challenged to do more, for more people, and at greater cost. Cooperation between international organisations and NGOs responding to crises, end-users and local actors, research and scientific communities and the private sector is crucial in this respect. Introducing innovative solutions for the delivery of humanitarian aid could help enhance the humanitarian response, which is particularly important for those in a most vulnerable situation.

Solutions should be developed through a frugal innovation approach, and should be novel and based on advanced technologies and services, demonstrating the added value and potential of one or more advanced technologies (no Information and Communication Technology-only solutions). Tested and proven in a humanitarian aid delivery, these solutions should be safe, scalable, resource-sustainable, replicable and usable in other contexts.

Innovative solutions should be inclusive, i.e. co-created and developed by different stakeholders with local actors, and accessible to a large number of people in a given context of humanitarian aid delivery settings.

The specific rules of the contest will be published in the fourth quarter of 2017 by the European Commission, which will directly launch and manage the contest and award the prize based on the judgement of independent experts[71]. The indicative budget for this prize is €5 million from the 2020 budget. This is expected to be allocated in five awards of €1 million, each in a different area such as shelter, water and sanitation, energy, heating or cooling, food, hygiene and medical care.

Expected results

- More cost-effective, more sustainable and higher-quality innovative solutions, leading to an optimised use of humanitarian funding and an

[71] A pre-selection phase may be done by Commission services in case of numerous applications received.

enhanced response to urgent needs in a humanitarian aid setting, notably for those in a most vulnerable situation in areas such as shelter, water and sanitation, energy, heating or cooling, food, hygiene and medical care.

Eligibility criteria

The contest is open to all legal entities (i.e. natural or legal persons, including international organisations) or groups of legal entities.

Essential award criteria

The prize will be awarded, after closure of the contest, to the contestants who, in the opinion of the jury, demonstrate a solution that best meets the following cumulative criteria:

- New solution tested successfully in a real environment, with a demonstrated potential of adaptability and scalability under different humanitarian aid settings and responding to the needs of those in a most vulnerable situation (taking age, gender, disability and minority into consideration).
- Quality and sustainability of the solution based on frugal application of advanced technologies, including the technological components (no ICT-only solutions).
- Affordability and improved cost-effectiveness for beneficiaries and organisations responding to crisis.
- Engagement with end users and perspective of a business case.

Type of action

Inducement prize

Indicative timetable	
Opening of contest	**Fourth quarter of 2017**
Deadline to submit applications	**First quarter of 2020**
Award of prize	**Fourth quarter of 2020**

Indicative budget

€5 million from the 2020 budget[72]

[72] of which EUR 5.00 million from the 'Access to Risk Finance' WP part.

OTHER ACTIONS

EIC Support Actions

EIC Support Actions

What's on offer, and how you can benefit

EIC Support Actions build on initiatives started under the SME Instrument and will evolve during the pilot phase in the light of needs and demands.

1. EIC Evaluators' and Ambassadors' Community

A reliable and trusted evaluation system is crucial for the success of the EIC pilot, and a community of expert evaluators is one of its most important assets. The pool of evaluators supporting the evaluations contains around 2500 experts. . An EIC Ambassadors' community, i.e. speakers at the EIC Summit 2018, former members of the EIC High-Level Group and members of the EIC Pilot Advisory Board, is also developing. The Evaluators' and Ambassadors' Community will be created through a gathering of these experts in early 2019 and 2020 focused on explaining and clarifying the objectives of the EIC pilot. EIC ambassadors, i.e. former members of the EIC High-Level Group and members of the EIC Pilot Advisory Board, will be invited to participate as high-level speakers. Briefing materials, presentations and webinars will also be created and delivered.

Subject-matter of the contract(s) envisaged: preparation, execution and follow-up of events; design, delivery and evolution of media and information dissemination products and services.

Type of action: Public Procurement – using a framework contract - up to 10 specific service contracts.

Indicative timetable: fourth quarter of 2019 and 2020.

Indicative budget: €0.95 million from the 2018 budget, € 1 million from the 2019 budget and € 1 million from the 2020 budget.

