

Future & Emerging Technologies (FET)

FET Open

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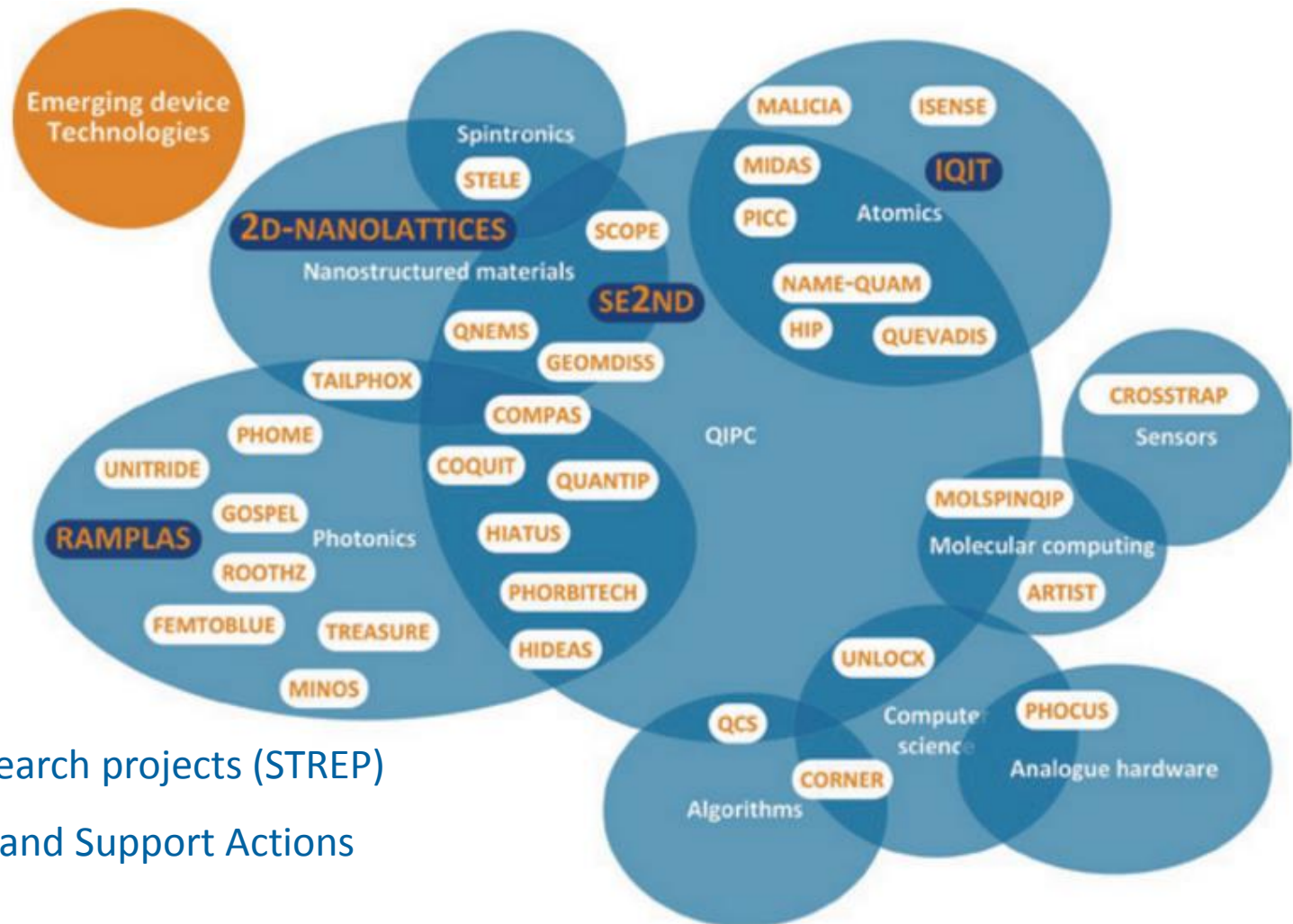
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[FP7 FET OPEN: Thematic Areas]



➤ 75 targeted research projects (STREP)

➤ 8 Coordination and Support Actions

➤ 140 M euros*

*FP7 (2007-2011),

[FET OPEN: Objectives]

- ✓ FET Open supports **early-stage joint science and technology** research around new ideas for radically new future technologies.
- ✓ It will build up a diverse portfolio of targeted projects to explore a wide range of **new technological possibilities**, inspired by cutting-edge science, **unconventional collaborations** or new research and innovation practices.
- ✓ Early detection of promising new areas, developments and trends, along with attracting **new bold-visioned and high-potential research** and innovation players will be key.
- ✓ FET-Open represents **40%** of the overall FET budget in Horizon 2020.

