Objective ICT-2013.9.9: FET Flagships – ERA-NET

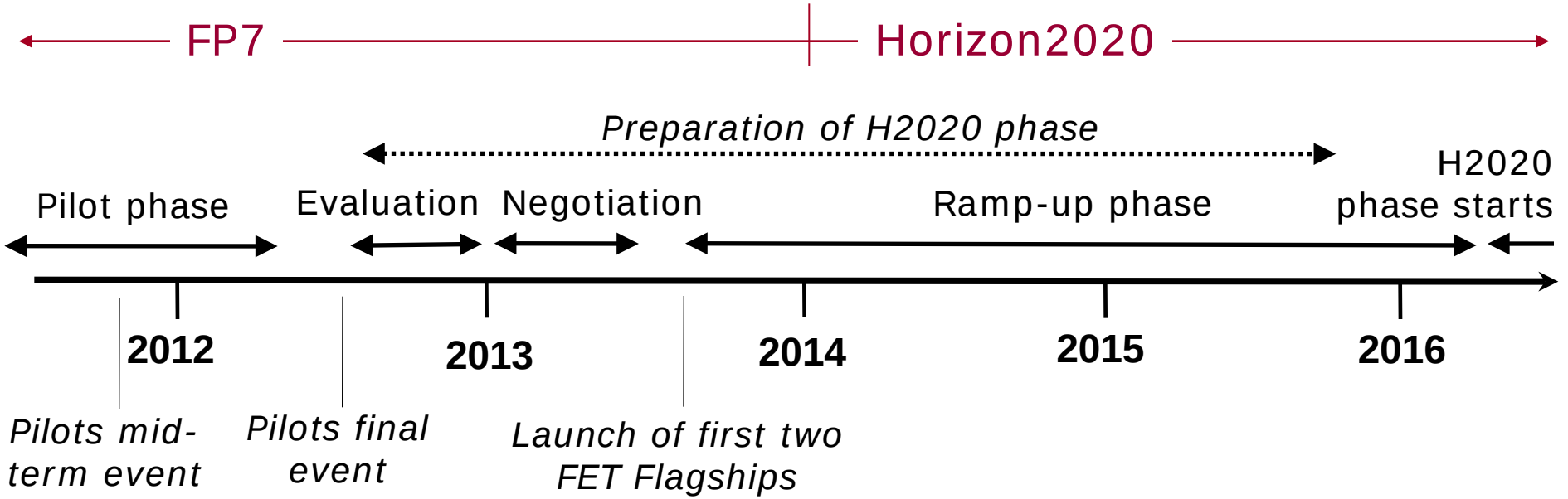
Wide Hogenhout

FET Flagships

Ambitious, unifying goal
Science-driven, highly interdisciplinary
Large-scale
Visionary initiatives with transformative impacts
Federation

FET Flagships are science-driven, large-scale, multidisciplinary research initiatives oriented towards a unifying goal, with a transformational impact on science and technology and substantial benefits for European competitiveness and society. The goals of such initiatives should be visionary and highly ambitious in terms of scientific challenges, resources required and coordinated efforts. They require cooperation among a range of disciplines, communities and programmes, extending over a long period (in the order of 10 years duration). FET Flagships are based on partnerships that enable effective coordination of efforts.

FET Flagships



An earlier call in 2010 (FP7-ICT-FET-F) has identified six potential flagship topics which have been elaborated in a preparatory phase by a number of EU-funded coordination actions, referred to as "FET-Flagships Preparatory Actions". As a next step, the ramp-up phase, this Work Programme calls for proposals to initiate and build up two FET Flagships.

FET Flagships – ERA-NET

Target Outcome (2) : An ERA-NET between national and/or regional funding agencies aiming at supporting the FET Flagships. Proposals for an ERA-NET should describe how they will coordinate national and/or regional efforts with the common research roadmap.

Expected impact:

- **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)**

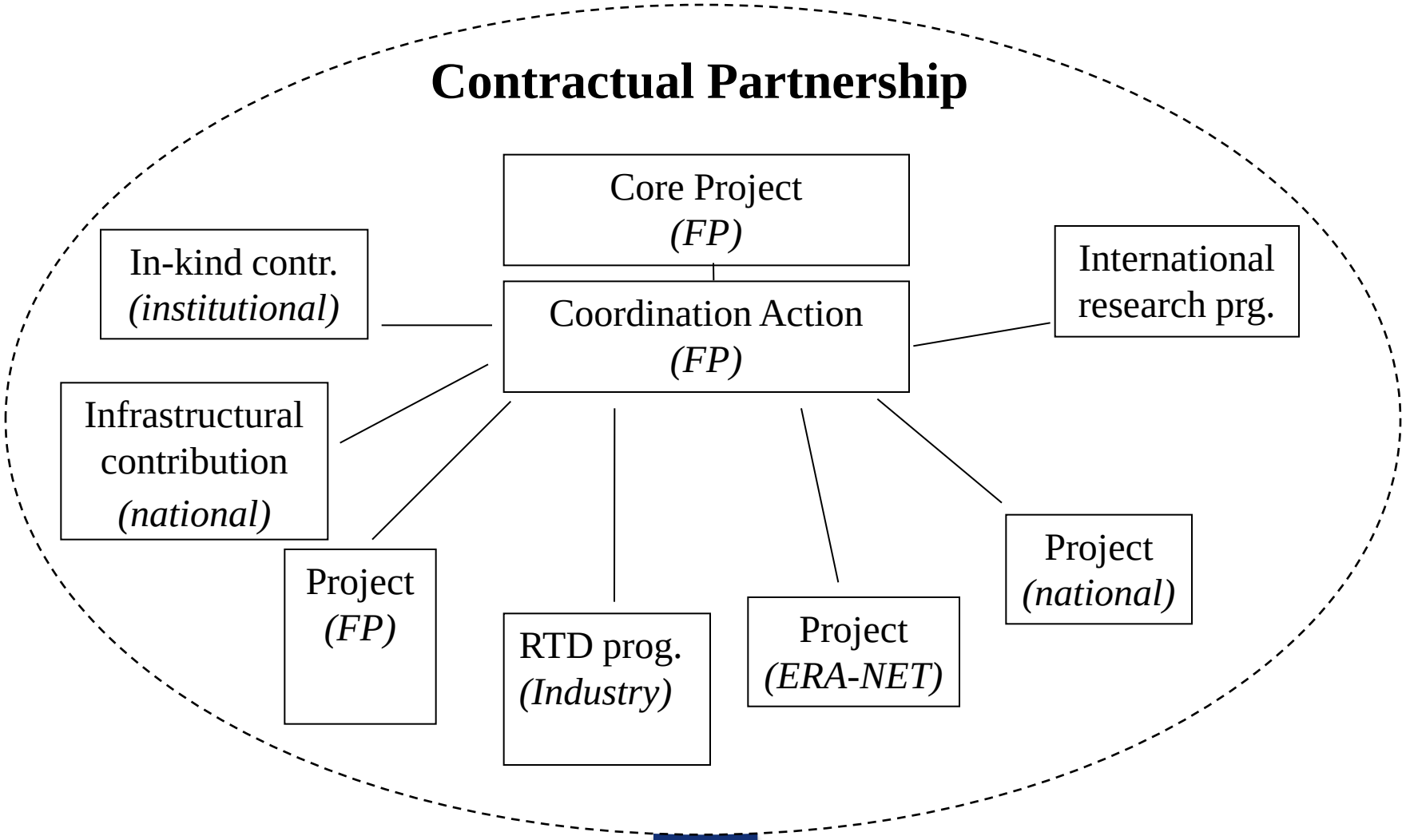
FET Flagships
Implementation

Ramp-up phase (30 Months)

- **Contractual Partnership: a Core Project (FP7 CP-CSA) and associated projects (FP, national, other) collaborating in a formalised partnership**

H2020 phase (until 2023)

- **Contractual Partnership, or**
- **Institutional Partnership**


Contractual Partnership
Core Project
(FP)
In-kind contr.
(institutional)
Coordination Action
(FP)
International
research prg.
Infrastructural
contribution
(national)
Project
(FP)
RTD prog.
(Industry)
Project
(ERA-NET)
Project
(national)

Flagship contributions

FP funds

- **Targeted calls** (standard instruments: IP, STREP, CA)
  - By different FP programmes
  - Funding for horizontal tasks (coordination, mobility etc)

National funds

- **Topical research programmes / calls**
- **Infrastructures** (geographical, physical, computing: in whole or dedicated use)
- Channelling of **structural funds** (for infrastructures or training programmes)

MS joint funds

- **ERA-NET**

Institutional funds

- Academia, industry, foundations

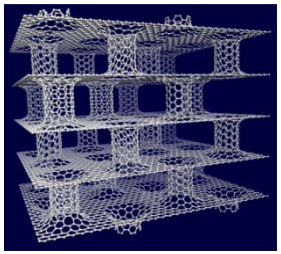
FET Flagship Pilots

FuturICT

The FuturICT knowledge accelerator

understanding and managing complex, global, socially interactive systems, with a focus on sustainability and resilience

Graphene



Graphene S&T for ICT and beyond

exploiting properties of graphene and related two-dimensional materials for the emergence of a graphene-based translational technology and innovative applications

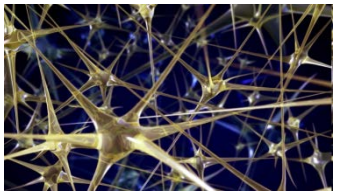
Guardian Angels

Guardian Angels for a smarter planet

smart, energy-efficient devices for personal assistance based on zero-power sensing, computation and communication technologies

FET Flagship Pilots

HBP

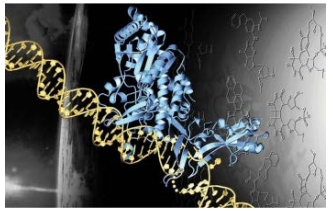


The Human Brain Project

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

ITFoM

Molecular modelling in health and medicine



building individual computational models of the biological processes that occur in every human for personalised healthcare

RoboCom

Robot Companions

unveiling the secrets underlying the embodied perception, cognition, and emotion of natural sentient systems and using this knowledge to build robot companions based on simplexity, morphological computation and sentience