2. EIC Community Platform

An interactive platform for SME Instrument beneficiaries was created under the Horizon 2020 work programme 2016-2017. The duration, functionalities and services provided through this platform will be extended to encompass all SMEs that are EIC grant beneficiaries.

The platform will be linked to platforms and projects offering services provided by InvestHorizon, such as investment-readiness training and introductions to investors, and by Startup Europe, such as the Web Investors Forum, the Accelerator Assembly, and the

Crowdfunding Network and the different services of the Enterprise Europe Network that are accessible via the Key Account Managers of the EIC beneficiaries. It will be supported till at least the end of 2020.

The action will support the extended community platform and its underlying activities, i.e.:

- ☐ *Promotion* through online and live interaction with potential investors, large enterprises, and public and private procurers, who will be able to create a profile on the platform for information-sharing and matchmaking.
- ☐ *Mentoring* through the creation of matchmaking profiles for mentors and mentees.
- ☐ *Participation in events* such as trade-fairs and major innovation or business conferences in Europe.
- ☐ *Access to existing services* offered by the Enterprise Europe Network (EEN), the EU Single Access to Finance Portal, the EU IPR Helpdesk, the European Observatory against Infringements of IPR, the Procurement of Innovation Platform, testing and demonstrating technologies (e.g. open innovation testbeds, digital innovation hubs) and other offerings at EU, national and regional levels such as the Thematic Smart Specialisation Platforms that could be of interest to participants in the EIC pilot.
- ☐ *Integration of data and insights from the Innovation Radar initiative* about EU–funded innovators and innovations, and acquisition of other financial, investment, patents and altmetrics data and analytics. This data will be leveraged to improve links between innovators with specific financing (or other 'go to market') needs and investors.
- ☐ *Procurement marketplace* to help companies, including EIC beneficiaries, to commercialise their innovations as first clients of public-sector innovation procurers, take advantage of public procurement opportunities, and better understand how the procurement market works and how to bid for procurements. Procurement opportunities published on the online marketplace and interaction with public procurers active on the platform will be open to all economic operators. There will also be activities to encourage public procurers to organise open-market consultations before procuring in order to give SMEs enough time to prepare bids and team-up with larger companies when bidding.

This is not necessarily an exhaustive list. Members of the EIC Evaluators' and Ambassadors' will also be invited to join and engage with the Platform and EIC beneficiaries

Subject-matter of the contracts envisaged: design, evolution and maintenance of online interactive platform; design, implementation and evolution of products and services delivered or deployed via the platform.

Type of action: Public Procurement — up to 10 specific service contracts (using a framework contract) and 1 direct contract.

Indicative timetable: first quarter of 2018 and first quarter of 2019.

Indicative budget: €1.50 million from the 2018 budget and €1.50 million from the 2019 budget.

3. EIC Events

EIC Events support international cooperation between highly innovative European SMEs and other entities both within Europe and in other parts of the world. They are designed to catalyse breakthrough innovations and speed up commercialisation.

A typical Event features investor pitching and a series of networking sessions and matchmaking socials to help you find potential collaborators, mentors, lenders and investors, corporate partners and public procurement opportunities. Members of the EIC Evaluators' and Ambassadors' Community will be invited to participate as, for example, workshop hosts, panellists or high-level speakers. Local universities and other public research organisations looking to commercialise research results are invited.

Each Event addresses innovation in the large, though some sessions may focus on particular sectors or geographies according to local circumstances and demand. To help SMEs get the most from participating in a Summit, follow-up support is available to facilitate business cooperation with other entities based either in or outside Europe.

Subject-matter of the contract envisaged: preparation, execution and follow-up of events.

Type of action: Public Procurement – one direct service contract linked to a framework contract.

Indicative timetable: third quarter of 2019; third quarter of 2020.

Indicative budget: €0.55 million from the 2019 budget; €0.55 million from the 2020 budget.

