



Board of Funders
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Preparing for Future FET Flagships

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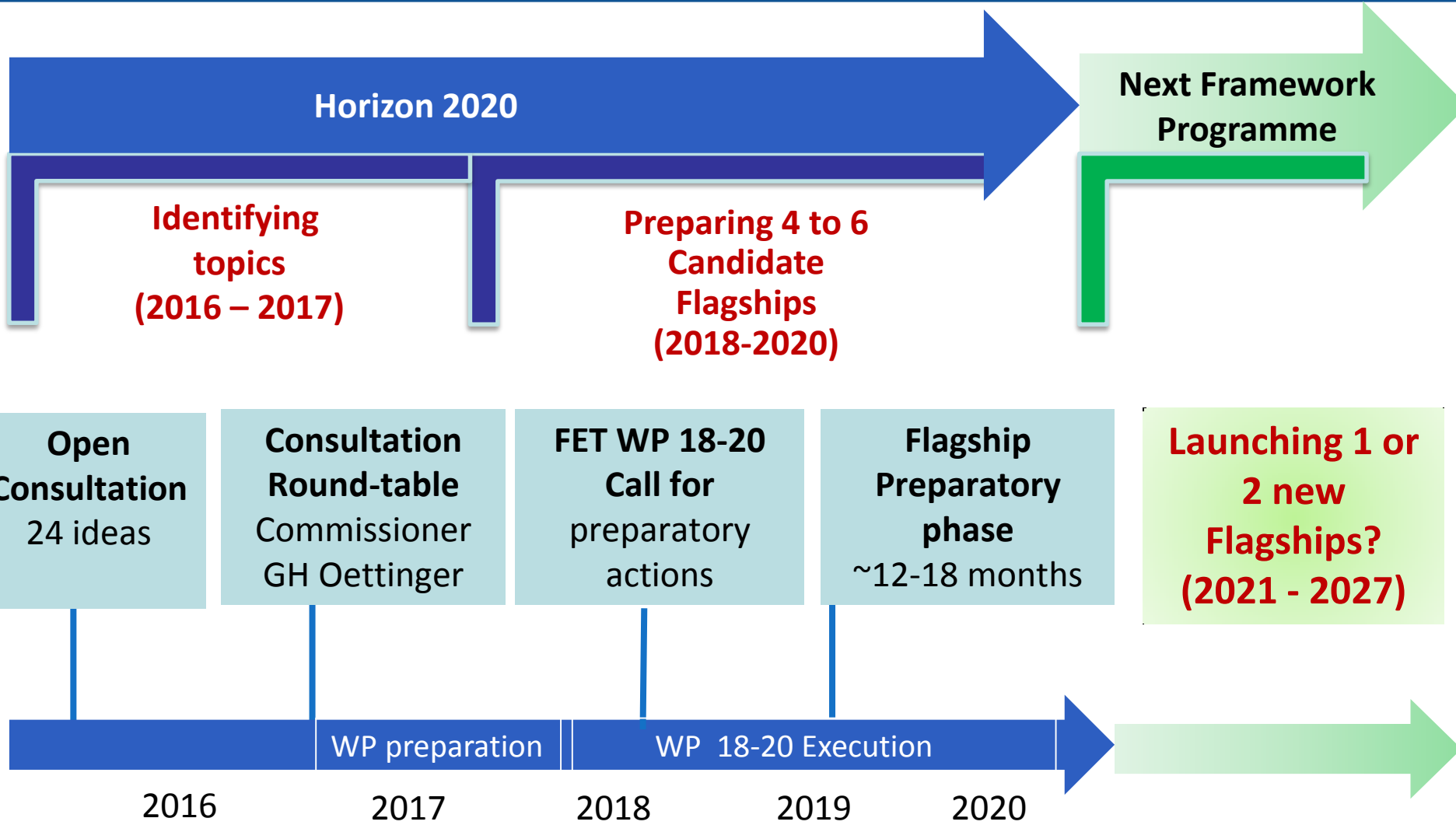
DG Connect

European Commission

- Overview of process
- Roundtable of 15 December 2016 with Commissioner Oettinger – main outcomes
- Moving to the H2020 Work Programme 2018-2020
 - *Preparatory actions*
 - *Emerging topical areas*
 - *Next steps for the work programme*



