THE EU FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION – HORIZON 2020

Questions and Answers

November, 2015

This Q&A is prepared by the South Denmark European Office and creoDK (Capital Region Denmark EU Office) in Brussels with advice and input from DANRO under the Danish Agency for Science, Technology and Innovation. The answers are based on official documentation, independent sources of information, and on our own knowledge, insights, and interpretation of Horizon 2020. Neither our offices nor the European institutions or other formal parties involved with the preparation, decision-making, and implementation of Horizon 2020 can be held responsible for any of the answers provided in this document. If you have suggestions for questions which we could add to this Q&A, then please contact your office in Brussels at www.regionh.dk/creodk/ or www.southdenmark.be.







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1. STRUCTURE OF HORIZON 2020

WHAT IS HORIZON 2020?

Horizon 2020 is the European Framework Programme for Research and Innovation. It is subsequent to FP7 and covers the period 2014-2020. Horizon 2020 supports research and innovation projects and programmes in ground breaking basic research, strategic and applied research, demonstration projects, and close-to-market activities. Horizon 2020 is the financial instrument implementing the <u>Innovation Union</u>. A <u>Europe 2020</u> flagship initiative aimed at securing Europe's global competitiveness. In principle Horizon 2020 combines all research and innovation funding previously provided through the Framework Programmes for Research and Technological Development, the innovation related activities of the Competitiveness and Innovation Framework Programme (CIP), and the European Institute of Innovation and Technology (EIT). The total budget of Horizon 2020 is 70.2 billion EUR for the period 2014-2020 in fixed prizes (2011).

WHAT IS THE STRUCTURE OF HORIZON 2020?

Horizon 2020 consists of three pillars: 1) Excellent Science, 2) Industrial Leadership, 3) Societal Challenges.

Pillar 1 includes the European Research Council (ERC), Marie Skłodowska Curie, Future and Emerging Technologies (FET) and Research Infrastructures.

Pillar 2 includes "Leadership in enabling and industrial technologies" (LEIT) (ICT, nanotechnologies, advanced materials and manufacturing processes, biotechnology, space), and access to risk finance and innovation in SME's.

Pillar 3 includes challenge-based themes (health, food, energy, transport, climate, security and inclusive societies).

Excellent science

- The European Research Council (ERC)
- Future and Emerging Technologies (FET's)
- Marie Curie Actions
- European research infrastructures

Industrial Leadership

- Leadership in enabling and industrial techonolgies
- Access to risk finance
- Innovation in SME's

Societal Challenges

- Health, demographic change and wellbeing
- European Bioeconomy Challenges
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, resource efficiency including raw materials
- Europe in a changing world -Inclusive, innovative and reflective societies
- Secure societies

Please also see "What is a Societal Challenge?" and "What is included in Industrial Leadership?" and "What is the budget of Horizon 2020?"

WHAT IS EXCELLENT SCIENCE?

The Excellent Science pillar aims at building skills in the long term. It focuses on the next generation of science, technology, researchers and innovations and provides support for emerging talent across EU and abroad. The Excellent Science pillar has four main specific objectives. Firstly, the European Research Council (ERC) will provide attractive and flexible funding to talented individual researchers and their teams. Secondly, Future and Emerging Technologies will support collaborative research in advanced and paradigm-changing innovation, radically new, high-risk ideas, and accelerate development of the most promising emerging areas of science and technology. Thirdly, the actions in Marie Skłodowska-Curie will provide excellent and innovative research training

of researchers. Finally, the Research Infrastructure (including e-infrastructures) will develop European research infrastructure for 2020. The budget for the first pillar is 24,4 billion Euro from 2014 – 2020.

Please also see "What is the structure of Horizon 2020?"

WHAT IS INCLUDED IN INDUSTRIAL LEADERSHIP?

Industrial Leadership is the second pillar of Horizon 2020 and aims at boosting the competitiveness of European industry by developing Leadership in Enabling and Industrial Technologies, LEIT (for example ICT, nanotechnologies, materials, biotechnologies and space technologies) to be deployed in new products and services. Industrial Leadership also includes financial instruments to help companies (SME's in particular) getting access to risk finance and activities to help SMEs bringing new innovations to the market. The budget for the second pillar is 17 billion Euro from 2014 – 2020.

Please also see What is the structure of Horizon 2020?"

WHAT IS A SOCIETAL CHALLENGE?

The Societal Challenges are a number of areas where European society faces significant socio-economic challenges. Concerns about these challenges are shared by citizens across Europe and is characterized by the fact that solutions cannot be found within an acceptable timeframe without major technological breakthroughs. The nature of the challenges is hence a high degree of complexity involved in finding a solution and the need for an interdisciplinary approach in addressing them.