4. Expert Group to advise on the design of a European Innovation Council

The High Level Group (HLG) of Innovators ('expert group') was established in January 2017 with a duration of two years. The mandate of the group ends in 2018, with high-level advice subsequently provided by the 'European Innovation Council (EIC)' Pilot Advisory.

The work of the expert group will build on early experience gained with the implementation of EIC pilot measures for the 2017-2018 period under Horizon 2020. Advice provided by the HLG will ensure future EU-level support for innovation takes advantage of existing best practices for innovation support in Europe and that it responds to the needs of entrepreneurs/innovators. The experts will have in-depth knowledge in the field of market-creating innovation and related financial instruments, national and regional innovation programmes, and start-up/scaling up of innovative companies.

The activities carried out by the group will be essential to the development and monitoring of the Union policy on Research, technological development and demonstration.

A special allowance of €450/day for each full working day spent assisting the Commission in terms of Article 21 of Decision C(2016)3301 will be paid to the highly qualified specialists appointed in their personal capacity who act independently and in the public interest. This amount is considered to be proportionate to the specific tasks to be assigned to the experts, including the number of meetings to be attended and possible preparatory work.

Type of action: Expert Contracts.

Indicative timetable: 2018.

Indicative budget: €0.45 million from the 2018 budget.[73]

5. Commission Expert Group 'European Innovation Council (EIC) Pilot Advisory Board'

The Commission will establish an 'EIC Pilot Advisory Board'. This Board will have a mandate until the end of 2020, acting as a transition structure until 2021 when the formal EIC Board is expected to be appointed under next Framework Programme for Research. Its role will be to advise the European Commission on: the development and follow up of the current and planned EIC pilot actions in 2019 and 2020, in particular the substantive new initiatives to be launched in 2019; the overall strategy for the future EIC and the design of the funding and support, in line with the Horizon Europe legislation, and any matter which may enhance and foster innovation eco-systems across Europe, the achievements and impact of the objectives of the EIC component and the capacity of innovative firms to roll out their solutions.

The Board is expected to consist of 15 to 20 high level experts, from various domains of Europe's innovation ecosystem, who will be appointed in a personal capacity, acting independently and in the public interest. The Commission will ensure a good mixture of high-level individuals including entrepreneurs who have started up and scaled up innovative enterprises at European/global level; investors, venture capitalists, individuals experienced in corporate venturing and corporate-startup relationships , individuals with a strong track record in developing the wider innovation ecosystem, in particular in knowledge/technology transfer, in building start-up communities, and in managing innovation agencies/ incubators/ accelerators and researchers and academics with leading expertise in fields relating to future technologies.

EIC Pilot Advisory Board members will provide high-level advice to the Commission of such a nature that without their input the implementation of the Enhanced EIC Pilot and the

[73] of which EUR 0.45 million from the 'Europe in a changing world – Inclusive, innovative and reflective societies' WP part.

development of the future definitive iteration of the EIC would not be effective. In light of this, and as highly qualified, specialised, independent experts selected following a public call for applications, on the basis of objective criteria, it is justified that the members of the EIC Pilot Advisory Board shall be remunerated for the services they offer pursuant Article 21 of the above-mentioned horizontal rules on expert group.

They will be paid a special allowance of €450/day for each full working day spent assisting the Commission in terms of Article 21 of Decision C(2016)3301. This amount is considered to be proportionate to the specific tasks to be assigned to the experts, including the number of meetings to be attended and the related preparatory work.

Type of action: Expert Contracts.

Indicative timetable: 2019 – 2020.

Indicative budget: €0.45 million from the 2019 budget and €0.45 million from the 2020 budget.

6. Using crowdfunding, artificial intelligence, blockchain and other novel approaches to help evaluate proposals for breakthrough and market-creating innovations

In fields as diverse as scientific research, entrepreneurship and the arts, crowds of interested stakeholders are increasingly responsible for deciding which innovations to fund, a task largely performed at present by business angels and venture capitalists, lenders or experts hired by grant-making bodies. Little is known about how much the crowd differs from investors, lenders or experts in judging which proposals to support, how rational the crowd is in making funding decisions, and what tools might best assist the crowd in this process. Artificial intelligence (AI) is also being tested in many areas as a complement to human judgment in making funding and investment decisions. In addition, experiments with using blockchain for managing and verifying business identities, records and transactions are underway. This study will examine the potential of using crowdfunding, AI, blockchain and other novel approaches to help evaluate close-to-market innovation-driven proposals, especially those submitted in response to the SME Instrument call.

