



**Europe and research opportunities...**

**Also an opportunity for you ?**

Kristof Vlaeminck, head of UiB Brussels office

1<sup>st</sup> of February 2018





# Structure of the presentation



# Structure of the presentation

1. General information on Horizon 2020
2. Rules for participation in a nutshell
3. Evaluation
4. The next framework programme
5. Some topic examples



# 1. General information on Horizon 2020



# What is Horizon 2020

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



# Why participating to Horizon 2020 ?

- International aspect of the programme
- Prestige to be involved in a successful project proposal
- Leverage for other funding schemes, you get a “quality-stamp”

# ...but there are negative aspects as well

- Although time-to-contract will be reduced, it's still  $\pm 1$  year starting from the publication of the call.
- Your research has to fit perfectly with the topic description.
- The competition is very high.



# Structure of Horizon2020

- 3 programme sections:
  - Excellent Science
  - Industrial Leadership
  - Societal Challenges
- 1 horizontal programme section



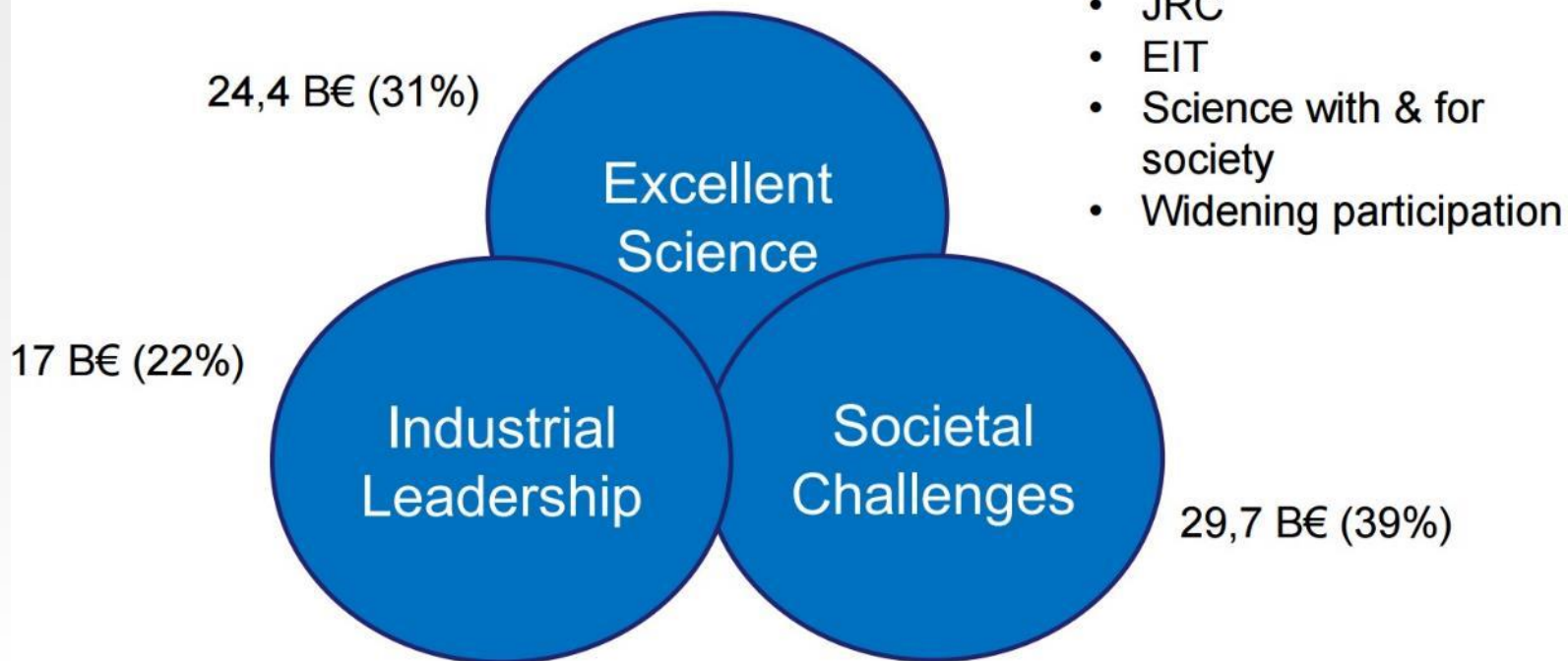


# Structure of Horizon 2020





# 3 pillars

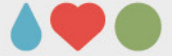




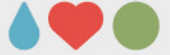
# Pillar 1 – Excellent Science

- **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

# Main points of Horizon 2020 – Pillar 1

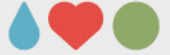


- Possibility to get funding for an individual researcher, collaboration is not obligatory
- Less restrictive topic descriptions, more bottom-up approach
- Evaluation mainly based on scientific excellence, less on impact and the quality and efficiency of the implementation



# Pillar 2 - Industrial Leadership

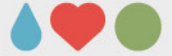
- **Leadership in enabling and industrial technologies (LEIT)**
  - Information and Communication Technologies
  - Nanotechnologies, advanced materials, advanced manufacturing & processing
  - Biotechnology
  - Space
- **Access to risk finance**
- **Innovation in SMEs**



# Pillar 3 – 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**

# Main points of Horizon 2020 – Pillar 2 and 3



- Top-down approach: topic description
- At least 3 partners from a different Member State or Associated Country
- Evaluation based on scientific excellence, impact and the quality and efficiency of the implementation



## **2. Rules for participation in a nutshell**





# Minimum conditions for participation

- At least three legal entities each established in a different Member State or an Associated Country (except ERC & Marie Skłodowska-Curie actions)
- Sometimes call specific: number of partners, SME involvement,...
- Maximum pages is defined, letter type (>11pt),...



