BUSINESS FINLAND

EU funding opportunities

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H2020 – the basics in short

**Funding**
- Typical grant 4-12 M€ for 3 years
- 100% or 70% funding even for large corporations

**Consortium**
- Typically 6-12 partners from 4-5 countries
- Minimum requirement is 3 partners from 3 countries

**Maturity scope**
- Range from basic research to close-to-market
- The call text defines the desired TRL

**Ownership**
- IPR for the developer.
- Details in Consortium Agreement.
## H2020 Benefits

Externally funded projects are not only about the funding

<table>
<thead>
<tr>
<th>Partners</th>
<th>Positive PR</th>
<th>R&amp;D experts &amp; sites</th>
<th>Lower risk in long term R&amp;D</th>
<th>Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Build your European value chain</td>
<td>• Communication and dissemination provide positive publicity</td>
<td>• Access to publicly funded R&amp;D sites and pilot facilities</td>
<td>• Longer term R&amp;D with both opportunities and risks</td>
<td>• Finding new customers</td>
</tr>
<tr>
<td>• Assess and engage your future business partners</td>
<td>• Participate in solving bigger challenges</td>
<td>• Your capability validated by neutral and respected R&amp;D player</td>
<td>• Public funding for things you might not afford otherwise</td>
<td>• Creating new markets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Influencing regulations and standards</td>
</tr>
</tbody>
</table>

Note: H2020 includes technology roadmaps, market signals and industrial lobbying. The Calls may provide a hint where the markets and your competitors are going.
H2020 has 13 months to go, still several hundreds of open calls

• European Innovation Council (EIC): €1.2 billion (e.g. FTI €100 million)
• A low-carbon, climate resilient future: €3.7 billion
• Circular economy: €1 billion
• Digitizing and transforming European industry and services: €1.8 billion
• Security Union: €1 billion
• Enhancing international cooperation: €550 million
• Actions on food and natural resources: €209 million
• ERC: €2.2 billion

Why now?

• Still a lot of calls and funding before H2020 ends
• H2020 rules are known (unlike the next program)
• H2020 proposal and project processes well tested & work smoothly
• Good funding rates (70/100% +25% overhead)
• Nice and agile bottom-up instruments with good hit rates or good funding rates

Every cent of H2020 budgets will be granted to someone – the beneficiaries include your peers and European competitors!
Different types of EU funding opportunities in short

Traditional H2020 Calls
- Call text describes in detail what kind of research and results can get funded
- Good funding rates and grants
- 500+ calls still open in 2020

H2020’s instruments with relatively free topic
- Fast Track to Innovation FTI
- EIC Accelerator Pilot (was SME2)
- MSCA
- ERC

H2020 joint undertakings
- Funding from combined sources (H2020, national, industry)
- For transport, ECSEL-JU is the most relevant

Eureka Clusters
- Eureka application, but national decisions & funding
- Eurostars
- Eureka/Penta, ITEA3, SMART, etc

EU funding outside H2020
- CEF, TEN-T
- LIFE+
- Pesco/PADR
- ERDF Structural funds
- etc
The "traditional" H2020 Calls with detailed call texts
• over 500 of these still left