Societal Challenges are addressed in the third pillar of Horizon 2020. The idea of this pillar of Horizon 2020 is to support the development of new, interdisciplinary, innovative, and impact-oriented solutions to such (predefined) challenges. It also supports European companies in developing products and services for European consumers and for global export. There are seven societal challenges in Horizon 2020. The budget for the third pillar is 29,7 billion Euro from 2014 – 2020.

Please also see "What is the structure of Horizon 2020?"

WHAT ARE THE NOVELTIES IN HORIZON 2020 COMPARED TO FP7?

The major novelties are:

- A new structure consisting of 3 pillars with similar rules for the entire Programme
- Simplification of Rules for Participation. In particular regarding the funding model where all types of participants receive similar funding rates in accordance with the activities to be undertaken
- The use of 2 years Strategic Programmes to set the priorities/focus areas in the Work Programmes
- Biannual Work Programmes
- A challenge-driven approach to the formulation of topics. Topic texts include the definition of a specific challenge, a scope which defines the elements addressed by selected projects, and the expected impact of selected projects
- More emphasis on industry, innovation and linking research to deployment, market application, and impact
- Horizon 2020 will combine all research and innovation funding previous provided through the Framework Programme for Research and Technological Development, the innovation related activities of the

Competitiveness, and Innovation Framework Programme (CIP), and the European Institute of Innovation and Technology (EIT).

WHAT DOES SIMPLIFICATION MEAN?

Compared to previous European research and innovation programmes Horizon 2020 intents to simplify access to funding by applying the same set of rules across the three pillars of Horizon 2020. The funding model is a simplification compared to previously as the same funding rates for direct and for indirect costs will apply to all types of participants whether they are research institutions, companies, or public authorities. Furthermore, the aim is to shorten the period from a call is published to the selected projects can start (time to grant) by on average 100 days, and to make use of considerably fewer audits of the granted projects. Calls will be broadly defined, and all project administration from issuing a proposal to final reporting will be digitalized and web-based.

Please also see "What are the rules for participation?"

WHAT DOES INNOVATION MEAN?

Funding for innovation activities is included in Horizon 2020 to improve market uptake of new technologies, processes and concepts. Activities, which may receive financial support, include prototyping, testing, demonstrating, piloting, large-scale product validation, and market replication. Horizon 2020 emphasizes that innovation is not only understood as new breakthrough technologies. It also includes the use of existing technologies in novel applications, continuous improvement, non-technological, and social innovation.

WHAT DOES TECHNOLOGY READINESS LEVEL MEAN?

Technology Readiness Levels (TRLs) are used in some parts of Horizon 2020 to define the different research and innovation steps going from basic research to the commercialisation of a product. The TRLs is defined in the <u>General Annexes</u> and are mostly utilized in the calls of the second pillar Industrial Leadership. Here it is indicated for each topic which TRL should be addressed.

| Technology | Definition |
|-----------------|--|
| Readiness Level | |
| TRL 1 | Basic principles observed and reported |
| TRL 2 | Technology concept and/or application formulated |
| TRL 3 | Analytical and experimental critical function and/or characteristic proof-of-concept |
| TRL 4 | Component and/or subsystem validation in laboratory environment |
| TRL 5 | Component/subsystem/system validation in relevant environment |
| TRL 6 | Demonstration in relevant environment |
| TRL 7 | Prototyping demonstration in an operational environment |
| TRL 8 | Actual system completed and qualified through test and demonstration |
| TRL 9 | Actual system proven through successful operations |

HOW IS INTERDISCIPLINARITY TO BE UNDERSTOOD IN HORIZON 2020?

Interdisciplinarity is not explicitly defined in the Horizon 2020 Specific Programme. The open and challenge-based approach in Horizon is intended to stimulate interdisciplinary proposals and projects and bring together all the disciplines, knowledge, actors and methods needed to create impact and to develop the best solutions. Horizon 2020 should stimulate a break-down of the silos of different research disciplines and stimulate integration in order to maximize impact.

WHAT ARE CROSS-CUTTING ISSUES IN HORIZON 2020?

The implementation of Horizon 2020 should contribute to cross-cutting objectives across all three pillars of Horizon 2020. These are:

- Sustainable development and climate change: All Horizon 2020 priorities are expected to contribute to sustainable development and to combating climate change.
- Bridging from discovery to market application: Bridging actions are going to be applied across Horizon 2020.
 These actions are aimed at bringing discoveries to market application in order to exploit and commercialize ideas when and however they occur in EU-funded projects.
- Inclusion of Social Sciences and Humanities (SSH): Horizon 2020 includes a mainstreaming of SSH as an
 essential element of the activities needed to enhance industrial leadership through pillar two and to tackle all
 the societal challenges of pillar three. The Specific Programme of Horizon 2020 emphasizes the chapters
 where contributions from SSH in particular can be expected.
- Encouragement of participation of Small and Medium-sized Enterprises (SMEs): Horizon 2020 is supposed to
 encourage increased participation of SME's. The target is that 20% of the Horizon 2020 budget should be
 allocated to SME's. Please also see "How will SME's be able to participate in Horizon 2020?"
- International cooperation, i.e. cooperation with non-EU member states and non-associated countries: International cooperation is a means for the EU to achieve its higher level objectives, in particular by: strengthening the Union's excellence and attractiveness in research and innovation, tackling global societal challenges and supporting the Union's external policies.
- Inclusion of gender issues: Work Programs will contain information on how imbalances between women and
 men will be addressed, and how a gender dimension will be integrated. This will also be reflected at project
 level within the provisions of grant agreements.
- Spreading excellence and widening participation: The existence of internal disparities in research and innovation performance within the EU hinders some Member States from meeting their full potential. Low performance is also reflected in the participation patterns of some Member States in the Framework Programmes, with limiting factors such as a low level of national investment in research and innovation and reduced access to research networks.

WHAT IS THE SPECIFIC PROGRAMME?

The Specific Programme is part of the legislative package that establishes Horizon 2020. It defines the implementation of Horizon 2020. The Specific Programme includes in broad terms the issues and activities to be covered during the seven years of Horizon 2020. The Specific Programme describes the programmes under the three pillars and activities and objectives of these programmes. The Specific Programme is implemented through biannual Work Programmes with announcement of calls for proposals. The Specific Programme also covers the instruments that implement the Framework Programme.

WHAT ARE THE STRATEGIC PROGRAMMES?

The Strategic Programmes is a novelty for Horizon 2020. It complements the Specific Programme by prioritizing particularly important areas to be supported by Horizon 2020 over a two-year period. Each Strategic Programme serves as the basis for the preparation of the content of the next biannual Work Programme. The Strategic Programme contains proposals for focus areas. Scoping papers developed by the European Commission based on input from preceding stakeholder consultations contain proposals for priorities, including how these priorities could be translated into calls for each chapter in the work programmes (including focus areas). Focus areas and the priorities included in the final versions of the Strategic Programmes and the attached scoping papers will receive a relatively large part of the budget during the period it covers.

HOW DOES HORIZON 2020 SUPPORT THE FORMER COMPETITIVENESS AND INNOVATION PROGRAMME (CIP) ACTIVITIES?

Horizon 2020 includes the activities previously funded under FP7 and CIP respectively. The aim is to facilitate a smoother transition from strategic and applied research to deployment and application. The activities supported under the former CIP sub-programmes ICT Policy Support Programme and Intelligent Energy Europe are now implemented through the industrial leadership pillar and partly through the societal challenges. The industrial leadership pillar includes commercially oriented activities such as risk finance and loans and funding dedicated to research-intensive SMEs. Under the societal challenges, close-to-market activities will be implemented through e.g. prototyping, testing, piloting, demonstration, and large-scale product validation and market replication. Support to pre-commercial public procurement and public procurement of innovative solutions are also included.

WHAT IS THE BUDGET OF HORIZON 2020?

In the beginning of Horizon 2020 the total budget of Horizon 2020 including EURATOM is 78,6 billion EUR in current prices covering the period 2014-2020. In fixed (2011) prices the amount is 70,2 billion EUR. This is an increase of nearly 30% in real terms compared with its predecessor, FP7.

However, the Horizon 2020 budget has been cut due to the financing of other European Commission initiatives such as for example the European Fund for Strategic Investment.

A smaller part of the budget will be available in the early years of the programme and a relatively larger part is expected to be spent in the latter part of Horizon 2020. The increase over the period is however expected to be linear and relatively flat. The table below illustrates both the initial structure of Horizon 2020 and the estimated budget in the three pillars.

| | EUR | DKK |
|--|--------|--------|
| | (mia.) | (mia.) |
| Excellent Science | 24,4 | 182,3 |
| European Research Council (ERC) | 13,1 | 97,7 |
| Future and Emerging Technologies | 2,7 | 20,1 |
| Marie Sklodowska-Curie actions | 6,2 | 46,0 |
| Research infrastructure | 2,5 | 18,6 |
| Industrial Leadership | 17,0 | 126,9 |
| Leadership in enabling and industrial technologies | 13,6 | 101,1 |
| Access to risk finance | 2,8 | 21,2 |
| Innovation in SMEs | 0,6 | 4,6 |
| Societal Challenges | 29,7 | 221,4 |
| Health, demographic change and well-being | 7,5 | 55,7 |

