**Schedule 2018**

**Timeline**
- **Feb**
- **March**
- **April**
- **May**
- **June**
- **Sept**
- **Oct**
- **Nov**
- **May 2019**

**Single stage**
- 17 topics
- 188,68 M€
- Deadline: 13

**Two stages**
- 19 topics
- 210 M€
- Deadline: 11

**1st stage**
- Remote (IER+CR)
- Info applic.
- 4 Months

**2nd stage**
- Remote (IER)
- Deadline
- On-site (CR)
- Info applic.
- GA signed

**Short proposal:** 10 pages
All participants in Part A

**General feedback to successful applicants**
Horizon 2020 Societal Challenge 2

5 priorities

- Functional ecosystems, sustainable food systems, healthy lifestyles
- Climate change and resilience on land and sea
- Major innovation on land and sea
- Smart, connected territories in rural and coastal areas
- Transition towards a circular bioeconomy

3 missions

- Nourish people sustainably today and tomorrow
- Understand, preserve and valorize oceans
- Boost and modernise rural economies and communities

3 calls + Fi

- Sustainable food security ca. €710M
- Blue Growth ca. €215M
- Rural renaissance ca. €295M

Key impacts

- Sustainable food from land and sea for healthy diets; Resource-efficient, resilient food systems, less waste; Less green house gas emissions; Improved ecosystems
- Productive, healthy, resilient seas & oceans; sustainable aquatic resources for food & bio-based value chains; strong Blue economy
- Enhance innovation uptake, circular economy and digitisation for strong and attractive rural areas
- De-risking investments in innovative technologies fostering Industrial, rural and coastal development
Sustainable Food Security – e.g. RIA, IA, CSA

Environment and climate smart food production and consumption

6 Topics
€66 mio for 2018/2019

Building capacities

6 Topics
€66 mio for 2018/2019

From functional ecosystems to healthy food

Sustainable Food Security

13 Topics
€66 mio for 2018/2019

Targeted international cooperation

8 Topics
€66 mio for 2018/2019
From functional ecosystems to healthy food

- **ecosystems services** for crop and animal production, e.g. For pest and disease control, nutrient cycling, soil fertility and productivity.
- **relationship between modes** of food production, ecosystem functions, food quality and consumer health.
- **diversity** and **diversification** in increasing the resilience of food systems
- promoting a better use of plant, animal genetic and microbial **genetic resources**.
- targeted **microbiome** activities - help to better understand how existing biodiversity can support processes across soils, plants, animals, the marine environment and humans.
From functional ecosystems to healthy food
Sustainable Food Security

**General**

- SFS-01 Biodiversity in action
  - Soil organisms & plants
  - Native biodiversity & farmland
  - Agrobiodiversity to dynamic value chains
- SFS-04 2019-2020 Integrated health approaches and alternatives to pesticides
  - Individual & combined effects
- SFS-05 2018-2019-2020 New and emerging risks to plant health
  - Responses due to management practices, climate & intensification
- SFS-06-2018-2020 Stepping up integrated pest management
  - Models & DST
- SFS-07-2018 Making European Beekeeping healthy and sustainable
- SFS-08-2018-2019 Animal welfare
- SFS-12-2019 A vaccine against African swine fever
- SFS-16-2018: Towards healthier & sustainable food

**DT Digitisation**


**LC Low Carbon**

- LC-SFS-03-2018: Microbiome applications for sustainable food systems
  - Microbiota in plants, soils, animals, marine
- LC-SFS-15-2018: Future proofing our plants
  - Prioritise technologies & methods for plant improvement
- LC-SFS-17-2019: Alternative proteins for food and feed
• **SFS-16-2018**
  **Towards healthier and sustainable food**

• **Scope**
  • Consumers, healthier food/healthy food attributes - Sustainability of production & processing – preservation of raw materials/food properties – consumer practices/maintenance of food attributes
  • Regionally & locally produced/supplied food/less processing
  • SME business models, logistics, engagement of local supply chain in adding value at a local level

