

# Novel ideas for radically new technologies

## Future and Emerging Technologies

### FET-OPEN-01-2016-2017

Deadline 11 May 2016, 17 Jan/27 Sept 2017

FET-OPEN aims to support early stages of joint science and technology research for radically new future technological possibilities. There is no prescription to nature or purpose of envisaged technologies. Stimulation of innovation by initiating entrepreneurial activities around results from FET research projects is important.

#### Scope of the programme

This topic supports the early stages of research to establish a new technological possibility. Exploration of radically new future technologies requires early stage, high risk visionary science and technology projects to investigate new ideas. There is a need for agile, risk friendly interdisciplinary approaches with broad collaborations open to all sciences and disciplines that dissolve traditional boundaries. The call seeks a driving role for high-potential actors in research and innovation, excellent, male and female young researchers and high-tech SMEs.

#### Benefits for research institutions:

- New forms of cooperation between academia, research centres and the private sectors.
- Exploit the business potential of your discoveries.

#### Benefits for companies

- Innovation on high-tech level.
- Enhance competitiveness of the European industries
- Develop industrial leadership

#### Conditions for FET-OPEN-01-2016-2017:

- **Long-term vision:** the research must address a new and radical long-term vision of a science- and technology-enabled future, far beyond the state-of-the-art and not currently foreseen by technology roadmaps.
- **Breakthrough scientific and technological target:** research must be ambitious and technologically concrete, a crucial step towards achieving the long-term vision. Feasibility for this in the life-time of the project must be argued in the proposal.
- **Novelty:** the research to achieve the breakthrough must be based on cutting-edge knowledge, new ideas and concepts, not the mere application or incremental refinement of existing ones.
- **Foundational:** if envisaged breakthroughs are achieved, they would establish an essential basis for a new kind of technology and its future uses, not currently anticipated.
- **High-risk:** the inherent risk of the research proposed will be reflected in a flexible but effective methodology for exploring alternative directions and options, supported by open and agile research and innovation practices.
- **Interdisciplinary:** Collaborations go beyond 'waterfall' configurations in science and tech research. Seek new solutions through genuine exchanges, mutual learning, cross fertilization and synergistic advances
- Impact should include strengthening of EU leadership beyond academic excellence with global recognition, and uptake of new research and innovation.

Indicative budget	EUR 84M and 110.5M from the 2016 and 2017 budgets are allocated to FET-OPEN respectively
Duration	No limitations, 3-4 years on average
Consortium	Interdisciplinary consortium with academic institutes and high-tech SMEs
Project size	Up to EUR 4M (or higher if properly substantiated) with 100% funding rate
Indicative timetable for evaluation and grant agreement:	Deadline: 11 May 2016 at 17.00 Brussels time (17 Jan/27 Sept 2017) Outcome of the evaluation: October 2016 Indicative date for the signing of grant agreements: December 2016