Horizon 2020

Working with SMEs on projects
Working with SMEs in Horizon 2020

- Horizon 2020 covers the entire innovation cycle, from basic research to introducing the product to the market (FTI Pilot) and therefore, requires the involvement of different actors, not just research organisations/ universities.

- Pretty much any organisation in the world can participate in the programme.

- SME/ industry participation is particularly important for Innovation Actions/ Research and Innovation Actions.

- Involvement of the non-academic sector is particularly important for MSCA, where the focus is on ensuring that researchers can benefit from being exposed to the non-academic environment.
Why SMEs matter?

SMEs account for what percentage of all EU enterprises?

A) 55%
B) 99%
C) 72%
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SMEs in Horizon 2020 - context

• SMEs constitute the backbone of the European economy accounting for 99% of all enterprises, 67% of employment, and 58% of gross value added.

• SMEs across Europe struggle to achieve a pre-crisis level of employment and value added.

• R&D activities of SMEs were much more affected by the crisis than those of large companies.
  – difficulties in finding financing
  – credit constraints
  – decline in available cash-flows.
SMEs in Horizon 2020 - policy

• Innovation Union:
  – One of Europe 2020 flagship initiatives
  – Aims to create an innovation-friendly environment that makes it easier for great ideas to be turned into products and services that will bring our economy growth and jobs.

  – Key priorities related to SMEs:
    • Enhancing access to finance for innovative companies
    • Creating a single innovation market
    • Promoting openness and capitalising on Europe's creative potential
    • Spreading the benefits of innovation across the Union
Horizon 2020 structure

Excellent Science
- European Research Council (ERC)
- Future and Emerging Technologies (FET)
- Marie Skłodowska-Curie Actions (MSCA)
- Research Infrastructures

Industrial Leadership
- Leadership in Enabling and Industrial Technologies (LEIT) - ICT, KETs, Space
- Access to Risk Finance
- Innovation in SMEs

Societal Challenges
- Health and Wellbeing
- Food security
- Transport
- Energy
- Climate action
- Societies
- Security

Widening Participation; Science with and for Society
- European Institute of Innovation and Technology (EIT)
- EURATOM
- Joint Research Centre (JRC)
New approach to SMEs

- Under Horizon 2020, Leadership in Enabling and Industrial Technologies (LEIT), and Societal Challenges are of utmost importance for SMEs.

- New instrument dedicated solely to SMEs not thematically organised but implemented across these priorities by means of a bottom-up approach.

- Change of approach:
  - Scope shift: from R&D towards innovation
  - Target shift: concerning the participation of SMEs
  - System shift: concerning the programme structure
Research and Innovation action

• Description
  – Action primarily consisting of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution. For this purpose they may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment.

• SME involvement is strongly encouraged
Research and Innovation action

• Suggested composition of the consortium:

  – Research organisation/ university – research activities
  – Innovation (testing, prototyping, demo) – industrial partners, preferably SMEs
  – Testers of the innovative solution
  – End users
Innovation action

• Description

  – Actions primarily consisting of activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services. For this purpose they may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication.

  – Projects may include limited research and development activities.

• SME involvement is crucial for this type of actions!
Who do I need in a consortium?

• Depends on topic and type of action

• Certain calls target specific partner types i.e. SMEs

• Partners must always match activities in proposal (especially now with the new wording of the evaluation criteria), so do not add SMEs simply for the sake of having them on the project.

• Commission normally favours large and ambitious projects and thus prefers large and diverse consortia.

• Golden rule: always go for the best organisations/people for the job!
How to find SMEs

• Existing contacts
• Past projects
• Partner searches: CORDIS, etc.
• EU conferences and information days
• National Contact Points (especially the SME NCP)
• Enterprise Europe Network (innovative SMEs)
• Social Media (Linked-in etc.)
Enterprise Europe Network

• Hosted by over 600 organisations (chambers of commerce, universities, development agencies, etc.) in more than 50 countries in the world.

• Provides support to SMEs and helps with finding business partners, as well as partners for H2020 projects.

• Access to detailed databases of innovative SMEs, so can easily find the SMEs you need!

• [http://een.ec.europa.eu](http://een.ec.europa.eu)
First set of data on 2014 calls

• Available on [CORDIS](https://cordis.europa.eu) from March, updated in July

• Can be used to determine:
  – Average EU contribution per type of action
  – Average number of partners per type of action
  – Average length of projects
  – Type of partners involved

• Cannot be used to determine success rates!

• Also... UKRO factsheet and Portal articles
“.. Ensure excellent and innovative research training as well as attractive career and knowledge-exchange opportunities through cross-border and cross-sector mobility of researchers to best prepare them to face current and future societal challenges.”

Total budget: €6.2bn
Marie Skłodowska-Curie Actions

Innovative Training Networks (ITN)
- For Early Stage Researchers

Individual Fellowships (IF)
- For Experienced Researchers

Research and Innovation Staff Exchange (RISE)
- Exchange visits (secondments) of staff
### Key MSCA Definitions

