Future and Emerging Technologies



"Incubator for radically new research ideas" FET-Open in WP2011-2012





FET research scheme is unique by combining the following characteristics

Foundational

New foundations for future ICT by exploring new unconventional ideas and scientific paradigms

- Transformative Driven by ideas that challenge and can radically change our understanding of scientific concepts behind existing ITs
- High risk, high pay-off Balances risks against high potential returns and the chance of revolutionary breakthroughs
- Purpose-driven
 Impact on future industrial ICT reserach agendas
- Multidisciplinary Synergies with and cross-fertilization between disciplines
- Collaborative

Best teams in Europe and increasingly worldwide



European Commission Information Society

Future & Emerging Technologies-FET

Supporting the emergence of new visionary ICT research

An early detector, incubator and pathfinder for new ideas and themes for long-term research in the area of information and communication technologies

High risk research, offset by potential breakthrough with high technological and/or societal impact



FET-Open vision the business-angels for research

"Incubator for radically new research ideas"

New ideas with long-term visionary impact on ICT ...

- ... can come from anywhere, from anybody and at anytime;
- ... are hard to find;
- ... are fragile and easy to shoot down;
- ... are hard to do and take time to incubate;
- ... require an open and transdisciplinary research atmosphere.

Needs a specific approach: FET-Open scheme



FET-Open call: a unique scheme Continuously open call

a fast and light scheme fitted to stimulate and capture new opportunities and developments in science and technology as they emerge

The <u>FET-Open 'scheme' is open to</u>:

- any ideas within ICT
 - bottom-up, no predefined themes and orientations
- at anytime
 - Continuously open call
- from anyone
 - anonymous evaluation of "short" proposals
- in a light and friendly way
 - two-step submission: Start with a 'short' 5 pages proposa



FET-Open in WP2011-12 One vision, one scheme implemented through 4 objectives

> European Commission Information Society

"Incubator for radically new research ideas"

- 4 interrelated objectives aiming at challenging current thinking and at attracting future potential:
- ICT-2011.9.1: Challenging current Thinking
- ICT-2011.9.2: High-Tech Research Intensive SMEs in FET research
- ICT-2011.9.3: FET Young Explorers
- ICT-2011.9.4: International cooperation on FET research



FET-Open ICT-2011.9.1: Challenging current thinking - STREPs

What are we looking for ?

 Exploration of new and alternative ideas that, because of their risky or non-conventional nature, would not be supported elsewhere in the ICT WP. It seeks:

- **foundational breakthroughs** as crucial steps towards radically new forms and uses of information and information technologies within a clear long-term vision that is far beyond the state of the art

- **ambitious proof-of-concept** and its supporting scientific foundation, where novelty comes from new, high-risk ideas rather than from the refinement of current ICT approaches

- **new inter-disciplinary collaborations**, possibly with prominent and internationally recognised non-EU research teams where these can provide a significant added value

• 75 M€ for STREP (& CSA)

SEVENTH FRAMEWOR

2-step submission and evaluation scheme

proposals continuously receivable until 11 September 2012



FET-Open ICT-2011.9.1: Challenging current thinking - CSAs

What are we looking for ?

 CSAs for creating the best conditions within which FET research can flourish and achieve transformative impacts that it aspires to. These activities may be, for example:

 actions, including networking and dissemination activities, aiming at the emergence of new research communities and collaborations involving a broad diversity of disciplines and actors into FET research

- actions towards the increased involvement high-tech research intensive SMEs

- actions that stimulate excellence and future leadership of pioneering teams of Young Researchers

- actions aiming to strengthen the international dimension of FET

• Up to 7.5 M€ for CSA

SEVENTH FRAME

1-step submission and evaluation scheme

proposals continuously receivable until 12 March 2013

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FET-Open ICT-2011.9.2: High-tech research intensive SMEs in FET research

What are we looking for ?

- High-tech research intensive SMEs ready to take a driving role in collaborative FET projects, by setting and co-executing the ambitious FET research agenda centred on their needs
 - link novel science with marketable ideas that can lead to new visionary business opportunities and create future markets;
 - generate a new scientific and technological asset for SMEs to establish themselves firmly as future innovation players
 - increased visibility, exposure and impact of FET projects by fostering the rapid maturing of breakthrough technologies
- <u>Funding</u>: 9M€
- <u>Target</u>: 'Small' STREP proposals, grant in the order of 1 M€*
- Eligibility: Consortium must contain a High Tech Research Intensive SME
- Submission: 2-step submission/evaluation process; short proposation process; short process; short proposation process; short proposation process; short proposation process; short proposation process; short process; short

FET-Open ICT-2011.9.3: FET Young Explorers

nd Media

What are we looking for ?