Type of action: Public Procurement – one direct service contract.

Indicative timetable: first quarter of 2018.

Indicative budget: €0.15 million[74] from the 2018 budget.

[74] of which EUR 0.15 million from the 'Access to Risk Finance' WP part.

7. Strengthening the organisation and management of the Enhanced EIC pilot

The transition to the enhanced EIC pilot and preparation of the launch of the full-fledged EIC under Horizon Europe requires the strengthening of the organisation and tools of EIC operational management, notably through the development of specific IT tools and exchange of experience with and learning from similar programmes.

Consultation of external stakeholders will be required in order to ensure that the instrument is best fitted to the needs of the European innovation ecosystem, in particular breakthrough market-creating innovation.

Technical assistance
Technical assistance will be required in order to develop specific IT tools in support of the evaluation and project management process (including exchange of data and operational liaison with the EIC SPV).

Type of action: Public Procurement – use of existing framework contracts.

Indicative timetable: second half of 2019.

Indicative budget: €0.5 million from the 2019 budget.

Workshops
Upon recruitment of EIC Programme Managers, a cycle of workshops will be set-up, with the participation of experienced external professionals managing programme and project in the area of breakthrough technologies and market creating innovation. This cycle will include events in organizations implementing activities similar to the EIC, in Europe but also in the United States.

Type of action: Public Procurement — one direct contract

Indicative timetable: second half of 2019.

Indicative budget: €0.05 million from the 2019 budget.

Experts
An expert group will be set up to convey the experience of other frameworks that served as an inspiration for the EIC enhanced pilot set up and will assist the Commission in better developing the role of Programme Managers and shaping relevant processes.

Up to 10 experts, appointed in a personal capacity, acting independently and in the public interest, will be paid a special allowance of €450 / day for each full working day spent assisting the Commission in terms of Article 21 of Decision C(2016)3301. This amount is

considered to be proportionate to the specific tasks to be assigned to the experts, including the number of meetings to be attended and the related preparatory work.

Type of action: Expert contracts

Indicative timetable: second half of 2019.

Indicative budget: €0.05 million from the 2019 budget.

8. Capacity-building and transnational cooperation for National Contact Points (NCPs) for the EIC and Access to Risk Finance

This grant will facilitate transnational cooperation between NCPs focused on the Horizon 2020 EIC Pilot and the specific objective 'Access to Risk Finance'. This action aims at identifying and sharing good practices and raising the general standard of support to programme applicants, taking into account the diversity of actors that make up the constituency of the EIC.

The action will involve one consortium of formally nominated NCPs in the areas of 'Future and Emerging Technologies', 'Innovation in SMEs' or 'Access to Risk Finance'.

Activities should deliver tangible benefits to potential applicants to calls under the EIC and Access to Risk Finance. Activities should capitalise on relevant work of previous or ongoing NCP network projects, and of the 'NCP Academy' (www.ncpacademy.eu). They should also seek to enhance synergies across different parts of the framework programmes, for instance with the ERC, the EIT and financial instruments, and complementarity with activities of other NCP networks and the Enterprise Europe Network in the domain of SMEs support. Various mechanisms may be included, such as benchmarking, joint workshops, enhanced cross-border brokerage events, common roadshows in relevant research and innovation events, and specific training linked to particularities of the EIC Pilot.

Where relevant, activities should make use of commonly available tools (e.g. for brokerage and partner search, benchmarking tools, guidebooks, promotional tools, etc.). Special attention should be given to enhance the competence of NCPs across Europe ensuring a homogenous level of support in all countries.