• **Challenge**
  • Food processing – optimise preservation of naturally occurring food properties
  • Innovative small scale processing technologies – SME needs
  • Testing/validation of solutions and ability to maintain post harvest preservation, product characteristics, traceability, authenticity, sustainability, public health, regulatory issues, reduce food losses/circularity
  • Business models accounting for organisation/distribution, consumer behaviours/acceptance and the need for consumer engagement
  • Multi actor approach – farmers, food SMEs, consumers
Environment and climate-smart food production and consumption

- progress on **low greenhouse gas emission** agriculture, fisheries and food industries.
- strategies and tools to better cope with more **variable and extreme weather events**, changing **environmental conditions** and new emerging threats.
- mitigation capacity of the primary production sector and the synergies and trade-offs between **adaptation** and **mitigation** measures.
- Activities also tackle the **stewardship and use of natural resources** on land and sea and other **inputs** throughout food production.
- **Optimising resource use** and **reducing environmental footprints** throughout primary production, food industries, food distribution, food service and households.
Environment and climate-smart food production and consumption

Sustainable Food Security

LC Low Carbon

• LC-SFS-19-2018-2019: Climate-smart and resilient farming
  • Efficiency & resilience of mixed farming
• LC-SFS-20-2018-2019: Soils EJP
• LC-SFS-22-2018-2019: Forest soils

General

• SFS-23-2019: Integrated water management in small agricultural catchments

CE Circular Economy

• CE-SFS-24-2019: Innovative and citizen driven food system approaches in cities
• CE-SFS-25-2019: Urban biowaste
• More **fundamental research** needs
• **Harmonisation and rationalisation** of data, methods or infrastructures.
• Test **new approaches** and develop **new models for business creation and societal engagement**.
• Delivery of **knowledge and resources** to support downstream translational research and innovations
• Targeted activities are foreseen to support the implementation of the EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA) and implement the EU-China FAB Flagship initiative.

Horizon 2020 SC-2
Building capacities
Sustainable Food Security

General

• SFS-27-2018 Monitoring food R&I investments & impacts
• SFS-28-2018-2019 Genetic Resources and pre-breeding communities
  • Adding value to plant GenRes
• SFS-29-2018 Innovations in plant variety testing
  • Crop characteristics & sustainability criteria
• SFS-30-2019 Agri-Aqua labs
  • Plant adaptation
  • Plant energy biology
• SFS-31-2019 ERANETS in agri-food
  • Climate change & food systems
  • Veterinary vaccinology
  • ICT & Agri-Food Systems

DT
Digitisation

• DT-SFS-25-2019: Food Cloud Demonstrators
Targeted Cooperation
Sustainable Food Security

Targeted cooperation
EU AFRICA

- SFS-32-2018: Microbiome Cooperation
- SFS-33-2018: EU Africa R&I partnership (FNSSA)
- LC-SFS-34-2019: Food Systems Africa
- SFS-35-2019-2020 Sustainable Intensification in Africa
- CE-SFS-36-2020: Small biobased concepts

Targeted cooperation
EU CHINA

- SFS-37-2019: Integrated approaches to food safety controls
- SFS-38-2018: Efficient management of soil quality and land resources
- CE-SFS-39-2019: High quality organic fertilisers from biogas digestate
Societal Challenge 2

Blue Growth including Food Security, Marine and Maritime and Inland Water Research, and the Bioeconomy

Work Programme 2018-2020
Integration of Sustainable Food Security terrestrial and aquatic issues

- LC-SFS-03-2018: Microbiome applications
- LC-SFS-17-2019: Alternative proteins for food and feed
- SFS-27-2018: Monitoring food R&I investments and impacts
BG-02-2018 Blue Bioeconomy PPP
Activities shall address innovative, sustainable and climate-friendly possibilities to produce, harvest and exploit aquatic biomass from different trophic levels for use in food and other value chains.

The ERA-NET Cofund shall address research and innovation gaps such as: achieving zero waste by optimising the use of underutilised and waste material from fisheries and aquaculture and apply biotechnology and ICT in the blue bioeconomy to develop smart, efficient, traceable food systems and other biomaterials and create synergies between aquaculture and fisheries (e.g. through genetic assessment); to unlock the potential of microbiomes in aquaculture, fisheries, food processing and biotechnology; to create predictive tools to improve the identification, targeting and conservation of biodiversity “hot-spots” in the oceans (e.g. through omics-based technologies); explore synergies with land-based production in areas such as food and feed processing, biorefining, bioenergy, biomaterials, chemicals and nutrients, and include waste streams from aquatic to terrestrial value chains; to improve aquaculture and fisheries by using a combination of methods, processes and technologies such as biotechnology to create innovative feeds, improve brood stock, introduce new species, improve biosecurity, define stock baselines, and assess stocks.

