

# FLAG-ERA II Deliverable D8.2 JTC 2016 projects seminar 1 presentations

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Author		Giorgio Carpino Eugenio Guglielmelli		giorgio.carpino@miur.it e.guglielmelli@unicampus.it	
WP/Task leader		Giorgio Carpino	giorgio.carpino@n	giorgio.carpino@miur.it	
EC project officer		Jean-Marie Auger			
Description of content		This deliverable documents the JTC 2016 1 <sup>st</sup> project seminar (kick-off seminar).			
Publishable abstract		The deliverable consists of the agenda and presentations of the JTC 2016 kick-off seminar.			
Keywords		JTC 2016, follow-up, monitoring			



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#### 1 Introduction

The present deliverable is in the framework of WP8, in particular task 8.2 "Follow-up seminar organisation". This task covers the organisation of three yearly JTC 2016 projects seminars, where the four projects funded in the framework of JTC 2016 (Convergence, FuturICT 2.0, ITFoC, Robocom++) present their goals and achievements to the research community and FLAG-ERA II representatives.

The kick-off meeting of the JTC 2016 projects was held in Riga on April 28, 2017 in a dedicated session of the FLAG-ERA II Project Workshop 1. The agenda of the FLAG-ERA JTC 2016 Project Kick-off Seminar is reported in Annex1 of the present document. A total of 43 participants attended the kick-off seminar (14 of them were project representatives). In the Annex2 the introductory and final presentations of the session by MIUR are reported.

#### Annex 1- JTC 2016 Project Kick-off Seminar Agenda

#### FLAG-ERA JTC 2016 Project Kick-off Seminar

#### **Agenda**

Hotel ASTOR RIGA

Z.A.Meierovica Blvd 10

Riga, Latvia

Participants: FLAG-ERA JTC 2017 CSC and projects

#### Thursday 27 April 2017

Time	Dur.	Item / goals	Organiser
20:00	2h30	Dinner at restaurant Kolonāde 26 Brīvības Blvd, Riga	VIAA
		http://kolonade.lv/	

#### Friday 28 April 2017

#### Conference room "Academy"

Time	Dur.	Item / goals	Speaker
08:00	0h30	Registration	
08:30	0h30	Introduction	VIAA, MIUR
09:00	0h30	ITFoC	ITFoC
		<ul> <li>Presentation from ITFoC</li> </ul>	
		• Q&A	
09:30	0h30	Convergence	Convergence
		<ul> <li>Presentation from Convergence</li> </ul>	
		• Q&A	
10:00	0h30	Coffee break	
10:30	0h30	RoboCom++	RoboCom++
		<ul> <li>Presentation from RoboCom++</li> </ul>	
		<ul> <li>Q&amp;A</li> </ul>	
11:00	0h30	FuturICT 2.0	FuturICT 2.0
		<ul> <li>Presentation from FuturICT 2.0</li> </ul>	
		• Q&A	
11:30	0h30	General discussion	MIUR
12:00	0h15	Conclusions and next steps	ANR
12:15	1h45	Lunch	
14:00		End of seminar	



## Annex 2- JTC 2016 Project Kick-off Seminar presentations

# FLAG-ERA JTC 2016 Session

#### INTRODUCTION

Eugenio Guglielmelli
Italian Ministry of Education, University and Research (MIUR)

Riga, 28 April 2017





## JTC 2016 Session Objectives

- Present the main goals and work plan of the four projects to the National Research Funding Organisations (NRFOs)
- Share information on checkpoints and milestones for monitoring the progress of each project in the next three years
- Stimulate possible synergies with other related National and Regional programmes
- Discuss possible synergies among the four projects



## FLAG-ERA consortium

#### 22 founding members from 17 countries































































+ associated members













#### Virtually all European countries involved



- Strategic (ministries, national policy making)
- Operational (agencies, call implementation)



## What is a FET Flagship?

- A partnering model for large-scale research initiatives proposed by the European Commission to address grand scientific and technological challenges
  - A federation of efforts funded from multiple sources
  - organised around a Core Project playing a leading role and
  - coordinated towards a unifying vision
- The first two Flagship initiatives were selected in 2013
  - Graphene Flagship
  - Human Brain Project (HBP)

http://ec.europa.eu/digital-agenda/en/fet-flagships

http://www.graphene-flagship.eu http://www.humanbrainproject.eu

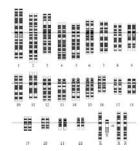


## Examples of Flagship-like past initiatives

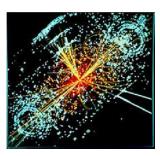
Source: http://cordis.europa.eu/fp7/ict/programme/fet/flagship/doc/flagshipstudy\_en.pdf