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>Early Stage Researcher (ESR)</strong></td>
<td>At the time of recruitment (ITN) by the host organisation, must be in the first 4 years (full-time research experience) of their research careers and have not been awarded a doctoral degree</td>
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<tr>
<td><strong>Experienced Researcher (ER)</strong></td>
<td>At the time of the call deadline (IF) or secondment (RISE) by the host organisation, must be in possession of a doctoral degree or have at least 4 years of full-time equivalent research experience</td>
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<tr>
<td><strong>Academic sector</strong></td>
<td>Includes universities and higher education institutions (public and private) awarding degrees, non-profit research institutions (public and private), and international European interest organisations</td>
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<tr>
<td><strong>Non-academic sector</strong></td>
<td>Includes any socio-economic actor not included in the academic sector (SMEs, NGOs, museums, Government, etc.)</td>
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<tr>
<td>Innovative Training Networks</td>
<td>European Joint Doctorates</td>
</tr>
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<td>------------------------------</td>
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<tr>
<td>• At least three beneficiaries from different MS/AC</td>
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</tr>
<tr>
<td>• Doctoral programme enrolment optional</td>
<td>• Doctoral programme enrolment mandatory</td>
</tr>
<tr>
<td>• Involvement of non-academic sector is essential</td>
<td>• Joint governance, admission, selection, supervision, monitoring and assessment mandatory</td>
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<td></td>
<td>• Award of joint, double or multiple doctoral degree mandatory</td>
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The Europe 2020 Strategy aims at making the EU more innovative and more dynamic by 2020.

This requires researchers to become more entrepreneurial and innovative by leaving the academic environment and benefitting from exposure to the non-academic sector, especially industry.

Commission assesses that 1/3 of all knowledge is ‘produced’ in Europe, but we are not particularly good in turning these into innovations. For this to change, we need a new generation of researchers who will be able to connect the dots between research and innovation.
Individual Fellowships (IF)

European Fellowships (12-24 months)
- Standard Panel
- Enterprise and Society Panel
- Career Restart Panel (CAR)
- Reintegration Panel (RI)
- From any country to MS/AC

Global Fellowships (12-24 months + 12 month return phase)
- New

Outgoing
Return

Secondment from MS/AC to third country
Mandatory return phase in Europe (not subject to mobility rule)
Secondments in IF project

<table>
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<tr>
<th>Duration of IF project</th>
<th>Max. secondment duration</th>
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<tr>
<td>≤18 months</td>
<td>3 months</td>
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<tr>
<td>&gt;18 months</td>
<td>6 months</td>
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- Highly recommended as a tool for knowledge transfer and training opportunity
- Must take place in MS/AC (but shorter visits to Third Countries eligible)
- Can be split into shorter periods
- Expected to take place in a different sector (non-academic/academic)

Secondment ≠ short visit or field work
Training activities on MSCA projects

• Training in research methods and techniques
• Personal Career Development Plan
• Complementary skills training – ethics, research management, IPR, grant writing, gender training
• Transferable skills training – public engagement, communication, entrepreneurship, management
• Conferences, seminars, public fora etc.
• Involvement in the organisation of ITN activities
Fast Track to Innovation Pilot
Fast Track to Innovation Pilot

- FTI will run in 2015 and 2016 with a continuously open call and three cut off dates.
- Aims to reduce the time from idea to market and give innovations the last push required before introduction to market.
- Time to grant not exceeding six months.
Fast Track to Innovation

- Supports projects undertaking innovation from the demonstration stage through to market uptake (TRL6)

**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)
Focuses on innovation actions under LEIT and Societal Challenges with a bottom-up-driven logic.

- Financial aspects - EU contribution covers:
  - 70% direct eligible costs + 25 indirect costs
  - Non-profit organisations: 100% direct costs + 25% indirect costs

- Aims to speed up the time from idea to market and to increase the participation of SMEs and first time applicants.
Fast Track to Innovation

• Expected impact:
  – Fast development, commercial take-up and/or wide deployment of sustainable innovative solutions (products, processes, services, business models etc.
  – Time to initial market take-up **no later than 3 years after the beginning of the FTI project.**
  – Enhanced competitiveness and growth of business partners in the consortium, measured in terms of turnover and job creation.
  – Increased industry participation, including SMEs, and more industry first-time applicants to Horizon 2020.
  – Leveraging more private investment into research and/or innovation.
FTI projects

• Must be **business-driven** and clearly demonstrate a realistic potential for quick deployment and market take-up of innovations.

• Must relate to any objective under LEIT (Pillar 2), or Societal Challenges (Pillar 3) i.e. specific call, or topic.

• Should be trans-disciplinary in nature and include cross-sector elements.
Consortia:

- Must involve participants from industry (broadly defined).
- May also include universities, research and technology organisations, and further innovation actors. Actors that can play a key role in the commercialisation process, such as cluster organisations, end-users, industrial associations, incubators, investors, or the public sector, are encouraged to take part.
- First-time industry* applicants and SMEs are particularly welcome (important during evaluation).

*Registering on Participant Portal for the first time
Consortia must have between 3 and 5 beneficiaries (MS/AC only).

At least one of the following minimum conditions shall be met: either

- at least 60% of the overall budget of the proposal must be allocated to consortium partner(s) from industry, or
- the minimum number of industry participants must be 2 in a consortium of 3 or 4 partners, and 3 in a consortium of 5 partners.

The maximum EU contribution per project is €3 million
Proposals must include a business plan, which will

- Describe the market potential (potential users/customers and benefits for them; targeted European/global markets, etc.)
- Business opportunities for participants
- Measures to enhance the probability of eventual commercial take-up
- Credible commercialisation strategy that identifies next steps and specifies other actors to be involved.
## FTI Pilot – 2016 cut off dates

<table>
<thead>
<tr>
<th>Topics (Type of Action)</th>
<th>Budgets (EUR million)</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td></td>
<td>2016</td>
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Opening: 02 Dec 2015

<table>
<thead>
<tr>
<th>Topics (Type of Action)</th>
<th>Budgets (EUR million)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>FTIPilot-01-2016 (IA)</td>
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<td>15 Mar 2016</td>
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<td></td>
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<td>01 Jun 2016</td>
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| Overall indicative budget   | 100.00                |                     |

The budget available will be divided equally between each cut-off date.
Thank you