[FET Open: 2014-2015]

FETOPEN 1: FET-Open research projects 2014-15

- Specific challenge
- **Supporting a large set of early stage, high risk visionary science and technology collaborative research projects** is necessary for the successful exploration of new foundations for radically new future technologies. Nurturing fragile ideas requires an agile, risk-friendly and highly interdisciplinary research approach, expanding well beyond the strictly technological disciplines. Recognising and stimulating the driving role of **new high-potential actors** in research and innovation, such as **women, young researchers and high-tech SMEs**, is also important for nurturing the scientific and industrial leaders of the future.
- Project size: 2 to 4M€
 - 1 step submission and evaluation of a 16 pages proposal
 - Proposals are not anymore anonymous
 - Cut-off date every 6 months March & Sept, starting as of Sept 2014

- Budget: 154M€

Deadlines	30/09/2014	31/03/2015	29/09/2015
Budget	77 M€	38,5 M€	38,5M€

[FET Open: 2014-2015]

FETOPEN 2: Coordination and Support Activities 2014

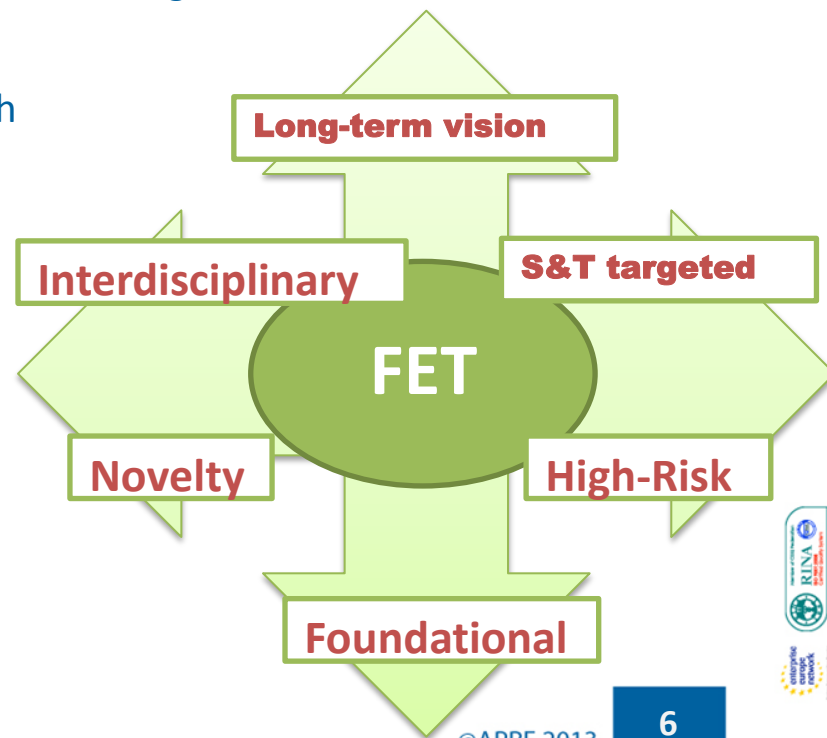
- ✓ Specific challenge: The challenge is to make Europe the best place in the world for collaborative research on future and emerging technologies that will renew the basis for future European competitiveness and growth, and that will make a difference for society in the decades to come.
- ✓ Scope: Proposals shall address one of the following topics:
 - ✓ **FET Observatory**: identifying new opportunities and directions for FET research
 - ✓ **FET Communication**: communicating on FET projects and activities
 - ✓ **FET Exchange**: structuring an emerging FET-relevant topic and communities
 - ✓ **FET Conference**: supporting the organisation of the third FET Conference
 - ✓ **FET Prizes**: identifying suitable areas for prizes and competitions in FET
 - ✓ **FET Impact**: Assessing the impacts of the FET programme
- ✓ Project size: 0,3 to 0,5M€ per topic, up to 1M€ for FET Conference
- ✓ Budget & deadline:
 - 3M€ -> Deadline: 30/9/2014

Infoday 16th May

[FET Open: 2014-15]

Call FET-Open : novel ideas for radically new technologies

- 'Open is open'
 - All technologies, no thematic restriction
- FET gatekeepers define the kind of research that FET is looking for
 - Scope defined by the 6 gatekeepers
 - Bottom-up, but targeted - not blue sky research
 - Collaborative research
- Total budget: 160M€ in 2014-15
- Instrument
 - Research and Innovation Action - 154M€
 - Coordination and Support actions (CSA) – 6M€



[FET Open: Gatekeepers]

- ✓ **Long-term vision:** a new, original or radical long-term vision of technology-enabled possibilities going far beyond the state of the art
- ✓ **Breakthrough S&T target:** scientifically ambitious and technologically concrete breakthroughs plausibly attainable within the life-time of the project.
- ✓ **Foundational:** the breakthroughs must be foundational in the sense that they can establish a basis for a new line of technology not currently anticipated.
- ✓ **Novelty:** new ideas and concepts, rather than 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 go beyond current mainstream collaboration configurations in joint S&T research, and must aim to advance different scientific and technological disciplines together and in synergy towards a breakthrough.

