

Work Programme

*for the specific programme for research,
technological development and
demonstration:*

*"Integrating and strengthening the
European Research Area"*

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Note : *This document contains extracts of the Work Programme for the FP6 specific programme « Integrating and Strengthening the European Research Area ». Not all of them are relevant to NEST.*

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Work Programme Section 0 : General Introduction

(last updated : June 2004)

1. General

Following the adoption of the specific programme for research, technological development and demonstration: "Integrating and strengthening the European Research Area"¹ and the rules of participation and dissemination² under the EC Treaty, the Commission adopted and updated as appropriate, with the assistance of the programme committee, this work programme which sets out in greater detail the objectives and technological priorities and the timetable for implementation of the specific programme.

As regards the **Priority Thematic Areas of Research**, integrated projects and networks of excellence are recognised as being an overall priority means to attain the objectives of critical mass, integration of the research capacities, management simplification and European added value.

These instruments are being used in each theme and, where deemed appropriate, as a priority means, while maintaining the use of specific targeted projects and co-ordination actions.

In terms of participation of the Community in programmes undertaken by several Member States (Article 169 of the Treaty), this is only foreseen, at this stage, in the priority thematic area of research addressing 'Life sciences, genomics and biotechnology for health'.

More information on the provisions for implementing the new instruments (integrated projects and networks of excellence) is available on Cordis (<http://www.cordis.lu/fp6/instruments.htm>).

Regarding research activities in areas involving Specific Activities Covering a Wider Field of Research, these are being implemented, at this stage, using specific targeted research projects, co-ordination actions, and specific research projects for small and medium sized enterprises (SMEs).

Concerning Strengthening the Foundations of the European Research Area, the implementation is mostly done through specific targeted research projects, specific support actions, and co-ordination actions.

Specific support actions, including calls for tender, and co-ordination actions may be applied throughout the programme.

In updating this work programme, the Commission has relied on advice mainly from advisory groups. More information on the list of members of the advisory groups is available on Cordis. These groups of independent high-

¹ OJ L 294, 29.10.2002, p. 1.

² OJ L 355, 30.12.2002, p. 23.

level experts have been set up to advise on the implementation of Community research policy. The experts are renowned for their knowledge, skills and top-level experience in the field or regarding the issues to be dealt with by the groups.

2. Scope of Work Programme

The scope of this work programme corresponds to that defined in the specific programme. The calls for proposals planned within this work programme are those foreseen to close in 2004 and 2005 along with, in many cases, an indication of those calls intended to close in 2006. Annex A gives an overview of these calls.

3. Cross Cutting Issues

There are several issues that are important to all parts of the work programme. These are addressed here and, as appropriate, elaborated in the various parts. Please note that the work related to statistics in this work programme will be implemented in close co-operation with EUROSTAT, in particular the parts relating to the priority thematic areas “Information society technologies” and “Citizens and governance in a knowledge-based society”, as well as the part addressing policy-oriented research under the heading “Specific activities covering a wider field of research”.

- a) This work programme places special emphasis on the needs of small and medium-sized enterprises (SMEs). In particular, at least 15% of the funding allocated to the Priority Thematic Areas of Research is foreseen for SMEs. In order to reach this objective, special actions are foreseen such as SME specific calls for proposals in the context of the new instruments, reinforcement of National Contact Points, and specific training and take-up measures. In addition, the involvement of SMEs is taken into account in the evaluation criteria particularly for the new instruments. Also the fact that enterprise groupings which represent large communities of SMEs may play an active role in the new instruments will contribute to reaching the above-mentioned objective.
- b) Proposers based in Associated States may take part in this programme on the same footing and with the same rights and obligations as those based in Member States. In addition, this work programme underlines the importance of involving associated candidate countries in the Community's research policy and in the European Research Area. Further specific support actions will also be implemented to stimulate, encourage and facilitate the participation of organisations from the remaining candidate countries in the activities of the priority thematic areas. Annex D provides details of these specific measures (in particular that relate to the reinforcement of the Associated Candidate Countries research capacities).

- c) International co-operation represents an important dimension of the Sixth Framework Programme. As a contribution to a European Research Area open to the world, it will be implemented in the Sixth Framework Programme through three major routes:
- The opening of “Focusing and Integrating Community Research” to third country organisations with substantial funding,
 - Specific measures in support of international co-operation, and
 - International activities under the heading of Human Resources in the specific programme for research, technological development and demonstration "structuring the European Research Area".

