

FET Open:

Scope: Proposals are sought for collaborative research with all of the following characteristics:

- **Long-term vision:** the research proposed must address a new, original or radical long-term vision of technology-enabled possibilities that are **far beyond** the state of the art and **currently not anticipated by technology roadmaps**.
- **Breakthrough S&T target:** research must target scientifically ambitious and technologically **concrete breakthroughs** that are arguably crucial steps towards achieving the long-term vision and that are plausibly **attainable within the life-time** of the proposed project.
- **Foundational:** the breakthroughs that are envisaged must be foundational in the sense that they can establish a basis for a new line of technology not currently anticipated.
- **Novelty:** the research proposed must find its plausibility in **new ideas and concepts, rather** than in the **application or incremental refinement** of existing ones.
- **High-risk:** the potential of a new technological direction depends on a whole range of factors that cannot be apprehended from a single disciplinary viewpoint. This inherent high-risk has to be countered by a **strongly interdisciplinary research** approach, where needed expanding well beyond the strictly technological realm.
- **Interdisciplinary:** the proposed collaborations must be interdisciplinary in the sense that they go beyond current mainstream collaboration configurations in joint science- and technology research, and that they aim to advance different scientific and technological disciplines together and in synergy towards a breakthrough.

Expected impact: Proposals must aim at one of the following two impacts:

- Initiating a radically new line of technology by establishing **Proof-of-Principle of a new technological possibility and its new scientific underpinning**, or
- Kick-starting an emerging innovation eco-system of high-potential actors around a solid baseline of feasibility and potential for a new technological option, ready for early take-up.

FETOPEN 1 30/09/2014

at 17.00.00 Brussels time

2-4 Mio. EUR

	Excellence	Impact	Quality and efficiency of the implementation
FETOPEN 1	<ul style="list-style-type: none"> • Clarity of targeted breakthrough and its specific science and technology contributions towards a long-term vision. • Novelty, level of ambition and foundational character. • Range and added value from interdisciplinarity. • Appropriateness of the research methods. 	<ul style="list-style-type: none"> • Importance of the new technological outcome with regards to its transformational impact on technology and/or society. • Quality of measures for achieving impact on science, technology and/or society. • Impact from empowerment of new and high potential actors towards future technological leadership. 	<ul style="list-style-type: none"> • Quality of the workplan and clarity of intermediate targets. • Relevant expertise in the consortium. • Appropriate allocation and justification of resources (person-months, equipment, budget).
	Threshold: 4/5 Weight: 60%	Threshold: 3.5/5 Weight: 20%	Threshold: 3/5 Weight: 20%