[Living Interdisciplinarity]

In FET permeability of disciplinary boundaries changes!!

- **Synergistic advances**
- **New collaborations** between biologists, mathematicians, chemists, psychologists, computer scientists, climate experts, social scientists, neuroscientists, physicists, designers, artists, doctors, engineers, economists and more.
- Long-term stays, open-ended agenda's, diversity in the teams (discipline, age, gender, culture,...), measures to cultivate the right mindset (including the right to fail) and ongoing mutual learning
- **NO** each discipline stays too much in its comfort zone of established knowledge and familiar methodologies.
- **NO** pro forma Collaborations with the social sciences and humanities in technology projects

BUT an **ongoing process of learning and exchange**

<http://ec.europa.eu/digital-agenda/en/news/fet-living-interdisciplinarity>

[High-tech research intensive SMEs]

- Link **novel ideas** from science on the one hand, and marketable ideas on the other, and can lead to new, visionary and **non-mainstream business opportunities** and future markets.
- Generate a new scientific and technological asset base on which the SMEs can establish themselves firmly as future innovation players in areas with a **high potential for future commercial or societal impact**.
- **NO** short term commercial outcomes:

not support, for example, the incremental improvement of state-of-the-art technology, mainstream research aimed at short term product or service development, the incremental improvement of existing lines of business activity, research aimed to catch-up with the competition, foraging or market studies, or the mere development of new business models or business plans

[Open Access in H2020]

- Mandatory for all publications resulting from H2020 projects;
- It is a tool to facilitate and improve the circulation of information in ERA and beyond;
- Not in conflict with Intellectual Property Rights;
- Publishing charges are eligible for reimbursement;
- E-infrastructure support for publications management & sharing.

[Guidelines on Open Access to Scientific Publications and Research Data](#)

[Open research Data Pilot in H2020]

- Open data pilot for specific areas, including Future and Emerging Technologies;
- Possibility to Opt-in or Opt-out when justified, also for running projects;
- Participating projects need to develop a Data Management Plan within 6 months from project start;
- E-infrastructure support for research data management & sharing

[Guidelines on Data Management](#)

[FET submission and evaluation] 1/2

- FET-Open & FET-Pro-active
 - Specific evaluation procedure
- FET-HPC
 - Standard submission and evaluation procedure
- FET-Flagship
 - Specific evaluation procedure

[FET: Submission & Evaluation] 2/2

- ✓ Part A: Administrative part of the proposal
 - ✓ Part B : Scientific part of the proposal
 - ✓ 16 pages – core proposal
 - ✓ Cover page
 - ✓ Section 1: S&T Excellence
 - ✓ Section 2: Impact
 - ✓ Section 3: Implementation
 - ✓ Additional information
 - ✓ Section 4: Members of the consortium
 - ✓ E.g. legal entity, CV, subcontract, third party
 - ✓ Section 5: Ethics and Security
 - ✓ Ethics self-assessment & supporting documents
 - ✓ Security checklist
- Cover page strictly limited to 1 page!*
- Section 1,2 & 3 are strictly limited to 15 pages!*
- Section 4 & 5 are not covered by the page limit.*
- ✓ Standard eligibility criteria (i.e. collaborative project with minimum 3 legal entities, each established in different MS/AC)
 - ✓ High quality peer review – 4 experts per proposals to best address multi-disciplinary nature of FET research

[FET RIAs: Evaluation Criteria]

Excellence	Impact	Implementation
<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).
<p>Threshold: 4/5 Weight: 60%</p>	<p>Threshold: 3,5/5 Weight: 20%</p>	<p>Threshold: 3/5 Weight: 20%</p>

[FET CSAs: Evaluation Criteria]

Excellence	Impact	Implementation
<input type="checkbox"/> Clarity of objectives <input type="checkbox"/> Contribution to the coordination and/or support of high-risk and high-impact research for new or emerging areas or horizontally <input type="checkbox"/> Appropriateness of the coordination and/or support activities	<input type="checkbox"/> Transformational impact on the communities and/or practices for high-risk and high-impact research <input type="checkbox"/> Appropriateness of measures for spreading excellence, use of results, and dissemination of knowledge, including engagement with stakeholders	<input type="checkbox"/> Quality of work plan and management <input type="checkbox"/> Relevant expertise in the consortium <input type="checkbox"/> Appropriate allocation and justification of resources (person-months, equipment, budget).
Threshold: 3/5 Weight: 40%	Threshold: 3/5 Weight: 40%	Threshold: 3/5 Weight: 20%

[Riassumendo]

- ✓ FET Open Objectives
- ✓ Call for Proposal
- ✓ FET Open characteristics
- ✓ Submission
- ✓ Evaluation