Apollo program ("Man on the Moon")



Human Genome Project



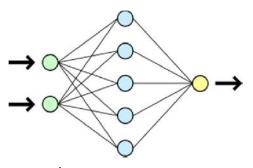
Large Hadron Collider



DARPA Grand Challenge



Deep Blue



5<sup>th</sup> Generation Computer



## The six FET Flagship Pilots



- managing complexity in the 21st century
- global participatory ICT platform
- planetary nervous system
- living earth simulator
- socio-inspired technologies



- carbon-based electronics
- lavered materials
- optoelectronics
- spintronics
- supercapacitors and batteries



- Autonomous smart systems
- Energy efficient nanolectronics: computing, communication, sensing
- Disruptive energy harvesting
- Nanotechnologies and heterogeneous integration
- Green e-assistants for improved quality of life



- Human Brain
- neuroinformatics
- medical informatics
- high performance computing
- brain inspired ICT



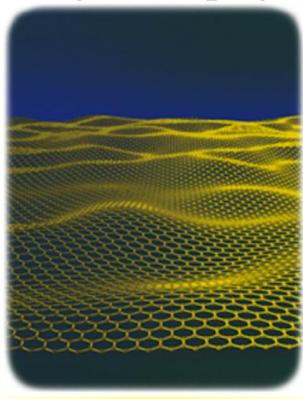
- virtual patient
- disease modelling
- high performance computing
- personalized medicine
- simulation



- Robot companions for sustainable welfare
- Science and Technology of embodied sentience
- New architectures for bodyware and mindware
- Understanding and building the brain-body-mind nexus
- Multi-scale science and technology of interaction

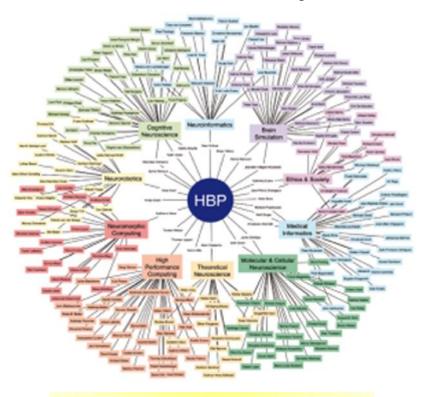
## The first two FET Flagship initiatives

#### **Graphene Flagship**



www.graphene-flagship.eu
142 partners from 23 countries

#### **Human Brain Project**



www.humanbrainproject.eu
112 partners from 24 countries



## The first two FET Flagship initiatives

#### **Graphene Flagship**

"Take graphene from the realm of academic laboratories into European society"

#### **Human Brain Project**

"Better understand the functioning of the brain and its diseases, and emulate its computational capabilities"

www.graphene-flagship.eu
142 partners from 23 countries

www.humanbrainproject.eu
112 partners from 24 countries

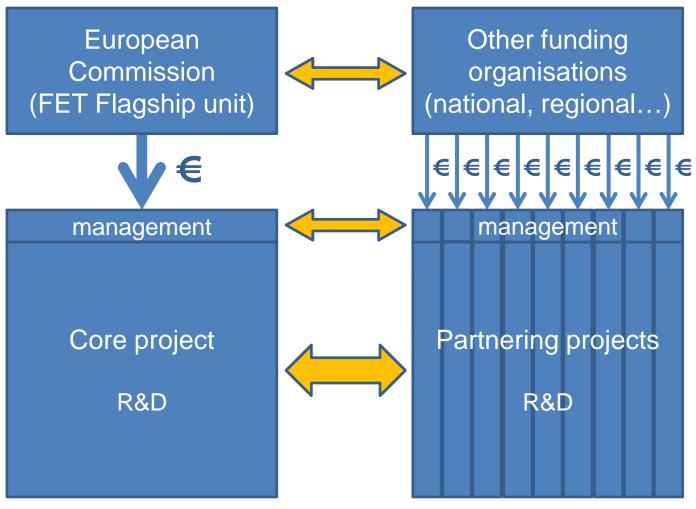


## The FET Flagship model

- A model for long-term, large-scale initiatives in the European Research Area, based on
  - · a unifying vision,
  - a core project serving this vision, and
  - mechanisms to align efforts funded from various sources with this core project and toward this unifying vision.
- A model for a large-scale integration of efforts while keeping flexibility through agile alignment mechanisms
- A model offering new possibilities
  - Vertical integration along the value chain
  - Horizontal integration across disciplines
  - Opportunity for large-scale data integration