# Funding rates

- Funding rate for university is always for collaborative projects:
  - 100% of the direct costs
  - 25% flat rate for indirect costs
- For ERC grants and MSCA: see presentations
- All the costs for the project during the runtime of the project are eligible.



# Intellectual Property Rights

- Ownership for the participant who generates the results, joint-ownership only in specific circumstances.
- General obligation to exploit.
- Open access obligatory for scientific publications and to research data.



# Time-to-grant: „5+3“

- Information on the evaluation results maximum 5 months from Call-Deadline (Two-Stage Calls: 2<sup>nd</sup> Call deadline)
- Thereafter maximum 3 months to conclusion of contract

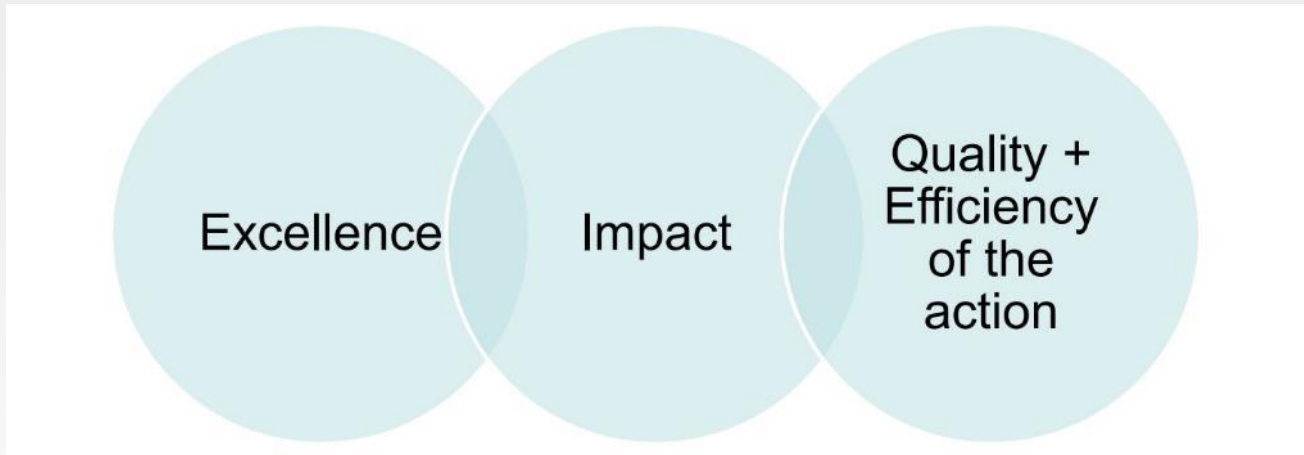


- Longer period of time-to-grant possible: ERC projects / justified exceptional cases (complex projects) / request of consortium
- Each proposal will be evaluated “as it is“, not as “what it could be“



# 3. Evaluation

# Evaluation of proposal – standard award criteria



- ERC frontier research actions: only “Excellence”
- Innovation actions: higher weighting for “Impact”



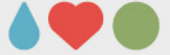
- **Excellence:**  
To which extent corresponds the proposed work with the topic description ?
- **Impact:**  
What is the impact of the outputs ?
- **Quality and efficiency of the implementation:**  
What is the quality of the management part, work plan, etc. ?



## Scoring from 0 to 5:

- 0 — The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.
- 1 — Poor
- 2 — Fair
- 3 — Good
- 4 — Very Good
- 5 — Excellent





# Evaluators

- Evaluators are chosen by the European Commission, but they are independent
- The EC tries to have a good balance of evaluators
- Become an evaluator yourself !

<http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html>



# 4. The next framework programme



# What we know already

- The next framework programme (FP) will start in January 2021
- Focus will be even more on innovation
- Another attempt to simplify the procedures
- 3 pillars: excellent science, European Innovation Council and clusters and missions

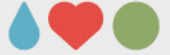


# What we don't know yet

- The name of the new FP...
- The content and the size of the FP
- The total budget and the amount foreseen for each pillar
- The elephant in the room a.k.a. the UK



# 5. Some topic examples



# Topics focussing on optics

- ICT-03-2018-2019: Photonics Manufacturing Pilot Lines for Photonic Components and Devices
- ICT-03-2018-2019: Photonics Manufacturing Pilot Lines for Photonic Components and Devices
- ICT-19-2019: Advanced 5G validation trials across multiple vertical industries
- ICT-20-2019-2020: 5G Long Term Evolution

# Topics focussing on medical physics



- NMBP-21-2020: Custom-made biological scaffolds for specific tissue regeneration and repair
- NMBP-22-2018: Osteoarticular tissues regeneration
- DT-NMBP-23-2020: Next generation organ-on-chip



# Topic focussing on space physics

- SU-SPACE-22-SEC-2019: Space Weather





UNIVERSITY OF BERGEN

