



Future and Emerging Technologies



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ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΙΓΑΙΟΥ

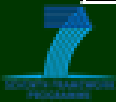




Pasteur's Quadrant for a 'Science of Global Systems'

| | Inspired by use? <i>No</i> | Inspired by use? <i>Yes</i> |
|--|--|--|
| Quest for fundamental understanding? <i>Yes</i> | <u>Fundamental questions:</u> <u>Formal foundations of</u> <u>highly interdependent</u> <u>systems</u> <p style="text-align: center;">ERC</p> | <u>Core Questions:</u> <u>Normative</u> <u>Analytic</u> <u>Computational</u> <p style="text-align: center;">FET</p> |
| Quest for fundamental understanding? <i>No</i> | | <u>Operational</u> <u>Questions:</u> <u>How to induce</u> <u>Action</u> <p style="text-align: center;">app-driven</p> |

Go FET?
... or Select something else?



inspired by W. Clark, Harvard

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.

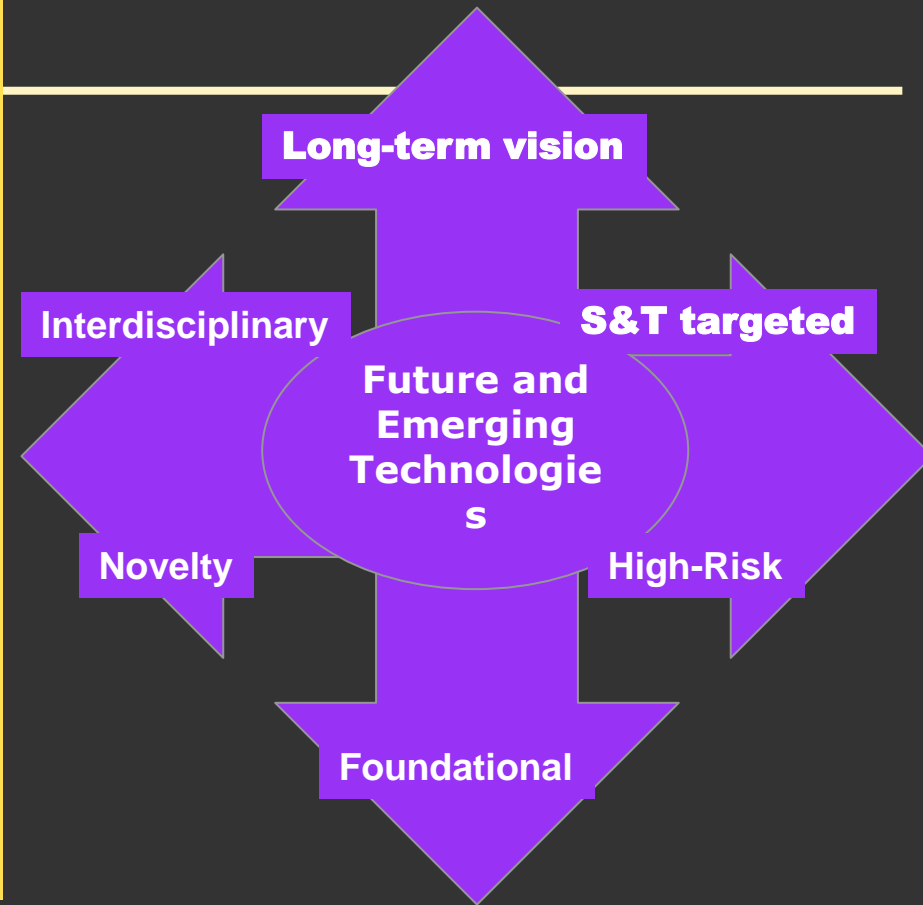
Foundational: the breakthroughs must be foundational in the sense that they can establish a basis for a new line of technology not currently anticipated.

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.

Necessary Conditions



Open, light and agile

Roadmap based research

FET-Open ^{40%}

Early Ideas

Individual research projects

Exploring novel ideas

FET Proactive

Exploration and Incubation

Critical mass making a case

Developing topics & communities

FET Flagships

Large-Scale Partnering Initiatives

Common research agenda

Addressing grand challenges

Small projects
up to 4M€ 6 to 8 partners

Medium size projects
4 to 10M€

Large initiatives