

# Horizon 2020

## Eurofed Information session

CODA-CERVA – 3 October 2014

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## Agenda

1. Eurofed team
2. Horizon 2020
3. Work Programmes 2014 – 2015
4. More information and questions ?

## 1. Eurofed team

## Who are we ?

- National Contact Points for Horizon 2020 of the Belgian federal government
- Eurofed is a service of the Scientific and Technical Information Service (DWTI-SIST)/Belgian Science Policy Office (BELSPO)
- 3 team members

## What is our aim ?

- Inform the federal actors about Horizon 2020:
  - telephone; email; face-to-face meetings;
  - info sessions
- Support federal actors in submitting proposals and managing projects

## How can we help you ?

- Inform you:
  - The [Eurofed website](#)
  - Our newsfeed (in English): please subscribe !
  - Twitter-account
- Answer to your questions: don't hesitate to send us a mail or give us a call.

## How can we help you ?

- Infosessions:
  - General infosessions like this one
  - Challenge specific infodays together with our Belgian NCP colleagues
  - On demand in your federal institution
  - Face-to-face meetings
- Feedback on your proposal

## More information ?

- The Eurofed website
- The [Participant Portal](#) of the European Commission
- The work programme of the specific challenge



## 2. Horizon 2020

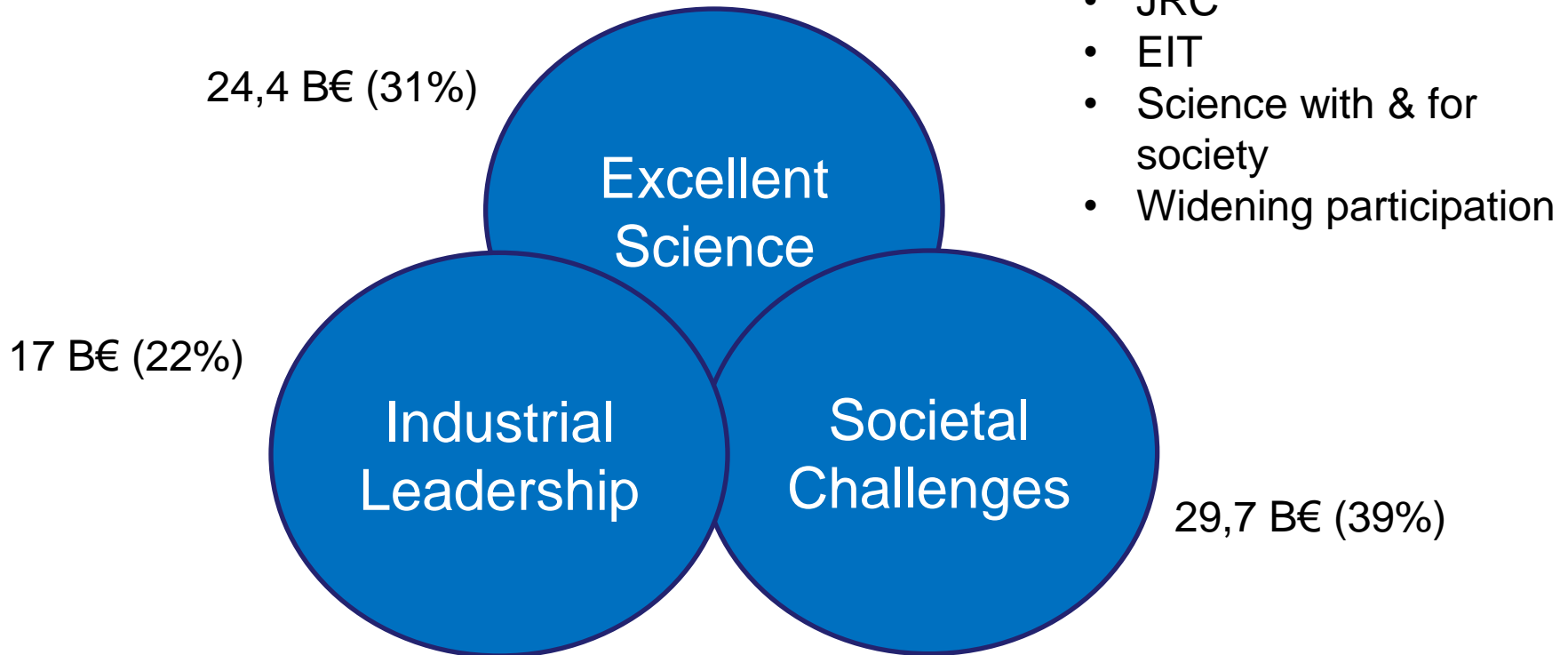
## What is Horizon 2020?

