The EU Funding Schemes
Focus: Horizon 2020

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Outline

• General rules and funding rates
  • Research and Innovation Actions (RIA)
  • Innovation Actions (IA)
  • Coordination and Support Actions (CSA)

• Sustainable Transport: the 2019 calls for proposals

• The European Innovation Council (EIC)
  • SME Instrument (SMEI)
  • Fast Track to Innovation (FTI)
General Rules and funding rates (1/8)

Once upon a time, there was the 1st Framework Programme…

€ Billion (including EURATOM budget)

<table>
<thead>
<tr>
<th>Year</th>
<th>Funding (€ Billion)</th>
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<tbody>
<tr>
<td>1984-1987</td>
<td>3.27</td>
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<tr>
<td>1987-1990</td>
<td>5.36</td>
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<td>1990-1994</td>
<td>6.6</td>
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<td>1998-2002</td>
<td>14.96</td>
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<td>2002-2006</td>
<td>17.8</td>
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<td>2007-2013</td>
<td>53.2</td>
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<td>2014-2020</td>
<td>77.03</td>
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General Rules and funding rates (2/8)
General Rules and funding rates (3/8)

KEY FEATURES OF HORIZON 2020

- An EU Research and Innovation Framework Programme that is unique in the world in terms of:
  > budget (about EUR 80 billion, the largest Framework Programme budget ever),
  > duration (seven years),
  > budgetary framework stability,
  > and scope (research plus innovation; grants as well as loans, equity, and procurement; broad top-down thematic coverage as well as bottom-up blue-sky research; cross-border, transnational, inter-disciplinary collaboration, mobility, coordination);

- Pursuing an ambitious general objective of "building a society and economy based on knowledge and innovation";

- A simple structure, aligned with the specific objectives, comprising three pillars: "excellent science"; "industrial leadership"; "societal challenges" and two additional priorities;

- With a built-in innovation and impact orientation (challenge-based approach; funding all the way from lab to market; enhanced business and SME involvement; impact-oriented call texts; expected impact to be spelled out in proposals; impact looked at in evaluation; regular reporting and monitoring);

- Excellence as guiding principle and main evaluation and selection criterion;

- Allocation of funding through a strategic programming process and two-year work programmes, and

- Wide range of instruments and actions.
General Rules and funding rates (4/8)

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020

EXCELLENT SCIENCE
- Future and Emerging Technologies
- European Research Council
- Marie Curie Actions
- Research Infrastructures

INDUSTRIAL LEADERSHIP
- Leadership in Enabling & Industrial Technologies
  - Information and communication technologies
  - Nanotechnologies
  - Advanced materials
  - Biotechnology
  - Advanced manufacturing and processing
  - Space
- Access to Risk Finance
- Innovation in SME

SOCIETAL CHALLENGES
- Health, Demographic Change and Wellbeing
- Food security, sustainable agriculture, marine and maritime research and the bio-economy
- Secure, clean and efficient Energy
- Smart, Green and Integrated Transport
- Climate Actions, Resource Efficiency and Raw Materials
- Europe in a changing world: inclusive, innovative and Reflective Societies
- Secure Societies - Protecting Freedom and Security of Europe and its Citizens

Joint Research Centre (JRC)
Widening Participation
Science with and for Society
European Institute of Innovation and Technology (EIT)
Joint Programming (P2P)
Joint Technology Initiatives (PPP)
The participation in Horizon 2020 calls for proposals is allowed to a consortium of minimum No.3 partners from at least No.3 EU member states.

Partners must be business, academic, local authorities, NGOs. The choice of the kind of partners depends on the goal of the topic chosen.

Countries eligible for H2020 funding are the 28 EU Member States, EU Accession countries, Associated countries such as Turkey, Israel, Norway, Iceland, Switzerland, and more.
General Rules and funding rates (6/8)

The calls for proposals in Horizon 2020 can be allocated to one or more of these different categories:

• RIA – Research and Innovation Actions – 100% funded
• IA – Innovation Actions – 70% funded
• CSA – Coordination and Support Actions – 100% funded

Indirect costs are calculated as 25% (flat rate) of the direct costs.

Ex. if your cost is €2,000/month and you are working on an IA-funded project, your funding will be: 2,000+(2,000*0.25)=2,500 *0.7 = €1,750/month
The calls for proposals in Horizon 2020 can be in a Single Stage or in a Double Stage:

- **1-Stage** – by the deadline the whole project, detailed budget must be submitted
- **2-Stage**
  - **1st stage** – by one first deadline the essential core of the project, overall budget are submitted. **Mandatory for accessing the 2nd stage**
  - **2nd stage** – if the 1st stage was positively evaluated, the full project and detailed budget are submitted to a second deadline. If the evaluation of the 2nd stage is not successful, the entire process is cancelled

The project budgets differ among topics and are suggested by the EC in relation to the budget allocated to each call
It has recently started the discussion of the next Multi-annual Financial Framework (MFF) – the EU Budget – for the next 7 years from 2021 to 2027.

