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NEST “Pathfinder” Initiatives

Outline of Pathfinder Topic Discussion and Selection Process

<p>Purpose of document: To provide a brief outline of the steps and rationale behind the NEST - Pathfinder topic discussion and selection workshop.</p>
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Background to NEST

The NEST (*New and Emerging Science and Technology*) activity is a new action created on the Sixth Framework Programme to stimulate breakthrough research in new and emerging areas of science and technology. NEST will focus on interdisciplinary and multidisciplinary research which lies outside the main fields of activity of the Framework Programme’s seven Thematic Priorities.

Pathfinder Initiatives:

Pathfinder is one of three action lines carried out simultaneously within NEST. Pathfinder will select important, exciting and promising areas of research for focussed initiatives. Emphasis will be on the outcomes; while remaining flexible in terms of the process:

What are the *main* objectives of NEST PATHFINDER initiatives?

Pathfinder initiatives aim at *building and consolidating European research capabilities in emerging and promising areas of Science and Technology*. The initiatives aim to bring together research activities and participants operating in proximate fields around a common strategic objective.

In the process, they pathfinder initiatives may serve to:

- Help clarify the real potential of a field
- Identify new research initiatives in Europe
- Create new communities of knowledge
- Attract young researchers into new areas with strong future potential
- Assist the development of European Research Area

What will Pathfinder activities look like?

Pathfinder initiatives will be “packages of activities” as opposed to simple topics. Generally, Pathfinder activities will be composed of research projects (STREPs), co-ordination actions (CAs) and /or support activities (SSAs) chosen and designed as necessary to achieve goals and objectives envisioned. Smaller exploratory actions on possible future Pathfinder activities may also be initiated, and would take the form of CAs or SSAs.

On what basis will Pathfinder topics be chosen?

Topics will be selected on the basis of their urgency or potential for future societal, industrial, or economic relevance. The assessment and selection of topics will be carried out with the support of independent high-level scientific and industrial experts, and will incorporate the following criteria:

- the potential contribution of the research topics for innovation and the EU's competitiveness, the strengthening of its scientific and technological bases and the achievement of the European Research Area, including the effective integration of the candidate countries;
- the scientific relevance and timeliness of the research themes and approaches proposed.

Topics will be evaluated and assessed against the following criteria:

- **To what extent does the topic have high future “potential”?**

Topics chosen should open the way to new scientific and technological developments, with important future prospects. This means that the link to potential societal, economic and/or industrial impacts, even if long term, should exist for PATHFINDER initiatives.

- **Is there high urgency for research on this topic?**

Preference will be given to topics where there are new research opportunities which could help put European research in a leading position; topics should be developing rapidly over the last several years.

- **Is this a small but emerging field of research in Europe?**

The existence of a small incipient community in Europe and the potential for trans-European collaboration are requirements for European added value and the proper uptake and use of the funds. At the same time, the topic/ community should not be established for a decade or more

- **Can the Pathfinder initiative actually make an impact?**

Topic needs to be sufficiently focussed so that EC support will make a difference. For example, would there be a “federating potential”, or would the Pathfinder action provide a starting point for further funding in the future by one or more thematic priorities? Can the actions serve as a “demonstration” of new interdisciplinary possibilities in a wider field?

- **Does the topic fit with NEST's “portfolio” of projects and in general and the overall NEST philosophy?**

Topics finally chosen need to respond to the overall “breakthrough” philosophy of the NEST programme. Furthermore, consideration will be given to whether a topic complements or duplicates other topics NEST is funding.

What relationship do the topics of the Pathfinder initiatives have to the other parts of the Framework Programme?

Topics chosen cannot fall in the natural area of activity of the Thematic Priorities of the Framework Programme. At the same time, the interest of other parts of the FP (inside and outside DG RTD) will be taken into consideration when selecting topics. For example, the ability to bridge between existing thematic priorities, or to be complementary to them will be considered.

Topic selection mechanisms:

Several parallel selection processes have been set into motion and are under way. These include:

- High level consultation with experts via workshops and discussion
- Interaction / consultation with research community (e.g. web based, direct visits to research institutions)
- Internal examination of recent “foresight activities”
- Consultation within the Commission and with external scientific organisations

Such a process will be made on a yearly basis through out FP6. The final decision will be made by the Commission services considering Commission priorities and policies.