- New Framework Programme for Research and Innovation for 2014-2020 (75 billion €)
- Financial instrument to implement the Innovation Union
- Coupling research to innovation
- Challenge based

## Main changes

- Single programme, combining all R&I instruments (FP7, CIP and EIT)
- Single set of rules
- 1 project = 1 funding rate
- Shorter time-to-grant (8 months)
- No negotiation (project as it is)
- 2 year work programme
- Less prescriptive calls, focusing on challenges

### 3 pillars



## Horizon 2020

### Excellent Science

European Research Council\*

Future and emerging technologies

Marie Skłodowska Curie actions\*

European Research infrastructures (incl. e-infrastructures)\*

### Competitive Industries

Leadership in enabling and industrial technologies:

- **dedicated support for ICT** \*
- nanotechnologies
- advanced materials
- biotechnology
- advanced manufacturing and processing
- **space**\*

Access to risk finance

Innovation in SMEs

### 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 action, resource efficiency and raw materials\*

Inclusive, innovative and secure societies\*

Secure Societies\*

European Institute of Innovation and Technology (EIT)

**Joint Research Centre (JRC)\***

Spreading Excellence and Widening Participation

**Science with and for Society\***

## Excellent Science

- **European Research Council (ERC)**  
Frontier research, all fields of science, all nationalities
- **Marie-Sklodowska-Curie actions (MSCA)**  
Training and career development
- **Future and Emerging Technologies (FET)**  
Collaborative research to open up new and promising fields of research & innovation
- **European Research Infrastructures (RI)**  
Ensure access to world-class RI (incl. e-RI) in EU and beyond

## Industrial Leadership

- Leadership in enabling and industrial technologies (LEIT)
  - Information and Communication Technologies (ICT)
  - Nanotechnologies, advanced materials, advanced manufacturing & processing
  - Biotechnology
  - Space
- Access to risk finance
- Innovation in SMEs

## Societal Challenges

- Health, demographic change and wellbeing
- Food Security, Sustainable Agriculture and Forestry, Marine and Maritime and Inland Water Research and the Bioeconomy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, environment, resource efficiency and raw materials
- Inclusive, innovative and reflective societies
- Secure Societies



## Time-to-grant: „5+3“

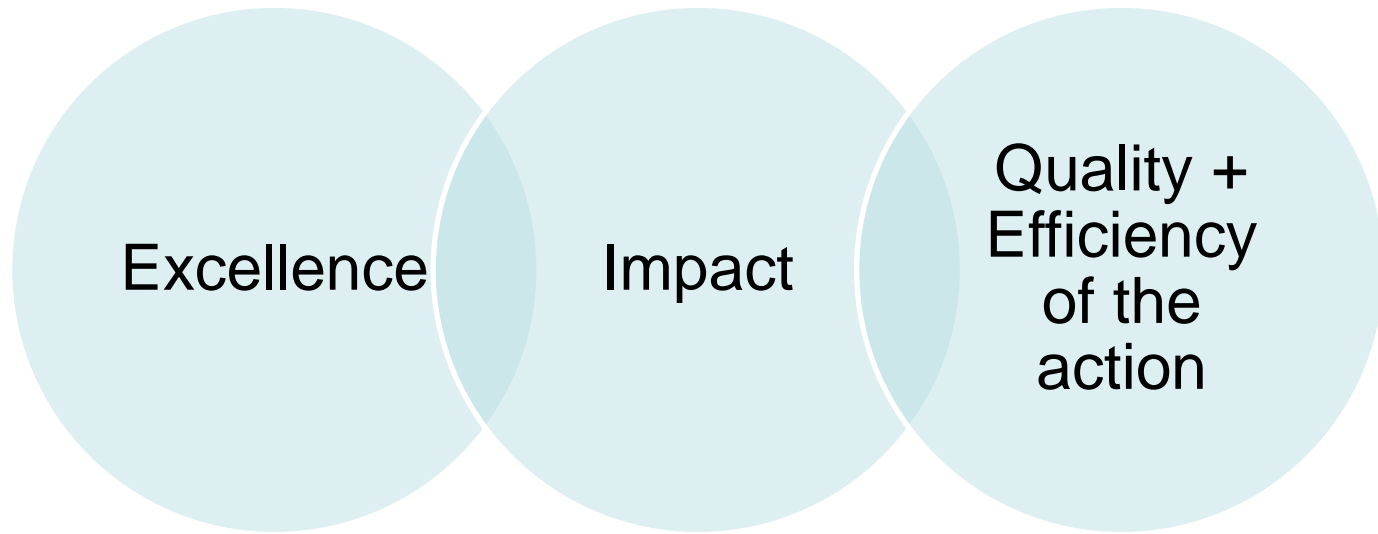
- Information on the **evaluation results** max. **5 months** from Call-Deadline (two-stage Calls: 2nd Call deadline)
- Thereafter max. **3 months to conclusion of contract**