Financial contributions from the Marine Institute and potentially Science Foundation Ireland
## BLUE GROWTH
### 2018-2020

<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>2018</td>
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<td><strong>Opening: 31 Oct 2017</strong></td>
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<td></td>
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<td>23 Jan 2019 (First Stage)</td>
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<td>04 Sep 2019 (Second Stage)</td>
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</tbody>
</table>
Rural Renaissance

Organising sustainable food and non-food value chains under changing condition

From farm to society: understanding dynamics and modernising policies

Taking advantage of the digital revolution

Boosting innovation and enhancing human and social capital

Rural renaissance

4 Topics (1 CSA, 2 IA, 1 RIA)
€51 mio for 2018/2019/2020

3 Topics (4 IA and 1 CSA, 1 IA)
€37 mio for 2018

4 Topics, (4 RIA)
€44 mio

2 Topics (2 CSA)
€15 mio for 2018/2019/2020
• **RUR-01-2018-2019**  
  Building modern policies on long-term visions and societal engagement  
  - Rural society-science policy hub  
  - Renewing rural generations, jobs and farms

• **RUR-02-2018**  
  Socio-economic impacts of digitisation of agriculture and rural areas

• **RUR-03-2018**  
  Contracts for effective and last delivery of agri-env public goods

• **RUR-04-2018-2019**  
  Analytical tools and models to support policies related to agri-food  
  - New models to support polices related to agriculture  
  - International trade models
From farm to society: understanding dynamics and modernising policies

• The objective is to better understand the assets and long-term drivers of rural territories and land use and establish how they are impacted by current policies.

• Design of innovative policy instruments, approaches and governance models to improve socio-economic and environmental conditions.

• This includes activities on policies impacting the delivery of ecosystem services and public goods.
Rural Renaissance

**CE Circular Economy**

- **CE-RUR-08-2018-2019-2020**
  Closing nutrient cycles
  - Properties and impacts of biobased fertilisers
  - Biobased fertilisers from animal manures
  - Biobased fertilisers from other by-products of the agri-food, fisheries, aquaculture & forestry sector
- **CE-RUR-10-2019**
  Circular biobased business models

**General**

- **RUR-09-2018**
  Regional and local bio-based economies

**LC Low Carbon**

- **LC-RUR-11-2019-2020**
  Sustainable wood value chains
  - Building with wood
  - Resilient forest systems
Organising sustainable food and non-food value chains under changing conditions

• This part will include activities related to the Focus Area "Connecting economic and environmental gains – the Circular Economy".

• The objective is to boost the development of innovative and sustainable food and non-food chains and services to support the diverse needs of communities and businesses, in a responsible and ethical way, hence fostering sustainable growth and jobs in rural areas and connecting territories (e.g. coastal-inland, rural-urban).
Rural Renaissance

- **DT-RUR-12-2018 ICT**
  Innovation for agriculture – digital innovation hubs

- **RUR-13-2018**
  Farm Advisors, Farmers & the digital age

- **RUR-14-2018**
  Digital solutions and e-tools to modernise the CAP
• ICT tools can play a key role in rural growth through a variety of impacts such as increased efficiency and competitiveness, social inclusion, new business models and opportunities, modernisation of services & renewal of governance models.

• Benefits of ICT applications maximised.

• This part will include activities related to the Focus Area "Digitising and transforming European industry and services".
Rural Renaissance

  Thematic Networks compiling knowledge ready for practice
  - Farming/Forestry

- **RUR -16- 2019**
  Fuelling the potential of advisors for innovation
Boosting innovation and enhancing the human and social capital in rural areas

• The objective is to support sustainable growth by encouraging innovation.

• This involves two main strands of activities: 1) strengthening the **skills, human and social capital** of farmers, foresters and rural dwellers by improving **cooperation, knowledge transfer and networking**; 2) investing into the **knowledge and innovation systems** to improve their delivery.