| European bioeconomy challenges: Food security, sustainable agriculture and forestry, marine and maritime and inland water research | 3,9 | 28,7 |
|--|------|-------|
| Secure, clean and efficient energy | 5,9 | 44,2 |
| Smart, green and integrated transport | 6,3 | 47,3 |
| Climate action, resource efficiency and raw materials | 3,1 | 23,0 |
| Europe in a changing world - inclusive, innovative and reflective societies | 1,3 | 9,8 |
| Secure Societies - protecting freedom and security of Europe and its citizens | | 12,6 |
| | | |
| Widening participation | 0,8 | 6,1 |
| Science with and for society | 0,5 | 3,4 |
| European Institute of Innovation and Technology (EIT) | 2,7 | 20,2 |
| Joint Reserch Centers (JRC) non-nuclear | 1,9 | 14,2 |
| | | |
| Total | 77,0 | 574,6 |

| | EUR (mia.) | DKK (mia.) |
|-----------------------------------|------------|------------|
| EURATOM | 1,6 | 12,0 |
| Fusion Indirect Actions | 0,7 | 5,4 |
| Fission Indirect Actions | 0,3 | 2,4 |
| Nuclear direct actions of the JRC | 0,6 | 4,2 |

2. HORIZON 2020 PROCESS

HOW WAS THE PROPOSAL FOR HORIZON 2020 DEVELOPED AND ADOPTED?

The overall policy discussions reflected in the Horizon 2020 proposal from the Commission dates back to 2008-2009. The notion that research must contribute to solve the grand societal challenges of our time became a regular discourse with the Lund Declaration prepared during the Swedish EU presidency in 2009. Another essential factor was the midterm evaluation of FP7 published in 2010. The final proposal with its emphasis on jobs, growth, and competitiveness reflects the economical situation and the financial crisis in Europe. In 2010 the current Commission took office and prepared the Europe 2020 strategy including the Innovation Union flagship. It created the basis for including innovation and competitiveness in the next Framework Programme. In early 2011 the Commission published a reflection paper "Common Strategic Framework" which suggested including the current research and innovation funding programmes under one umbrella (FP7, CIP and the European Institute of Innovation and Technology). At the same time a public consultation was launched. During 2011 the Commission also organized a number of thematic workshops where selected experts from different areas were invited to give their views on e.g. the content of the societal challenges. Finally, the Commission published its proposal on the 30 November 2011. Subsequently, it has been negotiated in both the European Parliament and in the Council of Ministers and since early 2013 in informal trialogues between the three main EU institutions.

The Horizon 2020 package is a legislative co-decision meaning that the Council of Ministers and the European Parliament have to agree on the main parts programme. After a series of informal trialogues between the council, Parliament and the Commission during the spring 2013 the parties reached a final agreement on the 25 June 2013. Consequently, the Council and the Parliament need to endorse this agreement by voting. This is expected is to happen in the autumn of 2013. Horizon 2020 was officially launched on December 11, 2013.

HOW OFTEN WILL CALLS BE PUBLISHED UNDER HORIZON 2020?

The Work Programmes including calls are published on a biannual basis, but with annual deadlines for call for proposals. The actual call publication date and deadlines may differ from one programme part to the other. Minor changes for calls in the second year of the Work Programme may occur after the publication.

HOW ARE THE WORK PROGRAMMES PREPARED UNDER HORIZON 2020?

Directorate-General for Research & Innovation (DG RTD) is responsible for preparing the Work Programmes. The Work Programmes are the result of a number of formal and informal consultations with various stakeholders. The collaboration between DG RTD and so-called policy DGs is more structured than previously and internal coordination and working groups have been established. The Commission also consults the Advisory Groups and the Programme Committee during the preparations. In addition, a number of external stakeholder groups are consulted more or less informally. It includes the European Technology Platforms, inputs from conferences, workshops and public consultations, ad hoc expert groups and informal dialogue with stakeholders.

3. ADVOCACY AND PLAYERS

WHAT ARE THE ADVISORY GROUPS?

The Advisory Groups are independent expert groups which the Commission consults on the Work Programmes and the Strategic Programmes. They consist of scientific or industrial experts who attend the groups in their own capacity. The experts are selected due to their expertise and ability to give independent advice. The first call for expression of interest in being a member of an Advisory Group was launched in early 2013 the second in Spring 2015. You can read more about the advisory groups here.

WHAT ARE THE PROGRAMME COMMITTEES?

The Programme Committees (PC) are the member states' forum to give input to the Commission on the Work Programmes. The PCs approve the final version of the Work Programmes before the calls are published. All EUcountries and countries associated with Horizon 2020 are represented. The Programme Committees are also a link between the EU and national research systems. The Danish representatives in the Programme Committees are usually representatives from the Danish Agency for Science, Technology and Innovation (DASTI (FI in Danish)), the relevant sector ministry (Environment, Food etc.), and an expert (scientist or industry representative).

WHAT ARE THE REFERENCE GROUPS?