- Longer period of time-to-grant possible:  
ERC projects / justified exceptional cases (complex projects) /  
request of consortium

**To speed up: each proposal will be evaluated „as it is“, not as „what it could be“; no more paper**

## Evaluation of proposal – standard award criteria



- ✓ ERC frontier research actions = „only excellence“
- ✓ Innovation actions = higher weighting for „impact“

## Who can become evaluator ?

- Simple answer: almost everyone (except conflict of interest)
- Database of the European Commission  
<http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html>
- Added value for the institute ?
  - Researchers learn from it
  - You stay in ‘the loop’/networking

### Funding rate

- For **“Research and Innovation actions“**: **100 %**  
**Indirect costs: 25 % of the direct, eligible costs**  
(except subcontracting + third parties in-kind contribution not used on the beneficiaries premises)

### Funded to 100%

Direct Costs	Indirect Costs	Total	Funding rate	Funding
100 €	25 €	125 €	100 %	125 €

Direct  
Costs

Indirect  
Costs

### Funding rate

- For „Innovation actions“: **70 %**  
„non-profit“ org.: **100 %**
  - **Indirect Costs: 25 % of the direct eligible costs**  
(except subcontracting + third parties in-kind contribution  
not used on the beneficiaries premises)
- Generally funded to 70 %**

Direct  
Costs

Indirect  
Costs

Type of organisation	Direct costs	Indirect costs	Total	Funding rate	Funding
General	100 €	25 €	125 €	70 %	87,5 €
Non profit org.	100 €	25 €	125 €	100 %	125 €

## 3. Work Programmes 2014 - 2015

## 3.1 Excellent Science

## European Research Council

- Autonomous funding body launched in 2007
- Led by scientists (22 scientists in the Scientific Council)
- Grants for excellent researchers, of any nationality, to perform frontier research in Europe
- All fields of science



## ERC - Grants

Starting Grants  
2-7 years after PhD  
Up to 2 M€  
for 5 years  
Deadline: Feb 2015  
Budget: 410 M€

Consolidator Grants  
7-12 years after PhD  
Up to 2,75 M€  
for 5 years  
Deadline: March  
2015  
Budget: 605 M€

Advanced Grants  
>12 years after PhD  
Up to 3,5 M€  
for 5 years  
Deadline: 21/10/14  
Budget: 450 M€

Proof of Concepts  
Up to 150.000€ for ERC grantees  
Deadline: 1/10/14  
Budget: 15 M€

## ERC- Evaluation

- Only criteria is excellence
- 1 single submission, 2 step evaluation
- 25 panels. 10-16 members per panel + remote experts
- Step 1: evaluation of the CV and synopsis (kill 80% of proposals).
- Step 2: Assessment of full proposals and interview (StG and CoG).
- 50% success
- Restriction to resubmission of proposals to future calls

## Marie Skłodowska-Curie actions

- Innovative Training Networks (ITN) – Only ESR

Main EU programme for structured doctoral training (early stage training).

