

Objective ICT-2012.9.9: **FET Flagships**

Large-scale long-term initiatives
leveraging excellence around a unifying scientific goal

Proposals should address a grand scientific challenge and need to provide a common research roadmap with well-defined goals and ambitious but realistic milestones. Proposals should be justified in terms of expected scientific advance, potential technological breakthroughs and socio-economic impact. Proposals should describe how the relevant disciplines, stakeholders and resources will be brought together and be efficiently coordinated under strong scientific leadership.

Target outcome

Two FET Flagships, each one addressing a topic in line with the FET Flagship Preparatory Actions. These actions organised extensive consultations with the relevant scientific communities and identified relevant national/regional initiatives and programmes that could be part of such a common European effort:

The topics of the Preparatory Actions are:



- understanding and managing complex, global, socially interactive systems, with a focus on sustainability and resilience – **FuturICT**: www.futurict.eu;



- exploiting properties of graphene and related two-dimensional materials for the emergence of a graphene-based translational technology and innovative applications – **GRAPHENE**: www.graphene-flagship.eu;



- smart, energy-efficient devices for personal assistance based on zero-power sensing, computation and communication technologies – **Guardian Angels**: www.ga-project.eu;



- building a European facility to simulate the working of the human brain by developing and using supercomputers and neuromorphic hardware, and involving the collection and integration of large amounts of medical and neurophysiological information – **HBP**: www.humanbrainproject.eu;



- building individual computational models of the biological processes that occur in every human for personalised healthcare – **ITFOM**: www.itfom.eu;



- unveiling the secrets underlying the embodied perception, cognition, and emotion of natural sentient systems and using this knowledge to build robot companions based on simplicity, morphological computation and sentience – **RoboCom**: www.robotcompanions.eu.

Useful Information

CP-CSA

Time frame: 10/07/2012 – 23/10/2012

Budget: 108 million Euro

ERANET

Time frame: 18/09/2012 – 16/04/2013

Budget: 2 million Euro

Relevant documents:

http://cordis.europa.eu/fp7/ict/programme/fet/flagship/calls_en.html

FET Flagships contact:

Wide.Hogenhout@ec.europa.eu

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Recognizing that FET Flagships are large endeavours that require a common European effort at multiple levels, this Work Programme calls for.

- a) Proposals for CP-CSA with a duration of 30 months. They should describe core research tasks, based on the common research roadmap, as well as establishing a contractual framework for collaboration with other projects and initiatives that address research priorities within the same roadmap. This framework needs to ensure a proper coordination and integration of all the research activities that contribute to the FET Flagship both within the CP-CSA project and within other research activities. The governance to be put into place needs to ensure broad participation and effective opportunities for new partners to join. Proposals should reserve a substantial part of the budget (e.g. 20%) for future partners, foreseeing an enlargement of the consortium in order to create flexibility and openness, and to ensure dynamic responses to unforeseen challenges. CP-CSA projects will undergo a review after 18 months to assess their contribution to FET-Flagship strategic objectives and their implementation progress.

- b) An ERA-NET between national and/or regional funding agencies aiming at supporting the FET Flagships³. Proposals for an ERA-NET should describe how they will coordinate national and/or regional efforts with the common research roadmap.

Expected impact of CP-CSA

- transformational impact on science and technology and substantial benefits for the European economy and society;
- European leadership in key scientific areas;
- strengthening of the interfaces between ICT and other disciplines;
- progress towards the realisation of the fully operational phase of the FET Flagship, following the ramp-up phase.

Expected impact of ERANET

- enhanced complementarities and synergies of regional, national, European and international research programmes and initiatives
- networking between national funding agencies and creation of a discussion forum for matters of interest related to the two FET Flagships
- identification of areas that could complement the CP-CSA and that may be subject of future joint calls
- reduction of the fragmentation of the European Research Area (ERA)

**You are invited to contact the candidate Flagships
for potential collaboration if your research could contribute to their objectives.**

cordis.europa.eu/fp7/ict/programme/fet/flagship