Timeline for new FET-Flagships

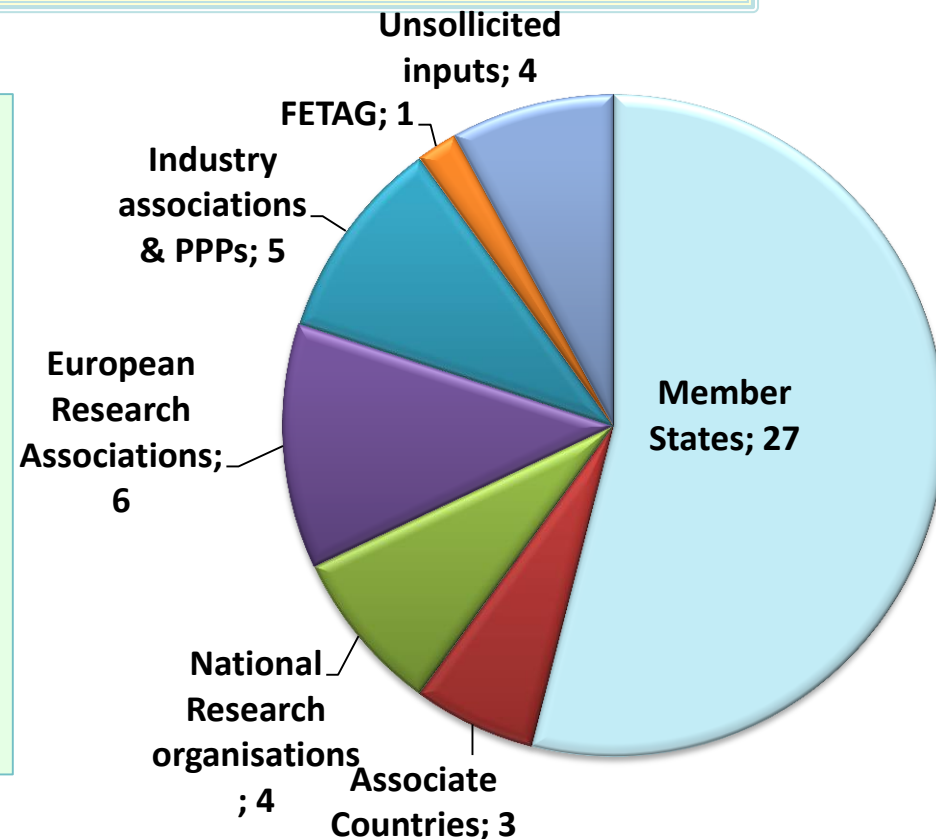


Round Table of 15 Dec 2016: Inputs

Participation by representatives from 27 MS and 3 AC, as well as 23 other organisations (research organisations, research associations, industry, ...)

50 position papers expressing:

- support to 14/24 topics submitted at the public consultation
- views to merging several topics
- support to a few new topics
- ... but also the need to review implementation & governance, selection procedures, etc.