Deadline: 13/01/15; 370 M€

### Research and Innovation Staff Exchange (RISE)

To promote international and inter-sectoral collaboration through research and innovation staff exchanges

Deadline: 28/04/15; 80 M€

- Individual Fellowships (IF) – Only ER

Deadline: 10/09/15; 213 M€

## MSCA - ITN

- International network of partners which recruit and host ESRs based on joint research training/doctoral programme. Open to MS/AC/TC
- Research fields chosen by applicants in multi/interdisciplinary and emerging fields of S&T.
- Training through individual research projects within the framework of the overall research topic.
- Meaningful exposure to the non-academic sector.
- Typical project duration 48 months. Researchers 3-36 months

## 3 implementation modes

**European  
Training  
Networks**

**350 M€**  
8 scientific panels

**European  
Industrial  
Doctorates**

**30 M€**  
Separate evaluation panel

**European  
Joint  
Doctorates**

**25.5 M€**  
Separate evaluation panel

## European Training Networks

- Min 3 MS/AC
- No mandatory PhD programme
- Typical: 6-10 participants
- Beneficiary : mandatory recruitment and hosting of ESR
- 540 researchers months
- Secondment: 30%

#### European Industrial Doctorates

- Min 2 MS/AC
- PhD enrolment at univ +  $\geq 50\%$  at non-academic partner
- Joint selection, training and supervision
- Mandatory consortium agreement
- 180/540 researchers months (2/3 MS)
- Each researchers is recruited

### European Joint Doctorates

- International, intersectoral, interdisciplinary joint doctoral training
- Min 3 MS/AC entitled to deliver PhD
- Joint degree
- Non-academic sector essential
- Mandatory consortium agreement
- Max 540 researchers months
- Each researchers is recruited. Secondment up to 30%



## ITN - Funding

Living allowance	Mobility allowance	Family allowance	Research, training and networking costs	Management and indirect costs
3110	600	500	1800	1200

- Country coefficient for the living allowance
- Institutional costs can be redistributed

## MSCA - RISE

- Project built on joint research and innovation activities
- Project implemented through the secondment of staff (no recruitments). All R&I& management staff (employed 6 month prior to secondment)
- Each staff member seconded for a period of 1 to 12 months
- Maximum project duration is 4 years, 540 researchers months
- No mobility rules
- Accent is on transfer of knowledge (return mechanism)

## RISE - Implementation

- Min 3 participants from 3 countries, min 2 MS/AC
- Secondment: international and/or intersectoral
- If all MS/AC, 1 academic and 1 non-academic
- MS (Ac) seconded to MS (N Ac) YES
- MS (Ac/N Ac) seconded to TC (Ac/N Ac) YES

## RISE - Funding

Staff member unit person/month Top up allowance	Research, training and networking costs	Management and indirect costs
2000	1800	700

- No country coefficient

## MSCA - IF

- To enhance the creative and innovative potential of experienced researchers through advanced training, international and intersectoral mobility
- **European Fellowships:** researcher comes to or move in EU (12-24 months)
- **Global Fellowships:** researcher is seconded to an outside EU country, return-phase of 1 year is mandatory (24-36 months)
- Also support to reintegration, return grants and restart of career
- Mobility rule: < 12 month in the last 3 years in host country at deadline

## IF- Typical activities

- Concrete plan of training through research (Career development plan at the beginning of the fellowship)
- Communication & Dissemination activities
  - Account for the use of funding
  - Present results and relevance of it to public
- Public engagement
  - Present activities to students
  - Awareness of research and implications

## IF- Funding

Researcher unit costs person/month			Institutional unit cost person/month	
Living allowance	Mobility allowance	Family allowance	Research, training and networking costs	Management and indirect costs
4650	600	500	800	650

Country coefficient following the country of the host institution

# European Research Infrastructures

- Research infrastructures: facilities, resources and services used by the research communities to conduct research and foster innovation in their fields.
- Major scientific equipment (or sets of instruments); knowledge-based resources such as collections, archives or scientific data; e-infrastructures, such as data and computing systems and communication networks; and any other infrastructure of a unique nature essential to achieve excellence in research and innovation.
- RI can be *single-sited, virtual or distributed*.



## European Research Infrastructures

1. Developing new world-class research infrastructures
2. Integrating and opening research infrastructures of pan-European interest
3. E-infrastructures
4. Support to Innovation, Human resources, Policy and International cooperation

## European Research Infrastructures

### 1. Developing new world-class RIs

- Design studies
- ESFRI preparatory phase
- Cross-cutting services for cluster of ESFRI projects

## European Research Infrastructures

### 2. Integrating & opening RIs of pan-EU interest

- Top-down approach (list of 41 topics)
- Focus on Societal challenges and Industrial Leadership
- Address 2 communities:
  - Starting communities: networking, standardisation and TNAs & services
  - Advanced communities: innovation and widening TNAs and services

## European Research Infrastructures

### 3. E-infrastructures

- Managing, computing and preserving big data
- Open access
- Global data infrastructures
- E-infra for virtual research environment (VRE)

## European Research Infrastructures

### **4. Support to Innovation, Human resources, Policy and International cooperation**

- Innovation support measures (portal for calls, tenders,..)
- Procurement in the field of scientific instrumentation
- Human capital of RI (training of staff, ...)