• In particular, support to the implementation of the EIP-AGRI "interactive innovation approach" will be provided.
Specific approaches and cross-cutting issues

Inputs from the Social Sciences and Humanities - relevant to tackle the complex challenges addressed in the 2018-2020 Work Programme for Societal Challenge 2.

The work programme includes topics where it is relevant to look at the gender dimension in a research content. Research and innovation activities should explore, analyse, and address possible sex and gender differences.

The concept of Responsible Research and Innovation (RRI) underpins this work programme, aiming to align research and innovation to the values, needs and expectations of society.

Several topics include a suggestion for coordination between projects financed under the same or related topics. This allows organising clusters of projects working on similar issues, to avoid duplication of efforts and to enable cross-fertilisation and synergies.
Make use of existing European research infrastructures (including e-infrastructures).

Proposers are encouraged to use **FIWARE** for some or all of their platform developments, when relevant. FIWARE enablers are available at www.fiware.org under open source licence for business use.

Proposers are advised to consult information on the [Copernicus programme](https://www.copernicus.eu) in general as well as the availability of Copernicus Sentinel Data.

To promote pan-European coherence and interoperability, integrate the results of the different activities and facilitate international co-operation, the activities related to earth observation data and other spatial data should at best comply with and build upon the existing [Infrastructure for Spatial Information in the European Community (INSPIRE)](https://inspire.ec.europa.eu).
Horizon 2020 Supports

- NCPs
- Enterprise Ireland
- InterTradeIreland
Introduction to new Horizon 2020 work programme for Societal Challenge 2

21st November 2017
Titanic Centre Belfast

Presentations by the European Commission and from the NCPs

Special Initiative – Specific Horizon 2020 Training for x5 North/South Partnerships – Apply Now

NCP Supports

• Information & advice on call topics
• Partner search facilities
• Pre-submission support
• Advice & support for successful and unsuccessful applicants
Contact Information

- Patrick Barrett (DAFM)
  [patrick.barrett@agriculture.gov.ie](mailto:patrick.barrett@agriculture.gov.ie)
  - 01-6072302
  - Agri-food and BBI topics

- Fiona Grant (MI)
  [fiona.grant@marine.ie](mailto:fiona.grant@marine.ie)
  - 01-7753913
  - Marine topics

- Elaine Groom (DAERA)
  [elaine.groom@afbini.gov.uk](mailto:elaine.groom@afbini.gov.uk)
  - 02890 255078
  - NI Contact Point
• Travel grants for academic researchers
  • Participants based in Ireland’s HEIs and RPOs.
  • Up to €400/day – Up to 3 days

• Coordination support for academics
  • Researchers based in Ireland’s HEIs or publically funded Institutions.
  • Costs relate solely to the preparation of the application to the European Commission
  • Max of €12,500 (incl VAT)

Contact: h2020support@enterprise-ireland.com
www.horizon2020.ie
Horizon 2020 Travel Schemes

Support for North South partners in Horizon 2020 to travel across the island and the EU

Carrie.Gribben@intertradeireland.com  -  Karen.McCallion@intertradeireland.com

Average consortium size per type of Action

<table>
<thead>
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<th>Type</th>
<th>Size</th>
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<td>IA</td>
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<tr>
<td>RIA</td>
<td>11</td>
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</tbody>
</table>
Average consortium size per call

<table>
<thead>
<tr>
<th>Region</th>
<th>Size</th>
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</thead>
<tbody>
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<td>BB</td>
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<tr>
<td>BG</td>
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<tr>
<td>RUR</td>
<td>14</td>
</tr>
<tr>
<td>SFS</td>
<td>13</td>
</tr>
</tbody>
</table>
Gender of coordinators

- 76% Male
- 24% Female
Single stage evaluators

228* experts contracted overall

Evaluators and rapporteurs

135 (59%) males
93 (41%) females

- 204 from 24 EU Member States
- 13 from 5 Associated Countries
- 11 from 9 Third Countries

* the map includes also 12 additional experts whose contracts were cancelled
Thank you

Patrick.Barrett@agriculture.gov.ie
Liam.Finnegan@agriculture.gov.ie
Fiona.Grant@marine.ie
Elaine.groom@afbini.gov.uk