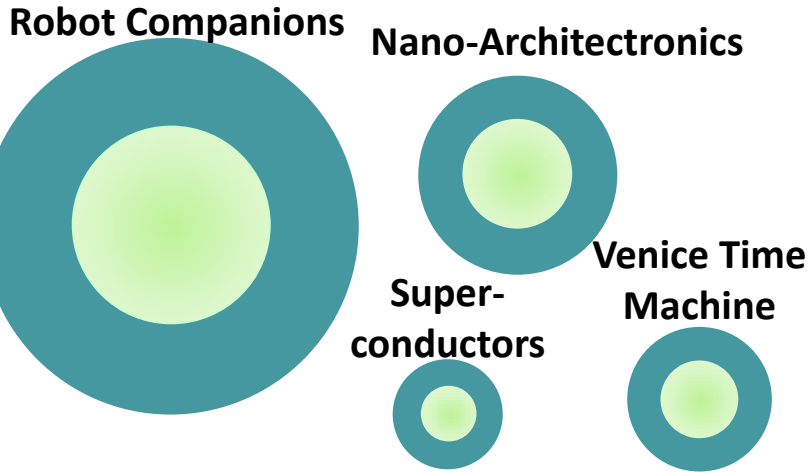




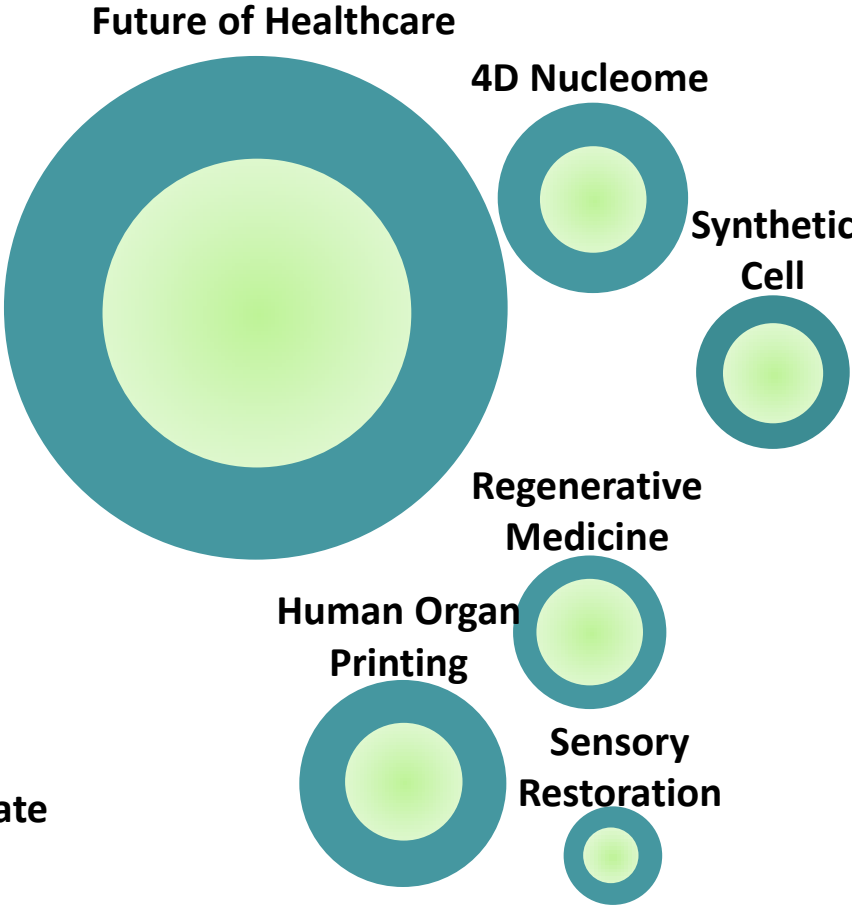
Round Table of 15 Dec 2016: Support and Clustering



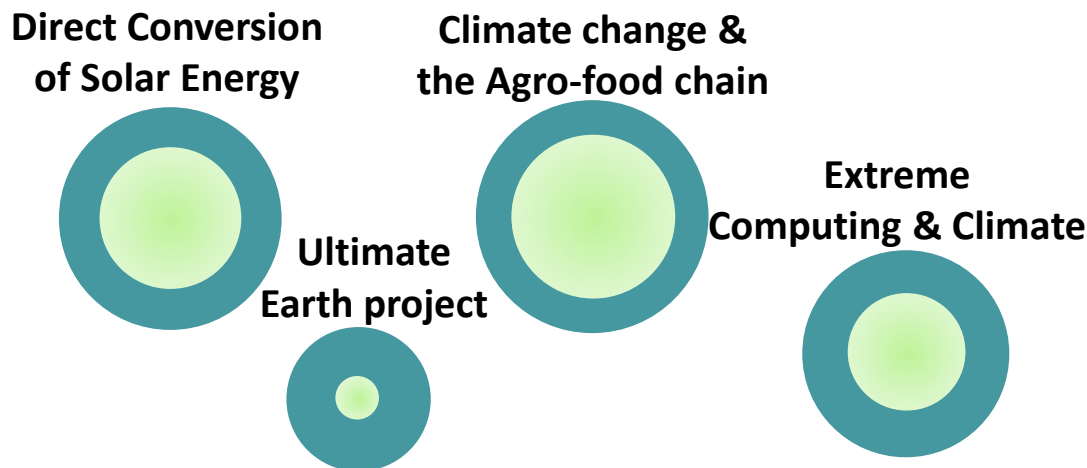
ICT for Connected Society



Health & Life Sciences



Energy, Environment, Climate Change



Round Table of 15 Dec 2016: Other ideas for Flagships

ICT for Connected Society

- Artificial Intelligence
- ICT for social sciences
(understanding digital transformation of societies, evolving societies, etc.)

Health & Life Sciences

- Nano-medicine technologies
- Electroporation technologies

Other S&T Areas

- Materials science & nanomaterials
- A resilient and dynamic Europe in a globalised world

Energy, Environment, Climate Change

- Ocean space technologies

Round Table of 15 Dec 2016: Main Conclusions

- Support for launching preparatory actions for new Flagships
- MS and Commission to jointly prepare new Flagships
- Consider recommendations from the FET Flagship high-level interim evaluation panel
- Three main areas: ICT and Connected Society; Health & Life Science; Energy, Environment and Climate Change
 - Most supported ideas from consultation/roundtable create the perimeter of call text per area
 - Open call with possibilities for new ideas, merging of ideas, etc.