The Reference Groups is a Danish concept. These groups are established by the Agency for Science, Technology and Innovation (DASTI (FI in Danish)) in order to structure the dialogue between the Danish Programme Committee members and the Danish stakeholders, e.g. the universities, industry and interest organizations. For Horizon 2020, eight Reference Groups were established in March 2013, covering the areas:

- Health, demographic change and wellbeing;
- European Bioeconomy Challenges;
- Information and Communication Technologies; Nano-science, Nano-technologies,
- Materials and new Production Technologies;
- Secure, Clean and Efficient Energy;

- Europe in a changing world Inclusive, Innovative and Reflective Societies;
- Climate Action, Resource Efficiency and Raw Materials;
- SMEs and Access to Risk Finance.

You can find the list of members including contact details of the Danish Reference Groups here.

WHAT ARE THE EUROPEAN TECHNOLOGY PLATFORMS?

Most European Technology Platforms (ETP) were established during FP6 and continued under FP7. The ETPs are industry-driven and aim at uniting stakeholders related to a specific sector. The members are from industry, research and technology organizations, academia and in some cases the member states. The technology platforms prepare strategic research agendas which define research priorities for the sector and draw up plans for implementation. The ETPs are expected to continue to play a role as consulted stakeholders in Horizon 2020 by delivering input to the biannual Work Programmes.

HOW CAN ONE PREPARE FOR HORIZON 2020?

To prepare for the call for proposals in Horizon 2020 it is important to get access to early Work Programmes which give an indication of the call content, requirements, timing of the call, and deadlines. Preparation activities vary and can include:

- Establish a relevant network
- Make early warnings among your core partners as soon as you see an interesting call text
- Establish or consider cooperation with private enterprises and/or end-users
- Consider innovation potential of the project
- Consider how to include different disciplines, also disciplines outside one's usual scope
- Consider the societal or industrial impact of one's project
- Contact relevant advisers as early as possible to get advice. Please also see "Where can I seek advice?"

HOW CAN ONE PROVIDE INPUT TO THE WORK PROGRAMMES?

In general, direct contact with the Commission (DG RTD and relevant policy DGs) is important, often on an informal basis. It may be through meetings, by organizing thematic workshops or through participation in a stakeholder event organized by the Commission. Such activities are often useful in order to put forward scientific, innovative and impact related issues. Personal contact to Commission staff also provides a platform for topic related input to specific parts of the Work Programmes. Contacts to members of Advisory Group and Programme Committees as well as active participation in a relevant European Technology Platform are other important channels to provide inputs. For some areas, the Commission may organize public consultations where all stakeholders may suggest future topics. Participation and involvement in science policy active networks and/or scientific societies are platforms that allow you to attract the attention of Commission staff and other players involved in preparing the Work Programmes to certain issues, challenges, or needs.

4. RULES FOR PARTICIPATION, FUNDING AND APPLICATION

WHAT ARE THE RULES FOR PARTICIPATION?

The Rules for Participation and dissemination lay down the specific rules for participating in Horizon 2020 and the rules governing the dissemination of results from funded projects. The Rules for Participation are focusing on:

1. Structure

There will be a single set of rules governing the formerly separated research (FP) and innovation (CIP) programmes and they will also apply to other Horizon 2020 activities such as the Article 185 initiatives and the Joint Technology Initiatives. The exception is the European Institute of Innovation and Technology which has its own set of rules.

2. Participants

- The Minimum number of participants in an action is at least **three** independent legal entities established in different Member States or Associated Countries.
- Exceptions where only one legal entity established in a Member State or Associated Country is required:
 ERC, SME instrument, Programme co-fund actions, Justified actions provided for in the Work Programmes or work plan, Support actions, Training and mobility actions.

3. Funding

- Horizon 2020 will make use of the following forms of funding: Grants, Public procurement, Precommercial procurement, Procurement of innovative solutions, Prizes, including inducement prizes,
 Financial instruments: a debt financial instrument, an instrument providing equity finance for R&I, etc.
- Enhanced use of lump-sums (including output-based grants), flat rates, and scales of unit.
- A single funding rate: Up to 100% of total eligible costs, limited to maximum 70 % for actions close to
 market except for non-profit universities and research institutions who will be able to receive up to 100%,
 One project = One rate (no different rates for different types of activities). Close to market actions include
 Innovation actions, Fast track to innovation and the SME-instrument.
- Indirect costs shall be determined by applying a flat rate of 25 % of the direct eligible costs.
- Personnel costs: Wider acceptance of average personnel costs (scale of unit costs), Less requirements for time records: Researchers who work exclusively in a project will not be required to produce time records.

WHAT ARE THE INSTRUMENTS TO BE APPLIED UNDER HORIZON 2020?

Horizon 2020 will in line with the former Framework Programmes FP6 and FP7, employ four different *forms of funding*: Grants, prizes, procurement and financial instruments.