The proposal is to increase the budget allocated to Research & Innovation activities:

• from the current **€77bn of Horizon 2020** (2014-2020, 28 EU Member States)
• to the ambitious **€100bn of FP9** (2021-2027, 27 EU Member States)

Sustainable Transport: the 2019 calls (1/3)

The calls regarding transport are part of SC4 (Societal Challenge no. 4): “Smart Green and Integrated Transport” and are grouped as follows with their own “call identifier”:

- **Mobility for Growth (MG)** — H2020-MG-2018-2019-2020

- **Digitasing and Transforming (DT) European Industry and Services: Automated Road Transport (ART)**

Sustainable Transport: the 2019 calls (2/3)

The calls using the 2019 budget will open on 05 Sept 2018 and 04 Dec 2018:

• Mobility for Growth (MG) – No.14 calls will open: No. 8 will open on 05 Sept 2018 (end: 16 Jan 2019 and 12 Sept 2019) and No.6 will open on 04 Dec 2018 (end: 24 Apr 2019)

• DT-Automated Road Transport (ART) – No. 2 calls (1 RIA+1 IA) will open on 04 Dec 2018 with deadline by 24 Apr 2019

• Green Vehicles (GV) – No.3 calls (IA) will open on 04 Dec 2018 with deadline by 24 Apr 2019
Mobility for Grow is usually the most popular theme that regards several modes of transport. In particular:

- **MG-1** – Building a Low-Carbon, Climate-resilient Future: Low-Carbon and Sustainable Transport
- **MG-2** – Safe, Integrated and Resilient Transport Systems
- **MG-3** – Global Leadership and Competitiveness
- **MG-4** – Accounting for the People
- **MG-BG** – Blue Growth
The European Innovation Council (EIC)

The EIC pilot was launched in 2018 to support top-class innovators, entrepreneurs, small companies and scientists with bright ideas and the ambition to scale up internationally.

There are €2.7bn funding available for 2018-2020

It brings together the parts of Horizon 2020 that provide funding, advice and networking opportunities for those at cutting edge of innovation.

The EIC pilot focusses on continuous improvement, networking, learning opportunities and facilitating access to business partners and investors.
The European Innovation Council (EIC)

The EIC pilot includes:

I. The SME Instrument

II. The Fast Track to Innovation

III. The FET Open – Future and Emerging Technologies

IV. The EIC Horizon Prize (with prescribed topics)

https://ec.europa.eu/research/eic/index.cfm
Since 2018 the SME Instrument - launched in 2014 with the beginning of Horizon 2020 - is part of the EIC.

The SME instrument supports close-to-market activities, with the aim to give a strong boost to breakthrough innovation with a market-creating potential.

Highly innovative SMEs with a clear commercial ambition and a potential for high growth and internationalisation are the prime target.

Their idea should be at least $\text{TRL} \geq 6$
G. Technology readiness levels (TRL)

Where a topic description refers to a TRL, the following definitions apply, unless otherwise specified:

- **TRL 1** – basic principles observed
- **TRL 2** – technology concept formulated
- **TRL 3** – experimental proof of concept
- **TRL 4** – technology validated in lab
- **TRL 5** – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- **TRL 6** – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- **TRL 7** – system prototype demonstration in operational environment
- **TRL 8** – system complete and qualified
- **TRL 9** – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)
The SME Instrument has a total budget of **more than €1.6 billion** for 2018-2020.

The instrument is structured in three phases, with the aim of transforming **disruptive ideas** into concrete, innovative solutions with a European and global impact. SMEs are recommended to apply for Phase 1, but may also apply directly for subsequent phases:

**PHASE 1**
Concept & Feasibility Assessment
Idea to concept (6 months)
- The SME will draft an initial **business proposal**.
- The European Union will provide **€50 000 in funding** and business coaching.

**PHASE 2**
Demonstration, Market Replication, R&D
Concept to Market-Maturity (1-2 years)
- The SME will further develop its proposal through **innovation activities**, and draft a more developed **business plan**.
- The EU may contribute between **€0.5 million and €2.5 million** and provide business coaching.

**PHASE 3**
Commercialisation
Prepare for Market Launch
- The SME will receive extensive support to help polish its concept into a marketable product, and have access to **networking opportunities**.
- The EU will not provide funding in this phase.

**USP No.1**: it is allowed a solo participation
**USP No.2**: it is possible to access Phase 2 without Phase 1
EIC (ii) - the Fast Track to Innovation

This scheme is for relatively mature ground-breaking technologies, concepts and business models which are close to market.

Proposals must come from consortia of 3 to 5 legal entities who want to see quick market uptake of new technologies. Grants of up to €3 million may be awarded (70% funding rate, 100% for not-for-profit organisations).

60% of project budget and/or majority of partners from Industry is mandatory

Fast Track to Innovation has a total budget of around €300 million for 2018-2020.
EIC (iii) – FET Open

Future and Emerging Technologies (FET) Open offers grants of typically €3 million to promote collaborative, inter-disciplinary research and innovation on future and emerging technologies. These grants are for consortia of at least 3 entities.

FET Open also offers “FET Innovation Launchpad” grants of up to €100,000 for short individual or collaborative actions to help turn the results of FET Open projects into innovations.

FET Open has a total budget of around €700 million for 2018-2020.
EIC (iv) – EIC Horizon Prizes

The EIC Horizon Prizes are awarded to whoever can most effectively meet a defined challenge, without prescribing how that challenge should be solved. These will boost breakthrough innovation across sectors by fostering cutting-edge solutions which bring major benefits to citizens and society.

Each EIC Horizon Prize has an ambitious goal to solve a major challenge facing society, without detailing how this should be achieved or who should achieve it.

Individual prizes amount to 5 or 10 million euro. The total budget for EIC Horizon Prizes until 2020 is €40 million.