The first two, as part of the specific programme “Integrating and strengthening the European Research Area”, are covered by the present work programme. They also correspond to the second activity referred to in Article 164 of the Treaty, which covers co-operation with third countries and international organisations.

- *Opening of “Focusing and Integrating Community Research” to third country organisations*

Funding is available for the participation of researchers, teams and institutions from third countries in projects within the seven Priority Thematic Areas of Research, as well as under “Specific activities covering a wider field of research”. Under this heading, the activities in question have the following overall objectives:

- To help European researchers, businesses and research organisations in the European Union and in the countries associated with the Framework programme to have access to knowledge and expertise existing elsewhere in the world, and
- To help ensure Europe’s strong and coherent participation in the research initiatives conducted at international level in order to push back the boundaries of knowledge or help to resolve the major global issues.

Any particular issue concerning the international dimension of the seven Priority Thematic Areas of Research and of the Specific activities concerning a wider field of research is set out in the relevant chapter of this work programme. Annex E on the other hand provides details on the specific measures that are envisaged for the promotion of co-operation with targeted third countries.

Participants from all third countries³ and from international organisations may take part in all activities under this heading in addition to the minimum number of participants required.

Participants from developing countries, Mediterranean partner countries, Western Balkan countries, as well as Russia and the new independent states (see the list of countries in Annex C) can be funded in all activities

³ Please check on Cordis for further details, including regularly updated information.

under this heading⁴. Other third country participants can also be funded in those areas where the relevant part of this work programme makes reference to this possibility or if it is essential for carrying out the research activity.

- *Specific measures in support of international co-operation*

315 million Euro will fund “Specific measures in support of international co-operation”. In support of the external relations, including the development policy, of the Community, these measures target the following groups of third countries: Developing countries, Mediterranean partner countries, Western Balkan countries, and Russia and the new independent states. The activities and calls for proposals under this heading, which are complementary to the opening of the Priority Thematic Areas of Research, are presented in Chapter 10 of this work programme. Requirements for consortium composition are set out in this part.

- *Participation and funding for third country entities under the heading “Strengthening the European Research Area”*

International co-operation with third country partners and international organisations will be actively fostered on all topics which will benefit from such co-operation. Furthermore, third country entities and international organisations can benefit from Community financial contribution. To this end, topics for international co-operation will be specified, where appropriate, in calls. This applies particularly to those third countries with whom co-operation agreements have been concluded. As mentioned above, Annex E provides details on the specific measures that are envisaged for the promotion of co-operation with targeted third countries.

- d) Research activities carried out under this work programme must respect fundamental ethical principles and the requirements as stipulated in the decision on the specific programme for research, technological development and demonstration: "Integrating and strengthening the European Research Area". More information on the review procedure is foreseen in the “Guidelines on Proposal Evaluation and Project Selection Procedures” (<http://www.cordis.lu/fp6/eval-guidelines>). Annex B to this work programme also details the issues to be covered in any ethical review.
- e) As much as possible and in association with the specific programme for research, technological development and demonstration "Structuring the European Research Area", the mobility of researchers will be promoted, particularly with a view to the successful creation of the European Research Area.

⁴ 285 million euro has in fact been allocated for participation from the targeted third countries (see Annex C) within the Priority Thematic Areas of Research and specific activities covering a wider field of research.

- f) This work programme attempts, where possible, to reinforce and increase the place and role of women in science and research both from the perspective of equal opportunities and gender relevance of the topics covered.
- g) A particular effort will be carried out to take into consideration the ethical, social, legal, regulatory and wider cultural aspects of the research including socio-economic research, and innovation, resulting from the possible deployment, use and effects of the newly developed technologies or processes and scenarios covered by each of the thematic priorities. This effort will be complemented by socio-economic research carried out within the priority addressing ‘Citizens and governance in a knowledge-based society’.
- h) In the context of the regular report to be submitted to the European Parliament and the Council, the Commission will continue to report in detail on progress in implementing the specific programme, and, in particular, progress towards achieving its objectives and meeting its priorities.
- i) The promotion of innovation is a cross-cutting issue, relevant to the whole European Community RTD Framework Programme. This issue aims to meet the Treaty objective of strengthening the scientific and technological bases of Community industry *and encouraging it to become more competitive at international level*⁵.

In this context, an important goal is to promote exploitation of the results of those projects which include R&D components⁶. To this end, consortia should pay sufficient attention to the management of knowledge and pursuit of innovation in their projects. These issues should be well integrated in the proposals through the work content and consortium composition, and will be taken into account during their evaluation⁷. Projects should involve, where appropriate, end-users and other stakeholders to ensure relevance of the research and effective take-up of results.