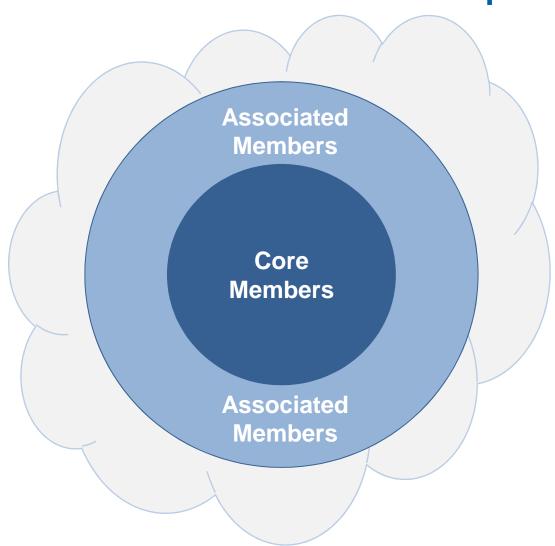
## Flagship funding structure





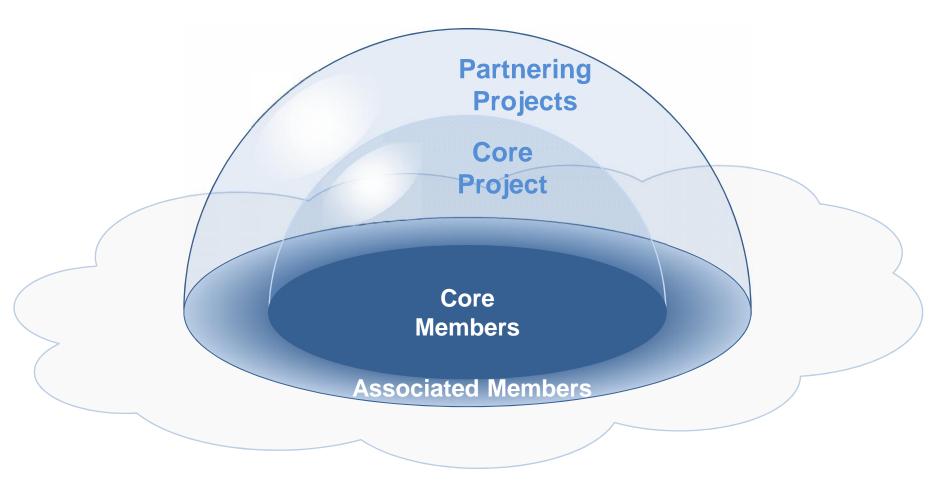
## Flagship associated membership

- Researchers from within and out of the Core Project willing to collaborate can do so through association / partnering mechanisms
- Research
   organisations
   which are not
   member of the
   Core Project can
   become
   Associated
   Members of the
   Flagship





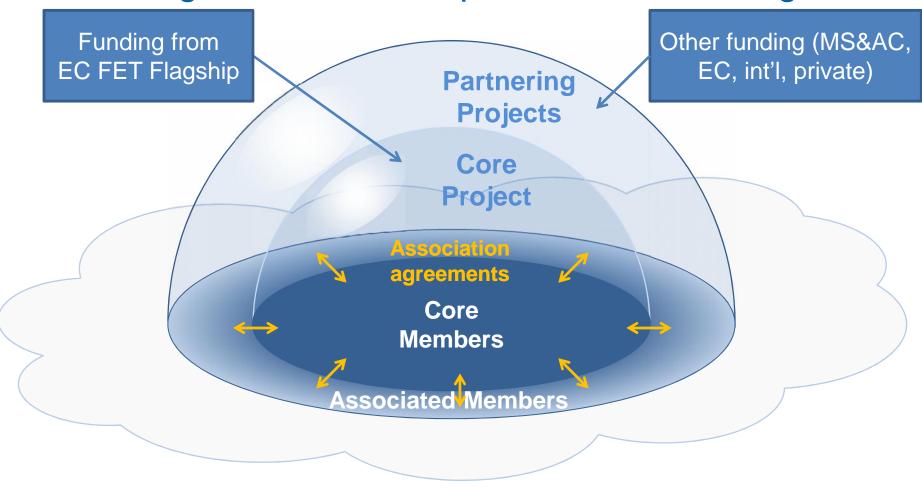
## Combined view





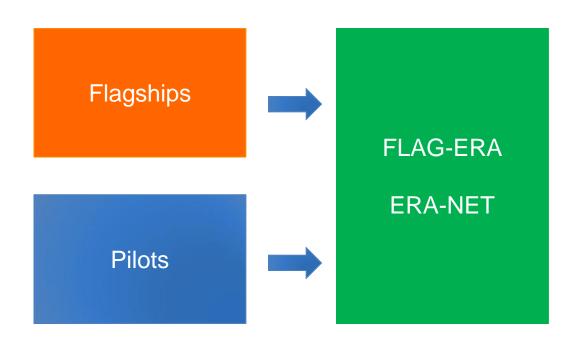
## The FET Flagship Partnering model

Combining efforts from multiple sources of funding





## Thematic activities for the four non-selected Pilots Support to non-selected Pilots - Motivation and Strategy



- Matching Funds
- New Partners
- Association Process

- Consolidate research networks
- Match National NRFO priorities
- Nurturing new large-scale projects
- Exploiting existing research roadmaps