To help close the innovation divide, a substantial component of the proposed activities must be devoted to outreach and support activities aimed at helping potential applicants in those countries that have been participating at low levels in the programme up to now. These activities should not only help the NCPs rapidly acquire the know-how on NCP operations accumulated in best practice countries but should include in priority awareness raising actions aimed at increasing visibility of the EIC Pilot to potential applicant organisations in the above mentioned countries.

The legal entities listed below are the host organisations of NCPs from EU Member States and Associated Countries who have been officially appointed by the relevant national authorities, and who have expressed a willingness to participate in this proposal. NCPs opting not to be a beneficiary are nevertheless invited and encouraged to participate in the project activities (e.g. workshops), and costs for such participation (e.g. travel costs paid by the consortium) may be included in the estimated budget and be eligible for funding by the Commission.

Organizations participating in the consortium must at least include two NCPs formally nominated for 'Future and Emerging Technologies' and 'Innovation in SMEs' or 'Access to Risk Finance'. FET NCPs will cover the Pathfinder Pilot.

In line with Articles 2, 31.6 and 41.4 of the Model Grant agreement, the project arising from this grant will complement other NCP network projects. This means that the beneficiaries and those of the complementary grants must cooperate and provide access to their results. They must conclude a written collaboration agreement regarding the coordination of the complementary grants and the work of the action.

The standard evaluation criteria, thresholds, weighting for award criteria and the maximum rate of co-financing for this type of action are provided in General Annexes D and H of the work programme.

Expected impact:

- An improved, more consistent and professionalised NCP service across Europe, thereby helping simplify access to EIC Pilot calls, and lowering the entry barriers for newcomers.
- An increase in the quality of proposals submitted, including those from countries where success rates are currently lower than average.

Legal Entities:

Business Name	Legal Name
APRE	AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA
CDTI	CENTRO PARA EL DESARROLLO TECNOLOGICO INDUSTRIAL.
FFG	OESTERREICHISCHE FORSCHUNGSFOERDERUNGSGESELLSCHAFT MBH
IPPT PAN	INSTYTUT PODSTAWOWYCH PROBLEMOW TECHNIKI POLSKIEJ AKADEMII NAUK
IIA - ISRAEL INNOVATION AUTHORITY	NATIONAL AUTHORITY OF TECHNOLOGICAL INNOVATION
DLR	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV
IN	INNOVASJON NORGE
BPIFRANCE FINANCEMENT SA	BPIFRANCE FINANCEMENT SA
FORTH	FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS
ENTERPRISE IRELAND	ENTERPRISE IRELAND

ANI	AGÊNCIA NACIONAL DE INOVAÇÃO
GIS-TRANSFERCENTER FOUNDATION	GIS-TRANSFERCENTER FOUNDATION
CVTISR	CENTRUM VEDECKO TECHNICKYCH INFORMACII SLOVENSKEJ REPUBLIKY
NKFIH	NEMZETI KUTATASI FEJLESZTESI ES INNOVACIOS HIVATAL
TC CZ	TECHNOLOGICKE CENTRUM AKADEMIE VED CESKE - REPUBLIKY

Type of action: Grant to identified beneficiary - Coordination and support action.

Indicative timetable: Q3 2019.

Indicative budget: €0.75 million from the 2019 budget, €0.25 million from the 2020 budget.

Budget[75] for

European Innovation Council pilot

	Budget-line	Budget in € millions		
		2018	2019	2020
Calls				
H2020-SMEInst-2018-2020	08.020800[76]	479.74	652.26	600.99
	08.020202	10[77]	37	53
H2020-FTI-2018-2020[78]	*See footnote*	100.00	100.00	100.00
H2020-FETOpen-2018-2020[79]	09.040101	185.70	166.00	357.20
H2020-FET PROACT-	09.040101			68

[75] The budget figures given in this table are rounded to two decimal places.
The budget amounts for the 2020 budget are subject to the availability of the appropriations provided for in the draft budget for 2020 after the adoption of the budget 2020 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