In particular, the participants should include in their projects “innovation-related activities”, that may be supported by EC funding. Examples of such activities include the protection and management of knowledge and intellectual property, the analysis of socio-economic factors affecting the exploitation of the project's results, feasibility studies for the creation of spin-offs, and other activities to promote knowledge transfer between public research and industry.

During a project, the participants will be requested to report periodically on these issues, in particular by developing and updating throughout the

⁵ EC Treaty, Art. 163.1

⁶ As confirmed in the Council decision of 30.9.2002 relating to the specific RTD programme for “Integrating and strengthening the European Research Area” (Annex, section 1.1 – OJ L 294/7)

⁷ As stated in Art. 10.1.e of the rules of participation (OJ L 355/28)

project a *plan for using and disseminating the knowledge*. This plan should describe the innovation-related activities already implemented and those being planned, as well as their actual or expected impact.

Besides these central project-level activities, specific mechanisms will ensure that there is exchange of information and experience between the activities of the different work programmes as regards their innovation dimension, and that the innovation-related achievements be properly analysed, monitored, and evaluated⁸.

4. Submitting a Proposal

Proposals should be submitted under the terms of a call for proposals⁹. In order to submit a proposal, a proposer should consult the following:

- This work programme,
- The relevant call for proposals as it is published in the *Official Journal of the European Union*, and
- The relevant Guide for Proposers.

These and a number of other useful texts, including the rules for participation and details on the contracts, are available on Cordis (as referred to above).

5. Cross Cutting Proposals

Proposals are invited to be submitted on the basis of calls for proposals, which are, in the case of the Priority Thematic Areas of Research organised thematically. Proposals that address more than one thematic area will be accommodated by the Commission, provided the proposal addresses areas covered by this work programme.

The specific programme is focused on a number of thematic priorities. They encompass a wide range of disciplines and proposals that cut across the boundaries of themes are to be expected. The criterion of relevance to the objectives of the specific programme is a *sine qua non* for the further consideration of such proposals. Furthermore, proposals will not be accepted if they do not fall within the scope of the work programme.

Cross-cutting proposals may be categorised as follows:

- **Proposals with a clear “centre of gravity”.** Given the nature of research carried out today, a large proportion of proposals contain some degree of multi-disciplinarity. These are handled by normal submission and evaluation procedures. For proposals which contain a significant

⁸ cf. OJ L 294/50, section 2.f of the Annex

⁹ Proposals for specific support actions, which do not fall within the scope of a call for proposals, may be submitted to the Commission only when it is provided for in this work programme.

technological or thematic element from a different part of the programme, the procedure involves the proposal being treated by the thematic area represented by the greatest proportion of the proposal (ie, its “centre of gravity”). For proposals where the centre of gravity is not immediately obvious, the Commission will examine the proposal content and decide in which thematic area the proposal is best handled. If a proposal is transferred to a thematic area other than the one to which it was submitted, it will be handled in the framework of the new thematic area. However, if the new centre of gravity does not have an open call at the time of transfer, the proposal will be held over, with the agreement of the proposers, until a suitable call is open, but only if such a call is explicitly foreseen by the work programme. If successful, the proposal will be handled and funded by the thematic centre of gravity.

- **Joint calls for proposals.** In certain fields, it is clear that proposals will always contain a high proportion of interest for different thematic areas. In this instance, the Commission uses calls for proposals issued jointly by two or more programme/thematic areas, with a pooling of budget. This procedure only occurs for well-defined areas where the cross cutting nature of the proposals to be received can be clearly identified in advance.
- **Proposals with horizontal interest.** These relate to proposals which are of general interest to all parts of the specific programme but of no specific interest to an individual part. If such proposals are truly innovative and ground breaking, there is the possibility of referring them to the work programme part that addresses “anticipating scientific and technological needs”, once this part is open for the receipt of such proposals. Proposals with a horizontal interest which do not meet this criterion may, if applicable, be handled like proposals with a centre of gravity (see first bullet point).

6. Evaluation Criteria and Related Issues

The “Guidelines on Proposal Evaluation and Project Selection Procedures” describes the basic procedures to be followed by all programmes under the Sixth Framework Programme of the European Community.

The set of criteria applicable to this work programme is given in Annex B. Any complementary criteria are clearly stated in the relevant part of this work programme. Evaluation thresholds for each set of criteria are given in Annex B and apply unless otherwise clearly stated. In addition, Annex B outlines how the following will be addressed: gender issues, ethical and/or safety aspects, and the education dimension.