#### **Joint Transnational Call 2016**

for Flagship Proof-of-Concept Projects on ICT for Social Sciences,
High-Efficiency Sensor Networks,
Digital Medicine for Cancer,
and Cooperative Robots.







## JTC 2016 on the topics of the 4 Pilots

- To build on the efforts of the 4 non-selected Flagship Pilots
  - Cooperative Robots (building on RoboCom)
  - Digital Medicine for Cancer (building on ITFoM)
  - High-Efficiency Sensor Networks (building on Guardian Angels)
  - ICT for Social Sciences (building on FuturICT)
- For each of the 4 topics, support one "Flagship-proof-ofconcept" project showing, through the implementation of selected activities, how the possibilities offered by the Flagship model can bring added value
- At a time where new Flagships are considered
  - <a href="https://ec.europa.eu/futurium/en/content/fet-flagships">https://ec.europa.eu/futurium/en/content/fet-flagships</a>



## Expected type of proposals

- Showcase federative activities with the potential to leverage other relevant initiatives (Core Project model)
- Be complementary with existing initiatives
- Focus on transformative activities with a high potential impact, in particular through changes of organisation and practices
- Organise networking activities with the research community interested in the topic
- Deliver plans and recommendations to further develop activities and collaborations



## JTC 2016 on the topics of the 4 Pilots

- 9 participating countries
- Indicative budget: 14.5 M€

#### **Timeline**

- Launched on January 22<sup>nd</sup>, 2016
- Submission deadline: March 31<sup>st</sup>, 2016
- Submission of revised proposals by September 26<sup>th</sup>, 2016
- End of negotiation phase by the end of October, 2016





#### Expected profile of the JTC 2016 projects

- Exploit the potential of the original pilot initiative (vision, research roadmap, network)
- Excellent quality of the scientific content and implementation work plan for Flagship proof-of-concept research activities
- Provide a solid and convincing Flagship-like approach for federating other ongoing research initiatives and foster coordination and networking of the research community
- Aim at making available new methods, infrastructures, evaluation metrics, benchmarking and other tools for joint research
- Include in the consortium qualified partners from each of the countries directly supporting the JTC 2016
- Leverage a critical mass of additional resources and partners from other EU and non-EU countries



#### JTC 2016 selected projects

Topic	Acronym and title	Coordinator	Countries in partnership*
Cooperative Robots	RoboCom++: Rethinki ng Robotics for the Robot Companion of the future	Paolo DARIO	IT, BE, CH, HR, <i>CZ</i> , EE, <i>ES</i> , FR, <i>GR</i> , <i>IL</i> , LV, <i>NL</i> , RO, SK, <i>UK</i> , TR
Digital Medicine for Cancer	ITFoC: Information Technology: Future of Cancer Treatment	Nora BENHABILES	FR, <i>DE</i> , IT, LV, RO, TR
High-Efficiency Sensor Networks	convergence: Frict ionless Energy Efficient Convergent Wearables For Healthcare and Lifestyle Applications		CH, BE, EE, FR, IT, LV, TR
ICT for Social Sciences	FuturICT 2.0: Large scale experiments and simulations for the second generation of FuturICT	Mario PAOLUCCI	IT, CH, EE, FR, BE, LV, RO



Two coordinators (bold) changed w.r.t. the 4 non-selected Pilots

## Inventory of the regional and national programmes, projects, initiatives and infrastructures in the domains addressed by the four non-selected Pilots

YOUR ORGANISATION / RESEARCH RELATED TO THE TOPICS OF THE JTC 2016 Please check the boxes below to indicate whether your organisation funds research that is related to or could be part of JTC 2016 topics.