<table>
<thead>
<tr>
<th>Ticker</th>
<th>Call topic</th>
<th>deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG-07-2019-2020</td>
<td>The Future of Seas and Oceans Flagship Initiative</td>
<td>22/01/2020</td>
</tr>
<tr>
<td>BG-10-2020</td>
<td>Fisheries in the full ecosystem context</td>
<td>22/01/2020</td>
</tr>
<tr>
<td>BG-11-2020</td>
<td>Towards a productive, healthy, resilient, sustainable and highly-valued Black Sea</td>
<td>22/01/2020</td>
</tr>
<tr>
<td>DT-ART-05-2020</td>
<td>Efficient and safe connected and automated heavy-duty vehicles in real logistics operations</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>DT-ART-06-2020</td>
<td>Large-scale, cross-border demonstration of connected and highly automated driving functions for passenger cars</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>LC-BAT-11-2020</td>
<td>Reducing the cost of large batteries for waterborne transport</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>LC-GV-06-2020</td>
<td>Advanced light materials and their production processes for automotive applications</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>LC-GV-07-2020</td>
<td>Reducing the environmental impact of hybrid light duty vehicles</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>LC-GV-08-2020</td>
<td>Next generation electrified vehicles for urban and suburban use</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>LC-GV-09-2020</td>
<td>Setting up a common European research and innovation strategy for the future of road transport</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>LC-MG-1-12-2020</td>
<td>Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions</td>
<td>09/01/2020</td>
</tr>
<tr>
<td>LC-MG-1-12-2020</td>
<td>Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>LC-MG-1-13-2020</td>
<td>Decarbonising long distance shipping</td>
<td>09/01/2020</td>
</tr>
<tr>
<td>LC-MG-1-14-2020</td>
<td>Understanding and mitigating the effects on public health of emerging non-regulated nanoparticle emissions issues and noise</td>
<td>09/01/2020</td>
</tr>
<tr>
<td>LC-MG-1-15-2020</td>
<td>Towards global environmental regulation of supersonic aviation</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-2-13-2020</td>
<td>Coordination and support for an integrated freight transport and logistics system</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-2-14-2020</td>
<td>The effects of automation on the transport labour force, future working conditions and skills requirements</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-3-4-2020</td>
<td>Innovative electric network architectures and systems, optimising global energy, electrical power, data and communication for aviation</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-3-5-2020</td>
<td>Next generation multifunctional and intelligent airframe and engine parts, with emphasis on manufacturing, maintenance and recycling</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-3-6-2020</td>
<td>Towards sustainable urban air mobility</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-3-8-2020</td>
<td>First of a Kind' solutions for sustainable transport and mobility: EU initiative for accelerating EU-wide market access, scale up and derisking</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-4-10-2020</td>
<td>Improving impact and broadening stakeholder engagement in support of transport research and innovation</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-4-7-2020</td>
<td>Digitalisation of the transport system: data sharing</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-4-8-2020</td>
<td>Advanced research methods and tools in support of transport/mobility researchers, planners and policy makers</td>
<td>21/04/2020</td>
</tr>
<tr>
<td>MG-4-9-2020</td>
<td>The European mobility culture of tomorrow: Reinventing the wheel?</td>
<td>21/04/2020</td>
</tr>
</tbody>
</table>
H2020 Calls in funding & tenders portal

Efficient and safe connected and automated heavy-duty vehicles in real logistics operations

ID: DT-ART-05-2020

Focus area: Digitising and transforming European Industry and services (DT)
Type of action: IA Innovation action

Deadline Model: single-stage
Planned opening date: 03 December 2019
Deadline: 21 April 2020 17:00:00 Brussels time

Work programme: Smart, green and integrated transport

See all topics of this call
How to read the Call text?

The Call text defines e.g.

- Requested activity and results
  - Specific challenge (= context, motivation)
  - Scope (= the activities in your project)
  - Expected impacts (= the results to deliver)
- Max grant for your project (typically 3-15 M€)
- Funding rate; RIA 100%+25%, IA 70%+25%
- TRL, i.e., how close to market you are
- Consortium and duration
  - Typically min 3 partners from 3 countries for 3 years
- Single stage or two stage proposal process
- Deadline (= sharp!)

What’s essential in it?

- The proposal needs to respond in ALL the text. If something is missing, you’re out.
- The results and actions are delivered by the consortium together. Consider what you can/want to do yourself, then list the partners you need.
- Make decisions and kick off 4-6 months before DL!
Technology readiness level defines which call suits for you

H2020 TRL definitions

- 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 (industrially*) relevant environment
- TRL 6 – technology demonstrated in (industrially*) relevant environment
- 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
EIC accelerator Pilot (SME funding)

- For innovative SMEs
- No consortium needed
- Two tracks:
  - Grant max 2,5M€ (70%)
  - Blended; Equity max 15 M€
- 24 month project
- Funding for both finalising R&D and business development
- This is the only path for an SME to get 2,5M€ without diluting ownership!