For each of these forms of funding a number of types of actions are funded in Horizon 2020:

Grants

Types of actions:

- Research and innovation actions: An action primarily consisting of activities aiming at research and technological development with possible innovation activities.
- Innovation actions: An action primarily consisting of close to market activities such as producing plans, arrangements for design for new, altered or improved products, processes or services. May include testing, prototyping, demonstrating, piloting, large-scale validation and market replication.
- Fast track to innovation (pilot): The pilot will be launched in mid-2014, and will be aimed at close-to-innovation actions with three-five partners and maximum 3 million Euro per project and fast time to grant. The scheme will be open to applications as of January 2015.

- Coordination and support actions: An action that supports accompanying measures such as standardisation, dissemination, awareness raising, and communication, networking, coordination and support services, policy dialogues and mutual learning exercises and studies.
- Support to Pre-Commercial Procurement: Procurement of research and development services involving risk-benefit sharing under market conditions, and competitive development in phases, where there is a clear separation of the research and development services procured from the deployment of commercial volumes of end-products.
- Public Procurement of Innovative solutions: Procurement where contracting authorities act as a launch customer for innovative products or services which are not yet available on a large-scale commercial basis.
- **SME Instrument:** See section "How will SME's be able to participate in Horizon 2020?"
- **ERA-NET (programme COFUND action):** Support to member states to make common strategic research aims and common calls for research projects. National financed with top-up financing from the EU. Member state participation is voluntary
- European Joint Programme (programme COFUND action): Joint Programme Initiatives (JPI's) is established on special areas with large potential for collaboration between member states. A voluntary partnership aimed at integrating and coordinating national research programmes.
- Marie Sklodowska Curie (MSCA) (includes COFUND action): An action that supports the mobility of researchers in the EU and associated countries.
- ERC Grants: Support for fundamental research. Grants are direct financial contributions.

Prizes

Types of actions:

· Inducement and recognition prizes

Procurement

Types of actions:

• Studies, advice, conferences, special service

Financial instruments

Types of actions:

· Debt and Equity Facilities

Please advise the general annexes section D for a full description of the instruments.

CAN PROJECT PARTICIPANTS BE LIABLE TO PAY BACK FUNDING TO THE EU IF A PROJECT DOES NOT REACH ITS GOALS?

As a general rule the answer is no. As long as the project produces the deliverables that have been agreed upon in the Grant Agreement with the Commission (e.g. reports, technical specifications, a prototype, a test period etc.) there will be no demands for re-payment based on an evaluation of the activities carried out in the project. However, when funding is *performance-based lump sums or inducement prizes*, the funding is given on the condition that agreed upon outputs are delivered and milestones are reached. In those cases pay-back of any prefinancing given is a possibility.

HOW WILL SME'S BE ABLE TO PARTICIPATE IN HORIZON 2020?

SMEs will be able to participate across Horizon 2020 and will be eligible in all instruments.

SME participation will be supported across the Horizon 2020 pillars. The goal is that 20 % of the budget from the pillars of Societal Challenges and Industrial Leadership will benefit SMEs directly. 7% will come from a new dedicated SME instrument .The SME instrument is open to highly innovative SMEs showing a strong ambition to develop, grow and internationalize regardless of whether they are high-tech or not. The instrument supports SMEs in three phases of innovation:

- Phase 1: Concept and Feasibility assessment. EU support in the form of a lump sum of €50,000 to present a first business plan.
- Phase 2: R&D, demonstration and market replication. € 0.5-2.5 million EU contributions to bring innovative concepts and products to market (exceptionally higher EU contribution if indicated in the work programme).
- Phase 3: Commercialization. Support and facilitation of access to private finance and EU financial instruments implemented via the European Investment Bank Group (see below "What kind of financial instruments are available in Horizon 2020"). There will be no direct funding.

Only SMEs can apply for funding under this instrument. Other entities such as large enterprises and research organisations can be involved in the projects through subcontracting.

An SME is defined as a private enterprise with up to 250 head counts, annual turnover up to 50 million euro, or annual balance sheet total of up to 43 million euro.

WHICH COUNTRIES CAN RECEIVE FUNDING IN HORIZON2020?

Horizon 2020 is open to participation from across the world. Member States (including overseas departments and overseas territories) and Associated Countries can receive automatic funding. Third countries listed in the general annexes to the Work Programmes can also receive funding (BRIC countries and Mexico are no longer included in third countries). For other countries, funding is only granted in exceptional cases:

- when provision is made in the call text
- bilateral agreement between EU and country
- when the Commission deems it essential (case by case assessment)

HOW CAN YOU COMBINE HORIZON 2020 AND OTHER EU FUNDS?

Each funding instrument has individual rules. Article 31 of Horizon 2020 Regulation – Rules for Participation allows cumulative funding, provided that the grants do not cover the same cost items.

Other EU funding instruments are for example:

- European Regional Development Fund (ERDF)
- Cohesion Fund
- <u>European Social Fund</u> (ESF)
- Cosme
- European Fund for Strategic Investment

A guide on how to combine different EU funding instruments was published in spring 2014.

