

EUROPEAN RST and INNOVATION POLICY

Thierry PHILIP
OEI President

October 3rd - 2018



Ladies and Gentlemen,
Colleagues,

This is not an easy subject, but it is justified by the importance of European funding for our Centres and by the stakes it represents for the hospitals.

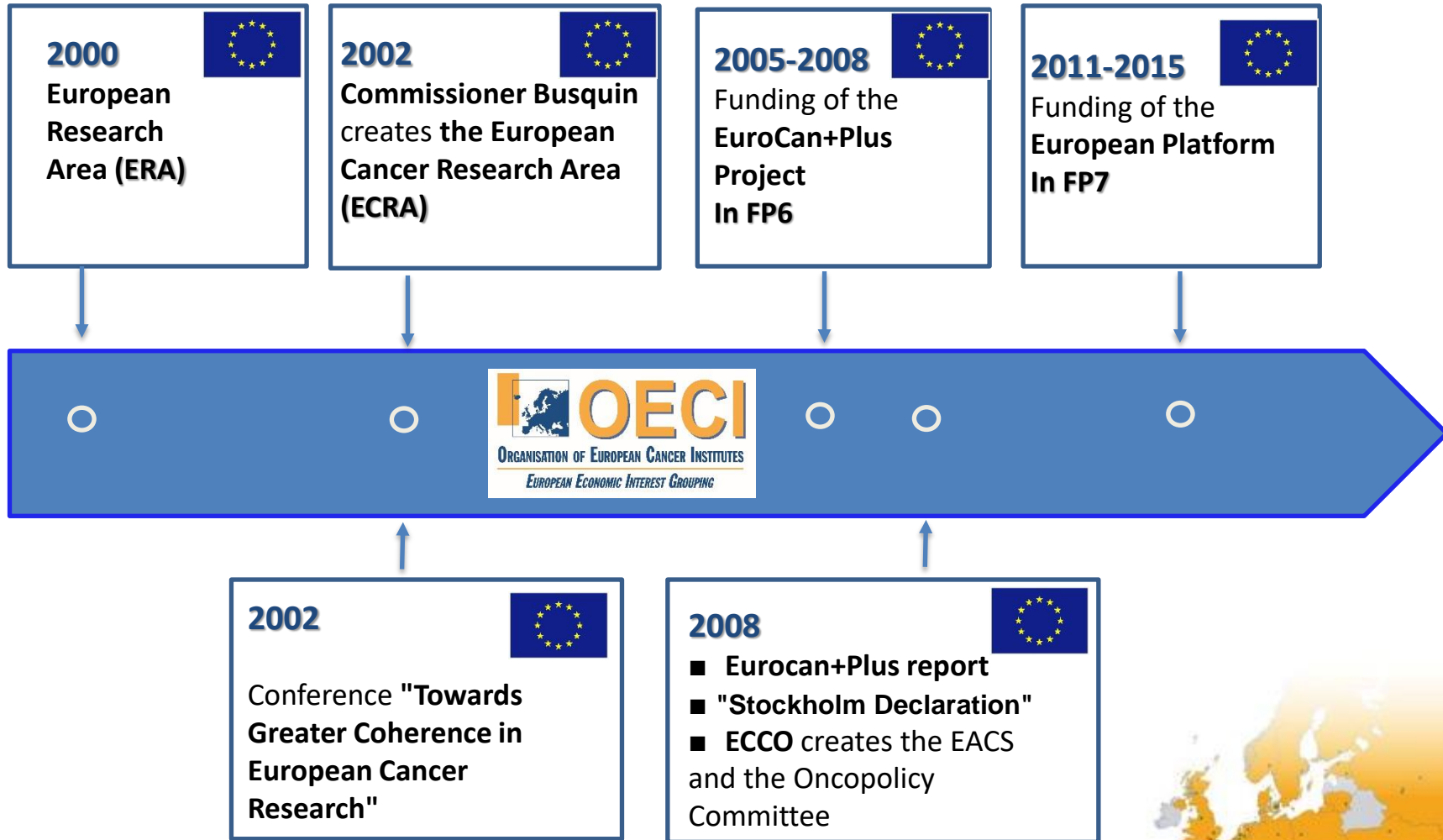
Before getting deeper into the subject, I would like to remind you that the Treaties leave each Member State to organise the healthcare provisions.