20 out of 20 people answered this question

1	Topic 1: ICT for Social Sciences (ICTSS)	16 / 80%
2	Topic 3: Digital Medicine for Cancer (DMC)	16 / 80%
3	Topic 2: High-Efficiency Sensor Networks (HESN)	15 / <b>75%</b>
4	Topic 4: Cooperative Robots (CR)	14 / 70%
5	NONE	3 / 15%

YOUR ORGANISATION / RESEARCH RELATED TO THE TOPICS OF THE JTC 2016 Is your organisation planning to be actively engaged in connecting these projects to the four projects which will be funded by the JTC 2016 (one project per each of the research topics)?

20 out of 20 people answered this question

1	NO	8 / 40%
2	NOT YET DECIDED	8 / 40%
3.	YES	4 / 20%

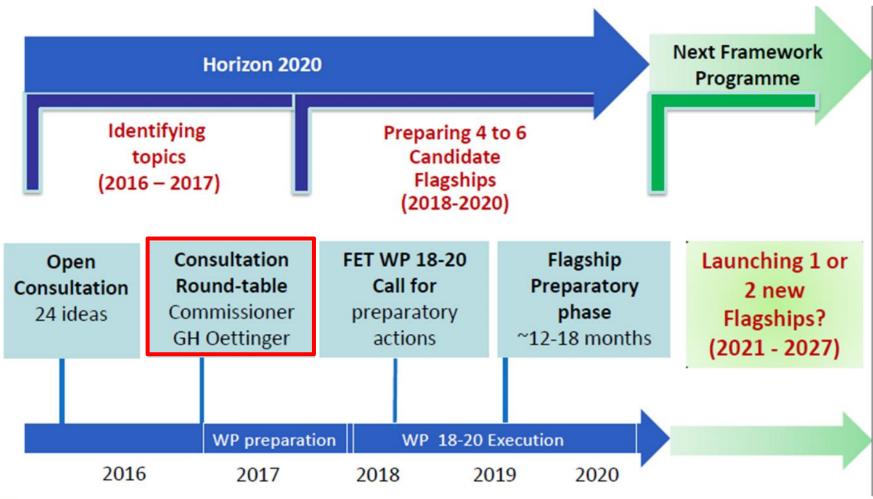
# YOUR ORGANISATION / FUNDING INFORMATION: How does your organisation fund the research projects related to the topics of the JTC 2016 at the national level? 20 out of 20 people answered this question 1 Both 13 / 65% 2 Through open calls/programmes (i.e. calls open to all scientific domains, with no rest... 6 / 30% 3 Through thematic calls/programmes (i.e. calls with a specific goal or theme which ca... 1 / 5%

#### Other questions focus on:

- Launch of new national programmes in the JTC 2016 research areas
- Support to young scientists
- Other national public/private research funding bodies
- Relevant infrastructures
- Companies/industries/private organisations
- Programmes and projects in the domain of JTC 2016



#### Timeline for new FET-Flagships





## Potential new Flagships

- New FET Flagships are considered to be launched in the context of the next Framework Programme
- Open public consultation
  - 24 ideas for new Flagships have been proposed
- Key areas identified
  - ICT for connected society
  - Health and life science
  - Environment, climate and energy
- Objective to launch 4 to 6 preparatory actions
  - Potentially leading to up to 2 new Flagships



## Conclusions

- The four selected project must clearly demonstrate full coherence with the aims and goals of JTC 2016
- Definition and adoption of new methodological approaches, evaluation metrics and other basic knowledge to support the development of new research areas are as important as expected research results
- FLAG-ERA workshops will be the regular venue for sharing upto-date information about the projects with NRFOs
- Partnership with National and Regional programmes are encouraged
- Follow-up plans are expected to include the challenge to become a new Flagship initiative, but other possible paths should be explored too



# FLAG-ERA JTC 2016 Session

#### Discussion

Eugenio Guglielmelli, Giorgio Carpino Italian Ministry of Education, University and Research (MIUR)

Riga, 28 April 2017





### Discussion issues

- All projects have to further elaborate and update the 'unifying vision', which must be scientifically very disruptive and rigorous, but quite easy to be communicated and understood by everyone
- The project are expected to develop by being inclusive and partnering with other EU, non-EU, National and Regional initiatives
- Build on the ongoing Flagship experience, materials available on the Commission's FET Flagship website
  - https://ec.europa.eu/digital-single-market/en/news/fet-flagships-lessons-learnt
  - https://ec.europa.eu/digital-single-market/en/news/fet-flagshipsreceive-positive-evaluation-their-journey-towards-ground-breakinginnovation



### Discussion issues

- FLAG-ERA workshops will be the regular venue for sharing up-to-date information about the projects with NRFOs
- A public JTC2016 event will be organised in 2018 (first semester?) in Rome. Project reviewers will be invited.
- All projects must be prepared to have a qualified representation and participation to this event
- Dissemination events might be included in the overall format\program