WHAT KIND OF FINANCIAL INSTRUMENTS ARE AVAILABLE IN HORIZON 2020?

Horizon 2020 will set up two facilities: the Equity Facility and the Debt Facility. The implementation will be done by the European Investment Bank Group (EIB and European Investment Fund) and/or national financial institutions entrusted with the implementation of financial instruments.

A debt facility providing loans, guarantees, and other forms of debt finance to entities of all forms and sizes, including research and innovation-driven SMEs

An equity facility providing finance for early- and growth-stage investments with a particular focus on early-stage SMEs with the potential to carry out innovation and grow rapidly.

WHAT ARE THE ETHICAL RULES IN HORIZON 2020?

The rules will continue as in FP7: Participants shall comply with national legislation, regulations, and ethical rules in the countries where the activities will be carried out. Where appropriate, participants shall seek the approval of the relevant national or local ethics committees prior to the start of the action. Stem cell research can be performed by a participant if in accordance with relevant national legislation. A guide on when and how the applicant should address ethical guestions in the application is part of the application template. Please find it here.

WILL IT BE EASIER TO APPLY FOR FUNDING FROM HORIZON 2020?

There are a number of features in Horizon 2020 that should make it easier to apply for funding. Horizon 2020 will have calls for proposals with a broader scope compared to FP7 in order to encourage research institutions, enterprises and public authorities to develop and submit quality proposals for individual calls. Moreover, proposal submission has been simplified with the establishment of one common Participant Portal covering all programme parts and instruments. Finally, the common funding rate (of 100% research and innovation actions and 70% in close-to-market actions) for all enterprises should make the process of application and eligibility check easier. This means that process of SME verification, which has previously been responsible for delaying the signing of Grant Agreements, has been eliminated in all instruments apart from the SME instrument where only SMEs can apply for funding.

5. PROPOSAL

HOW AND WHERE DO I SEND IN MY PROPOSAL, FIND CALLS AND SEARCH KEYWORDS ETC.?

Proposal procedures are expected to be similar to FP7. Everything will be done electronically via a web-based Participants Portal which is common for all parts of the programme. On the participant portal you find:

- All calls
- All documents
- Key word search engine
- Proposal submission, where application-forms are also listed (Notice! You need to be registred to do this)

The full Work Programme for 2016-2017 can be found here.

HOW LONG WILL THE PERIOD BE FROM PUBLICATION OF A CALL FOR PROPOSAL TO THE DEADLINE FOR SUBMISSION OF A PROPOSAL?

As all call texts are published up to two years in advance it varies depending on when the deadline is. The period from the call opens to the deadline for submitting a proposal is a minimum of three months.

6. EVALUATION

HOW IS THE EVALUATION PROCES?

The process of evaluation will be as in FP7: On receipt of the proposal, the department in charge of the implementation of the programme will check the proposal for eligibility in accordance with the criteria defined for the programme. All eligible proposals will then be assessed independently by at least three experts against predetermined evaluation criteria.

WHAT ARE THE EVALUATION CRITERIA FOR HORIZON 2020 PROPOSALS?

The evaluation criteria under Horizon 2020 are Excellence, Impact and Implementation. The evaluation criteria are found in the <u>general annexes</u> on pages 28-31. For different instruments (Research and Innovation, SME Instrument, Co-fund etc.) are different emphasis but overall it covers areas such as:

1) Excellence

- Clarity and pertinence of the objectives
- Credibility of the proposed approach
- Soundness of concept,
- Extent that proposed work is ambitious and beyond the state of the art
- Etc.

2) Impact:

- · The expected impacts listed in the Work Programmes under the relevant topic
- Enhancing innovation capacity and integration of new knowledge
- Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets
- environmental and socially important impacts
- · Effectiveness of the proposed measures to exploit and disseminate the project results
- Etc.

3) Implementation

- Coherence and effectiveness of the work plan
- Complementarity of the participants within the consortium
- Appropriateness of the management structures and procedures, including risk and innovation management.
- Etc.

WHAT IS THE ROLE OF "EXPERT EVALUATORS"

For evaluations of proposals the Commission / Agency picks experts from lists in a database. Everyone interested in being an evaluator is free to submit their CV and a description of their fields of expertise to the database. Evaluators with expertise in innovation, close-to-market activities, and business planning will be needed for Horizon 2020.

The tasks involved:

- Evaluation of proposals.
- Monitoring of actions.
- Preparation, implementation or evaluation of programmes and design of policies.

To be considered for one of the positions it is necessary to:

- Have a high level expertise in research or innovation in any scientific and technological field, including managerial aspects.
- Have at least a university degree.
- Be available for occasional, short-term assignments.

As an evaluator you get:

- All your cost covered and a per diem allowance.
- "A good application writing course".
- International and EU Commission network.
- Insight in funding opportunities.
- And the opportunity to read a lot of interesting research proposals.

