

H2020 Research and Innovation Programme

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What is H2020?

According to the official website:

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly € 80 billion of funding available over 7 years (2014 to 2020) - in addition to the private investment that this money will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market.

Objectives

Three pillars:

- Excellent Science.
- Industrial Leadership.
- Societal Challenges.

Two objectives:

- Spreading excellence & widening participation.
- Science with and for society.

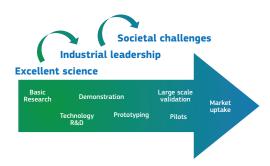


Figure: Evolution of an idea along the three pillars

Requirements

The most important requirement is a *full* proposal document¹. A proposal consists of 2 main parts:

- Administrative forms including the structured information of the basic administrative data, declarations of partners, organisations and contact persons, etc.
- Technical annex, which is the detailed description of the planned research and innovation project outlining work packages, costs, etc.

¹Proposal template: http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/pt/2016-2017/h2020-call_pt-ria-ia-2016-17_en.pdf

ICT scope on H2020's pilars

Excellent Science

Frontier Research (ERC)
Future & Emerging Technologies (FET)
Skills & career development (Marie Skłodowska-Curie)
Research Infrastructures

Industrial Leadership

Leadership in enabling
& industrial technologies
ICT (C)
Nanotech., Materials, Manuf. & Processing
Biotechnology
Space
Access to risk finance
Innovation in SMEs (C)

Societal Challenges

Health, demographic change & wellbeing Food security, sustainable agriculture, & the bio-based economy Secure, clean & efficient energy Smart, green & integrated transport Climate action, resource efficiency, & raw materials Inclusive, innovative & reflective societies Inclusive, s

Figure: Scope of the ICT on H2020 pilars

A proposal's lifecycle



Figure: Lifecycle of a proposal

Finding a call for proposals

Find the most adequate call for proposals for your project idea.

Finding partners

Many calls require a team of at least three partners.

Proposal's submission

All proposals are submitted online before the deadline.

Proposal's lifecycle

Evaluation

Once the deadline has passed, all proposals are evaluated by a panel of independent specialists in their fields (five months). The outcome of evaluation:

- O Proposal does not meet the criterion at all or cannot be assessed due to missing or incomplete information
- 1 Poor: serious weaknesses
- **2 Fair**: goes some way to meeting criterion, but with significant weaknesses
- **3 Good**: but with a number of shortcomings
- 4 Very good: but with a small number of shortcomings
- 5 Excellent: meets criterion in every relevant respect. Any shortcomings are minor

Proposal's lifecycle

Proposal's lifecycle

Grant agreement

The European Commission then draws up a grant agreement with each participant, confirming the research & innovation activities that will be undertaken, the project duration, budget, rates and costs, the European Commission's contribution, all rights and obligations and more. The time limit for signing the grant agreements is generally **three months**.

Range of funding

Type of action	Code	Minimum conditions	Funding	Typical duration	Average EC contribution	Aim	
Research & Innovation Action	RIA	≥ 3 legal entities from 3 MS/AC	100%	36-48 months	€ 2.0 - 5.0 M	Collaborative research projects	
Innovation Action	IA	≥ 3 legal entities from 3 MS/AC ²	70%	30-36 months	€ 2.0 - 5.0 M	Produce plans & arrangements or designs for new, altered or improved products, processes or services	
Coordination & Support Action	CSA	1 legal entity	100%	12-30 months	€ 0.5 - 2.0 M	Accompanying measures (standardisation, dissemination), no research	
ERC Grants	ERC	1 legal entity in MS/AC	100%	60 months	Starting: \leq € 2.0 M Consolidator: \leq € 2.75 M Advanced: \leq € 3.5 M	Support excelent investigators and their research teams to pursue ground-breaking, high-gain/high-risk research	
SME Instrument	SME	1 SME in MS/AC	3 phases: - Phase 1, lump sum of € 50 K per project - Phase 2: €1 - 2.5 M per project (1-2 years), 70% of eligible costs reimbursed - Phase 3: no funding			Combination of demonstration activities (testing, prototyping), market replication	
Fast Track to innovation	FTI	≤ 5 legal entities from 5 MS/AC	70%	-	≤ € 3.0 M	Produce plans & arrangements or designs for new, altered or improved products, processes or services	

Table: Fundings per type of action

²MS: EU Member State, AC: Associated Country, SME: Small and Medium-sized Enterprises

Expected results

- Expected results depend on the specific call for proposals and context of the project.
- Nevertheless, it is stated that open access must be granted to all scientific publications resulting from Horizon 2020 actions, and proposals must refer to measures envisaged.
- In order to receive fundings, periodically some deliverable artifacts should be presented, like information, special report, a technical diagram brochure, list, a software milestone or other building block of the action.

Mexican participation

- European researchers can include partners from anywhere in the world when preparing H2020 proposals.
- In this sense, Mexican researchers, enterprises and institutions can team up with their European partners to participate in projects under H2020.
- Mexico created in February 2014 a complementary funding mechanism called CONACYT-Horizon 2020 providing a source of financing "project-by-project participation" to Mexican partners in successful H2020 projects covering all thematic areas
- Mexican partners do not receive funding directly from H2020, but from the FONCICYT³.

³Fondo de Cooperación Internacional en Ciencia y Tecnología del CONACYT

Call for proposals examples

Topic ID	Topic title	Budget (M €)	Opening	Deadline 2016	Deadline 2017
Advanced Comp	outing and Cloud computing				
ICT-05-2017	Customized and low energy computing	26.0	08/12/16		25/04/17
ICT-06-2016	Cloud Computing	45.0	20/10/15	12/04/16	
Future Internet					
ICT-09-2017	Networking research beyond 5G	18.0	10/05/16	08/11/16	
ICT-10-2016	Software Technologies	31.0	20/10/15	12/04/16	
ICT-12-2016	Net Innovation Initiative	20.2	20/10/15	12/04/16	
Content					
ICT-19-2017	Media and content convergence	39.0	10/05/16	08/11/16	
ICT-22-2016	Technologies for Learning and Skills	31.0	20/10/15	12/04/16	
ICT-23-2017	Interfaces for accessibility	12.0	08/12/16		25/04/17
ICT-24-2016	Gaming and gamification	12.0	20/10/15	12/04/16	
Robotics and A	utonomous Systems				
ICT-25-2016	Advanced robot capabilibites research and take-up	30.0	20/10/15	12/04/16	
ICT-26-2016	System abilities, development and pilot installations	42.0	20/10/15	12/04/16	
ICT-28-2017	Robotics Competition, coordination and support	5.0	08/12/16		25/04/17

Table: Calls for proposals regarding to the Industrial Leadership pilar.

References

All information extracted from official documentation available at: Horizon 2020 The EU Framework Programme for Research and Innovation, http://ec.europa.eu/programmes/horizon2020/