The proposal is like a business plan; To be competitive, you need

- Clearly novel and innovative product, even disruptive
- High enough maturity: At least TRL 6
- Good business plan and skilful team
- Ambition and chances for international growth
- IPR strategy, freedom to operate (FTO)
- European benefit – what’s in it for the rest of the EU?

More information & advice from Business Finland: Outi.Kauppinen@BusinessFinland.fi, Heini.Gunther@BusinessFinland.fi
H2020 with “free topic”: Fast track to innovation

- For close to market innovations with strong business potential and risk
- 100 M€ annually, the next cut offs
  - 18.2.2020
  - 9.6.2020
  - 22.11.2020

- 1-3 M€ grant, 70%+25% funding rate
- Min 3 countries, max 5 partners
- Open also for LE’s, 1-2 RTOs allowed
- Duration 24 months
- Ready to market in 3 years after kick off
- Bottom-up - free choice of idea!
- Focus in TRL6-8; first a demo in relevant environment

More information & advice from Business Finland: Outi.Kauppinen@BusinessFinland.fi, Heini.Gunther@BusinessFinland.fi
H2020 with relatively free topic:
ECSEL Joint Undertaking Electronics components and systems for European Leadership

Compared to typical H2020 RIA/IA;
• Very large consortiums;
  • typically 30-60 partners
• Very big total budgets; even 100M€
  • In RIA max 15 M€ from H2020 In IAs max 30 M€ from H2020
• Smaller funding rates; 40-70%
  • EU share 20/25/30/35%
  • National share often the same, but depends on the country
• Higher hit rates; 20-60%

More information & advice from Business Finland: Kari.Leino@BusinessFinland.fi, Kimmo.Ahola@BusinessFinland.fi
Eurostars

National level decisions and funding

Dedicated to research-performing SMEs. Coordinator must invest 10% to R&D

Bottom-up approach: No thematic restriction for the area of innovation.

Budget 0.5 k€-6 M€, funding rates about 50%, max 36 months

To the market within 2 years after the project completion. (excl. clinical trials)

Need 2+ countries in consortium. EU 28 countries, Turkey, Israel and South Korea.

72 % of the participants are SMEs, the rest consists of RTOs and LEs

Cut-offs in autumn and spring

Hit rate about 30%

More information & advice from Business Finland: Matti.Evola@BusinessFinland.fi
National funding with relatively free topic: EUREKA Clusters

A typical Cluster project

- 2-14 participants
- 3-4 countries
- average duration 30 months
- average project cost 1.5 - 15 M€

- Telecommunications
- Smart electronics systems
- Low carbon energy technologies
- Software intensive systems and services
- New Cluster on Metallurgy
- Micro and Nano electronic technologies and applications
- Advanced manufacturing program

More information & advice from Business Finland: Kari.Leino@BusinessFinland.fi
The most agile bottom-up instruments