Research represents for Europe an investment for the future.

With regard to health, provided that we do not confuse health and disease, we must be aware that for Europe it represents a coordination for prevention and health promotion.



European Research Area



What we call the **European Research Area** dates back to the idea of a Belgian Minister and European Commissioner for Research named Philippe Busquin who helped make a lot of progress.

On slide 3, you can see that following an initial conference, the aim to create a **European Cancer Research Area** has been announced. During the following FPs several initiatives, such as the feasibility study Eurocan + Plus, were launched.

We are now in the 8th Framework Programme, better known as **Horizon 2020**, and the 9th Programme is under preparation.



EUROPEAN COMMISSION

H2020 (FP8)

HORIZON 2020



Many of you know and benefited from Horizon 2020, the 8th European Framework Programme.

We will examine in detail the different tools that enable us to obtain funding through calls for tender, the evaluation of which - it must be emphasised - is done in a very professional and very fair way without any major criticism of the selection method, based on meritocracy and transparency, a fundamental approach in a Community of 28 countries.



H2020 PILLARS AND HORIZONTAL ACTIVITIES



3 PRIORITIES		
EXCELLENT SCIENCE <ul style="list-style-type: none"> • European Research Council (ERC) • Marie-Sklodowska-Curie Actions • Future and Emerging Technologies (FET) • Research Infrastructures 	INDUSTRIAL LEADERSHIP <ul style="list-style-type: none"> • ICT • Key Enabling Technologies (KET): <ul style="list-style-type: none"> - Microelectronics - Photonics - Nanotechnologies - Advanced materials - Production systems - Biotechnologies • Space • Innovation in SMEs • Access to risk finance 	SOCIETAL CHALLENGES <ul style="list-style-type: none"> • Health, well-being, demographic change • Food security, bioeconomy • Secure, clean and efficient energy • Smart, green and integrated transport • Climate action, environment, raw materials • Inclusive, innovative and reflective societies • Secure societies
Spreading excellence and widening participation		
Science with and for society		
European Institute of Innovation and Technology (EIT)		
Joint Research Center (JRC)		

E
U
R
A
T
O
M



H2020 HAS THREE PRIORITIES:

- **Excellent Science,**
- **Industrial Leadership**
- **Societal Challenges**

We will review them together in detail





H2020 PILLARS



Pillar 1 – Excellent Science

- **European Research Council – ERC**
 - - ERC Starting Grant (2<PhD ≤7years) - up to € 1.5 M
 - - ERC Consolidator Grant (7<PhD ≤12 years) - up to € 2 M
 - - ERC Advanced Grant (pas de limit) - up to € 2.5 M
 - - ERC Synergy Grant
- **Marie Skłodowska-Curie Actions – MSCA**
 - Three categories of action types: individual actions, actions initiated by institutions, actions supported by funders
 - - ITN (Innovative Training Networks)
 - - Individual Fellowships
 - - RISE (Research and Innovation Staff Exchange)
 - - COFUND: Cofunding of PhD and postdoctoral programs and ERA-NET COFUND – European networks cofunded by the EC and national funding agencies
- **Future and Emerging Technologies - FET**
 - - FET-OPEN – Innovative ideas
 - - FET Proactive – Boosting Emerging Technologies and High Performance Computing
 - - FET Flagship – Grand Technology and Science Challenges





H2020 PILLARS



Excellent Science refers to the most used tools in research centers:

ERC, which means financing from the European Research Council with standing grants of up to €1.5 million, consolidation grants of up to €2 million, advanced grants of up to €2.5 million and ERC Synergy Grants.

Marie Curie grants for education, with either individual financing, funding of institutions, co-funding or even visiting professors.

FET, which stands for Future and Emerging Technologies and includes **FET-FLAGSHIP**. It is the ancestor of the missions we will talk about later.





H2020 PILLARS



- Research infrastructures
 - Developing new world-class research infrastructures
 - Integrating and opening research infrastructure of European Interest
 - e-Infrastructures
 - Support to Innovation, Human Resources, Policy and International Cooperation

Research infrastructures are mainly the funding of networks such as EU-Life, computing or Big Data infrastructures and a few European infrastructures such as EMBL.