[76] The SME Instrument call is financed from the single budget-line 08.020800 for a total, at minimum, of €1611.52, of which at least €160.50 million stems from 'Industrial leadership - Leadership in nanotechnologies, advanced materials, biotechnology and advanced manufacturing and processing', €305.73 million from 'Industrial leadership - Leadership in information and communications technology', €57.93 million from 'Industrial leadership - Leadership in space', €248.47 million from 'Societal Challenge 1 - Improving lifelong health and wellbeing', €129.54 million from 'Societal Challenge 2 - Securing sufficient supplies of safe and high-quality food and other bio-based products', €233.61 million from 'Societal Challenge 3 - Making the transition to a reliable, sustainable and competitive energy system', €236.92 million from 'Societal challenge 4 - Achieving a resource-efficient, environmentally-friendly, safe and seamless European transport system', €108.82 million from 'Societal challenge 5 - Achieving a resource-efficient and climate change resilient economy and a sustainable supply of raw materials', €51.38 million from 'Societal challenge 6 - Fostering inclusive, innovative and reflective societies', and €67.65 million from the 'Societal challenge 7 - Fostering secure European societies' WP parts. While these amounts are indicatively dedicated to the respective domain concerned, the SME Instrument will operate bottom-up and its budget will, as a whole, support firms developing the breakthrough, market-creating innovations that can occur, in particular, at the intersection between different technologies, industry sectors and scientific disciplines.

[77] Action adopted in the Access to Risk Finance part of the Work Programme for 2018.

[78] The FTI Pilot call is financed for a total of €300 million (€100 million per year of implementation), of which at least €30.31 million was originally assigned to 'Industrial leadership - Leadership in nanotechnologies, advanced materials, biotechnology and advanced manufacturing and processing', €53.45 million to 'Industrial leadership - Leadership in information and communications technology', €10.11 million to 'Industrial leadership - Leadership in space', €52.25 million to 'Societal Challenge 1 - Improving lifelong health and wellbeing', €26.70 million to 'Societal Challenge 2 - Securing sufficient supplies of safe and high-quality food and other bio-based products', €40.96 million to 'Societal Challenge 3 - Making the transition to a reliable, sustainable and competitive energy system', €44.28 million to 'Societal challenge 4 - Achieving a resource-efficient, environmentally-friendly, safe and seamless European transport system', €21.28 million to 'Societal challenge 5 - Achieving a resource-efficient and climate change resilient economy and a sustainable supply of raw materials', €9.06 million to 'Societal challenge 6 - Fostering inclusive, innovative and reflective societies' and €11.61 million to 'Societal challenge 7 - Fostering secure European societies' WP parts.

[79] The FET Open call is financed from the 'Strengthening research in future and emerging technologies' WP part.

2019-2020[80]	08.020102[81]		113.40	
Other actions				
EIC Horizon Prizes[82]	*See footnote*			40.00
Public procurements[83]	*See footnote*	2.60	3.60	1.55
Expert contracts	08.020306[84] 08.020800	0.45	0.5	0.45
Grant to identified beneficiary	08.020800 09.040101		0.75	0.25
Estimated total budget		**778.49**	**1073.51**	**1221.44**

[80] The amounts are for those FET Proactive topics that are part of the European Innovation Council enhanced pilot.

[81] The increase by 45.4 million for the 2019 budget is subject to the availability of the appropriations provided for in the 'Draft Amending Budget No 2 on the Reinforcement of key programmes for EU competitiveness: Horizon 2020 and Erasmus+', COM(2019)320 of 15.5.2019, after the adoption of the Amending Budget by the budgetary authority.

[82] EIC Horizon Prizes are financed for €30.00 million from the 'Access to Risk Finance' WP part, for €5.00 million from the 'Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing' WP part and for €5.00 million from the 'Leadership in Enabling and Industrial Technologies - Space' WP part.

[83] Public procurements are financed for €7.60 million from the SME instrument budget line and for €0.15 million from the 'Access to Risk Finance' WP part.

[84] This action is financed from the 'Europe in a changing world – Inclusive, innovative and reflective societies' WP part.