## 3.2 Societal Challenges

## 3.2.1 Health, demographic change and wellbeing

## Health, demographic change and wellbeing

- Closing date: 21 April 2015
- H2020-PHC-2015-single-stage: € 104,5 million

PHC-21-2015: Advancing active and healthy ageing with ICT: Early risk detection and intervention

PHC-25-2015: Advanced ICT systems and services for integrated care

PHC-27-2015: Self-management of health and disease and patient empowerment supported by ICT

PHC-28-2015: Self management of health and disease and decision support systems based on predictive computer modelling used by the patient him or herself

PHC-29-2015: Public procurement of innovative eHealth services

PHC-30-2015: Digital representation of health data to improve disease diagnosis and treatment



## Health, demographic change and wellbeing

- Closing date: 24.02.2015
- H2020-HCO-2015: € 29 million

HCO-06-2015: Global Alliance for Chronic Diseases. Prevention and treatment of lung diseases

HCO-11-2015: ERA NET Collaboration and alignment of national programmes and activities in the area of brain-related diseases and disorders of the nervous system

HCO-12-2015: ERA NET: Antimicrobial resistance

HCO-13-2015: ERA-NET: Cardiovascular disease

HCO-17-2015: Towards sustainability and globalisation of the Joint Programming Initiative on Neurodegenerative Diseases

## 3.2.2 Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy (AGRO)

## AGRO

- Three different calls (subthemes):
  - Call for Sustainable Food Security
  - Call for Blue Growth: Unlocking the potential of Seas and Oceans
  - Call for an Innovative, Sustainable and Inclusive Bioeconomy
- Deadlines:
  - 3 February 2015 (two stage)
  - 11 June 2015 (single stage)

## AGRO – Sustainable Food Security

- The SFS call has three lines of activities:
  - Sustainable food production systems
  - Safe food and healthy diets and sustainable consumption
  - Global drivers of food security
  
- Budget: € 93,5 million

## AGRO – Blue Growth

- The Blue Growth call has four lines of activities:
  - Sustainably exploiting the diversity of marine life
  - New offshore challenges
  - Horizontal aspects, socio-economic sciences, innovation, engagement with society and ocean governance across the blue growth focus area
- Budget: € 40 million

## AGRO – ISIB

- The Innovative, Sustainable and Inclusive Bioeconomy call has three lines of activities:
  - Sustainable Agriculture and Forestry
  - Sustainable and competitive bio-based industries
  - Cross-cutting actions covering all activities
  
- Budget: € 42 million

## 3.2.3 Climate action, resource efficiency and raw materials (ENV)

## ENV

- Also in this societal challenge possibilities for CODA-CERVA
- Deadline:
  - 21 April 2015
- Two interesting topics:
  - WASTE-7-2015: Ensuring sustainable use of agricultural waste, co-products and by-products
  - WATER-4-2014/2015: Harnessing EU water research and innovation results for industry, agriculture, policy makers and citizens



## 3.3 Joint Research Centre

## Joint Research Centre

- Scientific and technical arm of the European Commission.
- Provides scientific advice and technical know-how to support a wide range of EU policies.
- Collaboration with MS/AC through:
  - EU projects
  - Partnership agreement: joint research, info sharing
  - Scientific networks: validation, standardisation, technical support

## Joint Research Centre

- ~ 3000 staffs
- The Institute for Reference Materials and Measurements (IRMM), Geel, Belgium
- The Institute for Transuranium Elements (ITU), Karlsruhe, Germany
- The Institute for Energy and Transport (IET), Petten, Netherlands
- The Institute for the Protection and Security of the Citizen (IPSC), Ispra, Italy
- The Institute for Environment and Sustainability (IES), Ispra, Italy
- The Institute for Health and Consumer Protection (IHCP), Ispra, Italy
- The Institute for Prospective Technological Studies (IPTS), Seville, Spain

## 4. More information and questions ?

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