How much work is involved?

- Some work is to be expected.
- At each round you will probably have to evaluate approx. 22 applications if you are called in as an expert
 – then you will have to go to Bruxelles and agree with the other evaluators on the grades.

More details:

See the FAQ at the participants' portal

HOW TO SIGN UP AS "EXPERT EVALUATOR"?

The signing up process can take a little while. You can register yourself <u>here</u>. First you need to create an ECAS account to access the EU-system. Then you can register. When you enter the registration site you need to fill in information in six areas.

- 1. Programme selection (e.g. Horizon 2020 or other funding programmes)
- 2. Personal details (name, gender, nationality, contact information etc.)
- 3. Languages (proficiency (writing, reading and conversation) in X languages)
- 4. Education (title of qualification, institution, country, year awarded)
- 5. Area of Expertise (1. specialist field: choose from predefined areas, 2. Themes: chose which part of e.g. Horizon 2020 which would best suit your expertise for e.g. evaluating and 3. Open Keywords carefully chose keywords that suit your expertise.
- 6. Professional experience (Basically your CV: Employment History, Experience in Field, Publications and Achievements)

7. PROJECT IMPLEMENTATION

WHAT ARE THE REQUIREMENTS REGARDING PUBLICATION OF PROJECT RESULTS IN HORIZON 2020?

The normal procedure will be to give access to all publications produced in Horizon 2020 funded projects via open access repositories. This open access only applies for scientific articles and it cannot interfere with the protection of the intellectual property rights of participating enterprises. In Horizon 2020 a Pilot Action on Open Research Data is established. It aims to improve and maximize access to and re-use of research data generated by projects.

The areas participating in the pilot in the 2014-15 Work Programmes are: Future and Emerging Technologies, Research infrastructures (part e-Infrastructures), Leadership in enabling and industrial technologies, Information and Communication Technologies, Societal Challenge: 'Secure, Clean and Efficient Energy' (Smart cities and communities), Societal Challenge: 'Climate Action, Environment, Resource Efficiency and Raw materials' (except raw materials), Societal Challenge: 'Europe in a changing world – inclusive, innovative and reflective Societies' and Science with and for Society. Projects may at any stage opt out of the pilot if for example the open access hinders commercial exploitation of results, creates security issues, or is incompatible with the protection of personal data.

WHAT WILL BE THE DOCUMENTATION AND REPORTING REQUIREMENTS DURING THE IMPLEMENTATION OF A PROJECT?

Reporting of eligible costs and project deliverables will, as a general rule, be carried out every 18 months during the period of project implementation. There will, however, be the possibility of doing interim reporting every 6 months. All reporting will be performed electronically through the Participant Portal.

9. FURTHER INFORMATION

WHERE CAN I FIND MORE INFORMATION AND WHAT ARE THE KEY WEBSITES ON WHO IS WHO IN HORIZON 2020?

You can find more information on the European Commission's Horizon 2020 webpage

PARTICPANT PORTAL: WHAT IS THE MAIN ENTRANCE TO HORIZON 2020?

All information on Horizon 2020 calls, topics and deadlines, guides for applicants, rules for participation, and proposal submission forms are gathered under the <u>Participant Portal</u>. The Participant Portal has different search options to help you navigate on the web-site. See also the <u>Participant Portal Online Manual</u>.

WHERE CAN I SEEK ADVICE?

- You may contact your Regional office in Brussels: <u>South Denmark European Office</u> and <u>creoDK</u> (Capital Region Denmark EU Office).
- You can contact <u>EuroCenter</u> under the Danish Agency for Science, Technology and Innovation. They give
 advice and information to Danish companies, universities, research institutes and other operators about
 the participation in Horizon 2020.
- If you are employed by a university you could contact your local research support unit or similar office if relevant. If you are employed by the Capital Region of Denmark you can contact Enhed for Forskning og Innovation at the Capital Region Office.

- The European Commission's <u>Research Enquiry Service</u> can help with questions about Horizon 2020.
- You can also use the Danish platform EU-DK Support here.

HOW DO I FIND AND GET IN CONTACT WITH PARTNERS FOR MY PROJECT?

- If you are not already part of an international network within your field of expertise or are looking for
 project partners outside your network we recommend that you get in contact with your regional EU-office
 here. They can facilitate searches for partners via their networks, advice on relevant conferences, call
 opportunities, and the European networks in your field.
- If you are an enterprise looking for project partners or a research institution looking for business partners for your project, you can contact Enterprise Europe Network who has an extensive European partner database.
- Make use of the various partner search services provided by NCPs, CORDIS and other entities with a
 large number of partner profiles, open calls for proposals, partner requests, and networks. You can find a
 list on the <u>Participant Portal Horizon 2020 Online Manual</u>.