<table>
<thead>
<tr>
<th>Feature</th>
<th>EIC accelerator pilot</th>
<th>Fast Track to Innovation FTI</th>
<th>EuroStars</th>
</tr>
</thead>
<tbody>
<tr>
<td>To whom?</td>
<td>Strong innovation and business potential, high risk included</td>
<td>Strong innovation and business potential, still risk included</td>
<td>Have an innovation that needs R&amp;D</td>
</tr>
<tr>
<td>Source</td>
<td>H2020</td>
<td>H2020</td>
<td>National funding agencies; Business Finland</td>
</tr>
<tr>
<td>Max grant/ budget</td>
<td>2.5M€/3.6M€ (equity max 15M€)</td>
<td>3M€/4.3M€</td>
<td>0.5-6M€, average 1.4M€ (COO takes 50%)</td>
</tr>
<tr>
<td>Funding rate</td>
<td>70% +25%, option for blended</td>
<td>70% +25% (RTOs 100%+25%)</td>
<td>Defined by national funding agency.</td>
</tr>
<tr>
<td>Consortium</td>
<td>Single applicant</td>
<td>Min 3 countries. 3-5 partners, RTOs max 1/3 or 2/4-5.</td>
<td>Min 2 countries, typically 3-4 countries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Note: Also Canada, Turkey and South Korea</td>
</tr>
<tr>
<td>Coordinator</td>
<td>SME</td>
<td>Large Enterprise (preferably)</td>
<td>R&amp;D intensive SME (must)</td>
</tr>
<tr>
<td>Duration</td>
<td>24M</td>
<td>24M</td>
<td>12-36M, average 29</td>
</tr>
<tr>
<td>Funding scope</td>
<td>Topic is free; both R&amp;D and business development are must and funded</td>
<td>Topic is free; both R&amp;D and business development are must and funded</td>
<td>Topic is free; R&amp;D is funded</td>
</tr>
<tr>
<td>TRL scope</td>
<td>TRL6-8</td>
<td>TRL6-8</td>
<td>Not defined clearly</td>
</tr>
<tr>
<td>Launch to market</td>
<td>As the project ends</td>
<td>In 3 years from project start</td>
<td>In 2 years from project end</td>
</tr>
<tr>
<td>Pros</td>
<td>High funding rate, resub not limited</td>
<td>High funding rate, resub not limited</td>
<td>30% get funded</td>
</tr>
<tr>
<td>Cons</td>
<td>5-15% get funded, High enough TRL when starting?</td>
<td>5-15% get funded</td>
<td>Low/no funding for Large Enterprises. Coordination must be by SME</td>
</tr>
</tbody>
</table>
## Big consortiums for value chain building

<table>
<thead>
<tr>
<th>Feature</th>
<th>H2020 RIA/IA</th>
<th>ECSEL-JU RIA/IA</th>
</tr>
</thead>
<tbody>
<tr>
<td>To whom?</td>
<td>Anyone</td>
<td>Anyone</td>
</tr>
<tr>
<td>Source</td>
<td>H2020</td>
<td>H2020 + national funding agencies</td>
</tr>
<tr>
<td>Max grant/ budget</td>
<td>Typically 4-15 M€</td>
<td>15M€/30M€ grant/even 100M€ budgets</td>
</tr>
<tr>
<td>Funding rate</td>
<td>100% +25%/ 70% +25%</td>
<td>40%...100%, depends on call, org type and country</td>
</tr>
<tr>
<td>Consortium</td>
<td>Min 3 countries (typically 5-15 partners)</td>
<td>Min 3 countries (typically 30-50 partners)</td>
</tr>
<tr>
<td>Coordinator</td>
<td>Big enough, company for IA</td>
<td>Large Enterprise (preferably)</td>
</tr>
<tr>
<td>Duration</td>
<td>Typically 36M</td>
<td>Typically 36M</td>
</tr>
<tr>
<td>Funding scope</td>
<td>Defined in the Call text in very detail</td>
<td>Relatively free topic within the larger focus of ECS</td>
</tr>
<tr>
<td>TRL scope</td>
<td>TRL2..8, defined in the Call text</td>
<td>TRL 3-5/TRL6-8</td>
</tr>
<tr>
<td>Application dates</td>
<td>Defined in the Call text</td>
<td>Typically PO in May and FPP in September</td>
</tr>
<tr>
<td>Pros</td>
<td>High funding rate, numerous benefits</td>
<td>High hit rate, 20..60%, very good VC building platform</td>
</tr>
<tr>
<td>Cons</td>
<td>5-15% get funded, one proposal matches one call</td>
<td>Low funding rates, complex building and decision making process</td>
</tr>
</tbody>
</table>
Proposal & practicalities

**Funding & tenders portal**
- PIC Code
- (SME validation)
- Opening the proposal in portal
- Inviting the partners
- Partner profiles
- Budgets
- Uploading Part B
- Submitting the proposal IN TIME

**"Part B", the proposal of 70 pages**

**Excellence, e.g.,**
- Objectives
- Relation to the work programme
- Concept and approach
- Ambition

**Impacts, e.g.,**
- Expected Impacts
- Communications, dissemination and exploitation of results
- IP and regulatory issues