- Captures the creative potential of young researchers in FET type of research
- Fosters their leadership and participation: put them in the driver seat of FET-like collaborative research projects
- Empowers the next generation of European independent research leaders
- Promotes early independence of high-potential young researchers
- <u>Funding</u>: 6M€
- <u>Target</u>: 'Small' STREP proposals; grant in the order of 1 M€
- <u>Eligibility</u>: Project and all Workpackages must be led by Young Researchers*
- <u>Submission</u>: 2-step submission/evaluation process; short proposations receivable continuously from 4 August 2010 until 11 September 2012

(*) Young researcher is defined as up to PhD + 6 years (or equivalent) at proposal submission FET-Open in WP2011-2012

FET-Open ICT-2011.9.4: : International cooperation on FET research Top-up call

What are we looking for ?

- Extension of ongoing FET projects with complementary research activities, in which collaboration with non-EU research partners of excellent global standingbrings significant added value
- Focus on new research activities that
 - Expand the research challenge and global reach of FET research
 - Increase the impact of the initial project
 - Foster cooperation among top EU and non-EU research teams
- <u>Funding</u>: 3M€, for top-up funding for partners from the ongoing FET project and by the new non-EU research participants to cover the coordination and joint research activities
- Eligibility: Restricted to on-going FET IPs & STREPs projects ending at least 18 months after the submission date of the proposal. European Commission Information Society
- Submission: 1-step submission/evaluation process; proposals ceivable continuously up to 12 March 2013





+ a special initiatives in Call 8 on 'Science of Global Systems'







ICT-2011.9.14: Joint call on 'Science of **Global Systems**' INFSO ICT/RTD SSH

What are we looking for ?

- Progressing research on global systems dynamics to better understand the interactions between ecological and socioeconomic systems and to improve their ability to respond to global environmental changes.
- Better links between modellers and stakeholders facilitated by new policy-relevant concepts in modelling of global systems
- Overcome fragmentation in research in various policy-relevant models resulting in a better uptake of modelling results for global coordination of policies
- Policy uptake in targeted areas: socio-ecological system and climate change impacts, innovation as a global system, dynamics of the financial system and new models for economy. European Commission Information Society
- Funding: 3.5* M€ for STREP, Call 8
- <u>Submission</u>: 1-step submission/evaluation process; proposals we ceivable continuously up to 12 March 2013

•(*) **Contribution**, an additional contribution of 3.5M€ is expected from the Social Sciences and Humanities FET-Open in WP2011-2012 priori



Annexe





FET-Open in WP2011-2012

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FET-Open Scheme implementation and funding instruments

- Continuation of the successful & popular scheme of FP6
- CSA & STREP funding instruments

1 stage submission & evaluation

SEVENTH FRAME

2 stage submission & evaluation:

'Short' proposal (5 pages), anonymous, evaluated as soon as it is submitted

If 'short' proposal successful, 'full' proposal submitted by a binding cut-off date and evaluated in batches

European Commission Information Society and Medi

Inco top-up call

How to submit to FET-Open ? Two stage submission (STREPs)



FET evaluation

Criteria – 'short' STREP

| 1. S/T quality | 2. Implementation | 3. Impact |
|--|------------------------------------|---------------------------------|
| Clarity of targeted breakthrough and its relevance towards a long- term vision | (not applicable to short STREP) | (not applicable to short STREP) |
| Novelty and foundational character Plausibility of the S/T approach | | |
| Threshold: 4.0/5 | | |







FET evaluation Selection and award criteria – 'full' STREP

| 1. S/T quality | 2. Implem | entation | 3. Impact |
|---|--|---|--|
| Clarity of targeted breakthrough and relevance toward term vision Novelty and four character Specific contribution progress in scien technology Quality and effect of the S/T method | d its s a long- dational ion to ce and tiveness dology d its managem • Quality a as a whole complem • Appropri and justif resources (person-r | and relevant ce of the l participants of the consortium le (including entarity, balance) ate allocation fication of the s to be committed | Transformational impact of the results on science, technology and/or society Impacts towards the targeted objective in the work programme Appropriateness of measures envisaged for the dissemination and/or use of project results. |
| Threshold: 4/5 Weight: 50% | Threshold: Weight: 20 | | Threshold: 3.5/5 Weight: 30% |



How to submit to FET-Open? <u>Exception</u>: ICT-2011.9.4: International cooperation in FET – top-up to on going IPs and STREPs



How to submit to FET-Open? Coordination and Support Action



FET eligibility, evaluation, selection and award criteria - CSA

| 1. S/T quality | 2. Implementation | 3. Impact |
|--|--|---|
| Clarity of objectives. Contribution to the co-ordination and/or support of high-risk and high-impact research, for new or emerging areas or horizontally Quality and effectiveness of the coordination and/or support activities | Quality of workplan and management. Quality and relevant experience of the individual participants Quality of the consortium Appropriate management of the resources to be committed (person- months equipment, budget) | Transformational impact on the communities and/or practices for high- risk and high-impact research Appropriateness of measures for spreading excellence, use of results, and dissemination of knowledge, including engagement with stakeholders |
| Threshold: 3/5 Weight: 40% | Threshold: 3/5 Weight: 20% | Threshold: 3/5 Weight: 40% |





Thank you for your attention



The sower, Vincent van Gogh

Further information: http://cordis.europa.eu/fp7/ict/fet-open/home_en.http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.eu/fp7/ict/fet-open/http://cordis.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europ