Moving to the H2020 WP 2018-2020: Scope of Preparatory Actions

- Aim at developing:
 - **A consolidated vision** based on a well-defined unifying goal thoroughly justified in terms of S&T advances and of its targeted impact on economy and society
 - **A strategic research roadmap**
 - **A governance structure**
 - **Industry commitment and support**
 - **Approach to education and RRI (gender aspects, social and ethical aspects, legal implications, ...)**
- Activities of Preparatory Actions:
 - **Consultations with research communities from different disciplines**
 - **Build Support by Stakeholders (including Industry)**
 - **Interaction with MS and national initiatives**
 - **Interaction with / outreach to citizens**
 - **Joint dissemination event**

Moving to the H2020 WP 2018-2020: Call Areas (DRAFT)

- ICT and Connected Society
- Health & Life Science
- Energy, Environment and Climate Change

- *Call open to all*
- *Proposals to cover one or more topic per area or parts of them*



DRAFT: ICT and Connected Society

- **Nanoscale Engineering:** Novel nano-engineered materials and systems with properties enabling the design and manufacturing of radically new ICT components and devices creating disruptive technologies and market opportunities, for example in data processing, smart interfaces or nano-bio devices.
- **Interfaces, Robotics and Artificial Intelligence:** New approaches to human-machine interaction, robotics technologies, cognition and artificial intelligence giving rise to much smarter systems performing very sophisticated functions and opening radically new opportunities for industrial and societal applications.
- **ICT for Social Sciences and Humanities:** new ICT technologies and approaches for the understanding of large-scale complex socio-technical systems and their interaction and interdependencies or for collecting, preserving, studying and promoting Europe's unique cultural assets and exploiting these to achieve major societal or economic benefits.

- **Disruptive ICT to Revolutionise Healthcare:** New technologies and approaches aiming at a paradigm shift to prevention and treatment of diseases. This includes in particular methods to use patients' genetic make-up to provide individualised prevention and treatment, nano-medicine approaches including novel uses of bio-sensors, organ-on-a-chip technologies, radically new technologies for drug development, or regenerative medicine and biofabrication techniques to replace human cells, tissues and whole organs.
- **Understanding Life by Exploring the Genome and the Cell:** Novel technologies and approaches that enable a paradigm shift in studying and understanding the foundational building blocks of life, e.g., how the human cell and full genome function, opening up radically new opportunities in biology, advanced drug delivery and screening methods, and bio-nano-devices and technologies.

DRAFT: Energy, Environment and Climate change

- **Earth, Climate Change and Natural Resources:** New technologies and ambitious approaches for high-precision modelling and simulation that enable an in-depth understanding of the earth and climate change, helping in the long run to manage natural resources in a sustainable way, ensure food security and sustainable farming, and protect natural ecosystems.
- **Radically new Energy Production systems:** Disruptive technologies aiming at a paradigm shift in renewable energy by exploring and exploiting radically new principles (e.g. artificial photosynthesis, etc.) that can substantially reduce Europe's dependence on fossil fuels and open new industrial opportunities for their exploitation.

Work Programme 2018-2020

Timeline

- Today: first discussion
- Spring: preparing the work programme text
- Autumn: validation by the FET programme committee
- Call soon after
- Duration of actions: 18 months

Selecting Preparatory Actions

- H2020 Evaluation
 - The criteria (S&T excellence, Impact & Implementation) will address both the flagship idea and the implementation of the preparatory action
 - Evaluation by experts : Independence – impartiality – objectivity – accuracy – consistency
- How to select the best proposals for preparatory actions?
 - Expert selection
 - 2-stage evaluation?



Deviating from panel ranked list

➤ *The Rules for Participation, Art. 15:*

- *6. Proposals shall be ranked according to the evaluation results. The selection shall be made on the basis of that ranking.*
- *7. The evaluation shall be carried out by independent experts.*
- *8. In the case of a legal entity referred to in Article 11(2) or in other duly justified exceptional circumstances, the evaluation may be carried out in a manner derogating from paragraph 7. In each case of such evaluation the Commission shall provide the Member States with detailed information on the evaluation procedure used and its outcome.*

➤ *If the authorising officer would like to deviate from the panel ranked list for policy reasons, those proposals must later on be subject to a rejection/award decision in mode décisionnel. Such decisions are not subdelegated and must this be taken by the College with a formal inter-service consultation. (See Commission Decision C(2014)7046 on the delegation of powers, Article 15 of the Commission Rules of Procedure and Article 15 of the Rules giving effect to the Commission Rules of Procedure – C(2010)1200 OJ L 55, 5.3.2010).*



THANK YOU!