H2020 PILLARS



Pillar 2 – Industrial Leadership

Integration of an “Innovation” dimension in the research & development framework program, which encourages the collaboration between academic and industry stakeholders

- **LEIT (Leadership in Enabling and Industrial Technologies)**
 - cloud computing, big data
 - KET (Key Enabling Technologies) – biotechnologies, nanomaterials, etc.
 - ICT (Information and Communication Technologies)

Pillar 3 – Societal challenges (including health, demographic change and well-being)

- Collaborative, multi-disciplinary projects to address key societal challenges



H2020 PILLARS



Industrial Leadership is very important for the EU as it links Industry, Academic Research Centres and Hospitals.

This includes IMI-type tenders that physicians are familiar with and also LEITs, which support economic development, Big Data and information systems.

Finally, **Societal Challenges** cover the political role of the European Union, which must address major societal challenges such as globalisation, and also the environment, agricultural policy, etc.





H2020 PILLARS



Other H2020 programs

- **Science with and for society** - projects that encourage engagement of society in research and innovation from various perspectives, for example gender equality.

Science with and for Society is the logical follow-up for Europe's political vision.





H2020 Calls for Proposals



Different types of funding

- **RIA - Research and Innovation Actions:** Collaborative projects that aim at developing new technologies, processes or services. They may include basic and applied research.
- **IA – Innovation Actions:** Collaborative projects on activities that directly aim at producing plans, arrangements, or concepts for new or improved products, processes, or services.
- **CSA – Coordination and Support Action:** Accompanying measure projects.
- **ERC – European Research Council Actions**
- **Marie Skłodowska - Curie Actions (MSCA)**
- **Cofund CT Actions**





H2020 Calls for Proposals



IN BRIEF:

The last two slides present many funding types, summarising the H2020 chapter





H2020 Calls for Proposals



H2020

- **IMI – Innovative Medicines Initiative**

- Public-private partnership between the European Union and the European pharmaceuticals industry (EFPIA)
- A program that aims at improving health by accelerating the development of innovative drugs and patient access to these drugs, in particular in areas with unsatisfied medical or social needs.



2018 -2020 H2020/FP8 end and AFTER?

- **H2020** ↘ 77 billion euros for research
- **FP9** ↘ 2021-2027
- **FP9** ↘ 100 billion euros for research:
- June 6, 2018: *How much money available for which priorities?*

Health Cluster?

7 billion euros **H 2020**

? billion euros **FP 9**

Expectations: 10 billion



The 9th EUROPEAN FRAMEWORK PROGRAMME, follows Horizon 2020 and it is now under preparation:

We already know that, despite Brexit, funding will increase from €77 to €100 billion.

We do not know how much it will be allocated for Health. Since it was €7 billion in H2020, we may expect €10 billion.

We have no idea on how much of that €10 billion will go to Cancer.



What to do with 10 billion euros?

- *“Many mouths to feed”*
- “All health areas are covered and this should not change”
- “The whole Health scope will remain in the Health Cluster”
(Research and Health Commissions)



What to do with 10 billion euros?

I recently had meetings with the Directions General for Health and Research and Innovation of the European Commission.

As you can see, we will not be the only ones in the Health Cluster.



How to put between 7 and 10 billion euros to good use?

Which instruments?

- Calls for proposals will remain at the heart of the Health cluster
- There are ongoing discussions about the issue of public/private/partnership, but this should still be a good instrument for research and industry together (IMI?)

The question is: with which instruments can we hope for European support?

A new emerging instrument: Missions

What is a Mission?

At this stage, the details are unknown.

Part of the budget on an issue may be dedicated to a mission:

- Example: “Pesticides” Mission?
- Example: “Cerebral Degeneration” Mission?
- Example: “Cancer” Mission?

June 6th 2018: The “Mission” tool will exist, but we do not know how many Missions there will be and the themes of the Missions

“No emergency, the launch is scheduled on 2021”

There will be a new tool called "**MISSION**" which is the logical follow-up to the FET-FLAGSHIP but nobody knows if there will be even a single mission in the Health Cluster and if cancer will be concerned or not.

At this stage, it is not easy to define what a mission may be, but the idea is similar to,

"We will send a man to the Moon within 10 years and bring him back to Earth."

We will come back on that this afternoon.



Thank you for your attention