**Implementation, e.g.,**
- Work plan
- Management, risks
- Consortium as whole
- Resources to be committed - budget

**Partners**
- Partner descriptions
- Subcontracting
Process from idea to product, Example utilizing FTI funding
Cut offs 19.2., 9.6. or 22.10.2020

<table>
<thead>
<tr>
<th>From idea to product</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-house R&amp;D</td>
<td>2016-</td>
</tr>
<tr>
<td>FTI idea development</td>
<td>11/2019-02/2020</td>
</tr>
<tr>
<td>FTI proposal building decision</td>
<td>01-02/2019</td>
</tr>
<tr>
<td>FTI proposal building process</td>
<td>03-06/2020</td>
</tr>
<tr>
<td>Decision by EC estimated</td>
<td>08-09/2020</td>
</tr>
<tr>
<td>Grant negotiations estimated</td>
<td>08-10/2020</td>
</tr>
<tr>
<td>Project kick off estimated</td>
<td>10-11/2020</td>
</tr>
<tr>
<td>Pre-payment, about 25% of grant</td>
<td>10-11/2020</td>
</tr>
<tr>
<td>Project ends</td>
<td>10-11/2022</td>
</tr>
<tr>
<td>New product launched at latest</td>
<td>2023</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposal building process to 19.2.2020 DL</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select topic:</td>
<td>01-02/2020</td>
</tr>
<tr>
<td>• Novelty &amp; innovation, strong business opportunity, some risk</td>
<td></td>
</tr>
<tr>
<td>One-pager</td>
<td>02/2020</td>
</tr>
<tr>
<td>• Crystallize the idea for presenting it to own organisation &amp; partners</td>
<td></td>
</tr>
<tr>
<td>Contact and engage the partners</td>
<td>02/2020</td>
</tr>
<tr>
<td>• Value chain, partners for your future businesses, large company</td>
<td></td>
</tr>
<tr>
<td>Finalise project concept, distribute work with partners</td>
<td>03-06/2020</td>
</tr>
<tr>
<td>Consortium meeting</td>
<td></td>
</tr>
<tr>
<td>First draft &amp; Budget proposal</td>
<td></td>
</tr>
<tr>
<td>Partners inputs to the draft &amp; budget</td>
<td></td>
</tr>
<tr>
<td>Full draft prepared, comments on draft</td>
<td></td>
</tr>
<tr>
<td>Consortium meeting (F2F/Skype) on final division of budget and work</td>
<td></td>
</tr>
<tr>
<td>Polish, Refine, Review, Proofread and edit full proposal</td>
<td></td>
</tr>
<tr>
<td>Submit the proposal</td>
<td>9.6.2020</td>
</tr>
</tbody>
</table>
For a H2020 newbie, the low hanging fruit is to find a consortium

How to get onboard in a consortium?

• Tell the "H2020 usual suspects" you’d like to join a consortium
  • University or VTT research group active in your sector
  • The non-Finnish RTOs you already know
• Participate in the Commission infodays and brokerage events (e.g. EFECES or ECSEL brokerage in January)
  • Contact those who pitch a project idea!
  • Describe your know-how in your profile and tell you’d like to join consortium (doing what)
• Utilize online brokerage platforms
  • **ECS collaboration tool** for all ICT from electronics to AI
How Business Finland can support you?

**Advice**
- NCPs can provide further details
- NCPs and EUTI provide coaching and advice

**EU proposal building grant**
- Only for SME or mid-cap companies
- The project budget needs to be min 3M€, grant is max 5% of Finnish total budget, 50% funding
- Apply asap when you start working! Check details on BF webpage

**Utilising ongoing BF project**
- Option to use the grant for EU proposal building
- Contact your project officer to discuss budget change
Take off utilising EU funding to build your success?

Thank you for the attention! Take home:
• H2020 provides a multitude of funding opportunities, your competitors already utilize them
• If you plan to Coordinate your own, make the decision early enough!
• If you don’t plan to coordinate, tell all RTOs you’d like to join a consortium!

Business Finlabd NCPs and EUTI would be glad to help 😊