All proposals before they are selected for funding and which deal with ethical issues and any proposal for which ethical concerns have been identified during the scientific evaluation may be reviewed by a separate ethical review panel. The “Guidelines on Proposal Evaluation and Project Selection Procedures” gives more details on the evaluation procedure as a whole as well as details of the ethical review procedure.

Furthermore, the work programmes, and consequently their calls for proposals, may specify and restrict the participation of legal entities in an indirect action according to their activity and type, according to the instrument deployed and to take into account specific objectives of the Framework Programme.

Calls for proposals may involve a two-stage evaluation procedure. When such a procedure is employed, this is stated clearly in the call for proposals. More information on this process is given in the “Guidelines on Proposal Evaluation and Project Selection Procedures”.

Finally, when evaluating proposals received in response to a call, the Commission may opt to send the proposals to external experts or make proposals available by electronic means, so that the experts can carry out their examination at their home or place of work.

7. Specific Support Actions

Support activities are more limited in scope than the accompanying measures of the previous Framework Programmes. These projects aim to **contribute actively** to the implementation of activities of the work programme, the analysis and dissemination of results or the preparation of future activities, with a view to enabling the Community to achieve or define its RTD strategic objectives. Therefore, a significant emphasis has been placed on Support Actions:

- to promote and facilitate the dissemination, transfer, exploitation, assessment and/or broad take-up of past and present programme results (over and above the standard diffusion and exploitation activities of individual projects);
- to contribute to strategic objectives, notably regarding the European research area (e.g. pilot initiatives on benchmarking, mapping, networking, etc.);
- to prepare future community RTD activities, (e.g. via prospective studies, exploratory measures. pilot actions etc.);

as opposed to awareness and information exchange activities, e.g. annual Workshops and Conferences, that would take place anyway without Commission support. The latter activities will not be welcome if they do not **serve** the programme’s strategic objectives, (in the sense of the European Research Area, improved co-ordination, public awareness, preparation of future Community initiatives, etc.).

A limited number of specific support actions may be funded, where such a request does not fall within the scope of a call for proposals, when they have particular characteristics and value to the objectives and the scientific and technological content of the specific programme. Such requests for grants must be for actions of European significance and could, for example, provide support for major policy-related workshops in the context of activities of the

rotating Presidency of the Union. They should be submitted at least five months in advance of the event for which support is requested. The evaluation criteria will be those applicable to specific support actions as laid down in this work programme.

Work Programme Section 8:
New and Emerging Science and Technology (NEST)
(last updated: October 2005)

8.2.1 Introduction, objectives and overall approach

Under the Sixth Framework Programme, Community research is organised mainly around a small number of highly concentrated “thematic priorities”, which focus a high level of funding on areas where research is expected to have the greatest potential to benefit Europe’s society and economy in the medium term. By necessity, the research fields associated with the thematic priorities are sufficiently well established to enable the future directions of scientific and technological progress to be sketched out with some confidence.

But if Europe is to maintain a truly dynamic research capability, it needs not only to support the critical research areas for tomorrow, but also to seek out the most promising opportunities for the day after. Advances in scientific understanding are punctuated by unexpected developments – new theoretical insights, unforeseen experimental findings, the availability of higher-resolution instrumentation - that create new avenues for science and technology, for example by providing ways to resolve long-standing problems or by opening up productive new directions for research.

At the same time, Europe needs to be aware of potential problems and risks that are signalled by new developments in the science base, and take appropriate steps to address them.

NEST provides a means to anticipate scientific and technological opportunities and needs in new and emerging areas. It supports research that falls within the legitimate scope of Community research and which cuts across or lies outside the thematic priority areas, in particular because it is highly interdisciplinary and/or multidisciplinary. The research will also respond to unexpected major developments.

NEST supports three main types of research actions, each with a distinctive profile.

- **ADVENTURE**: Research projects, in emerging areas of knowledge and on future technologies, in particular in multidisciplinary fields, which are highly innovative and involve high (technical) risks.
- **INSIGHT**: Research projects aimed at assessing new discoveries and newly-observed phenomena, where the latter may indicate important potential problems or risks to society.
- **PATHFINDER**. Larger-scale actions, focusing on emerging areas of science and technology that are identified, in conjunction with the scientific community, as having particular promise and/or urgency.

In addition ***NEST SUPPORT*** actions will be carried out, focused on the conceptual and practical questions associated specifically with NEST implementation. They will run in parallel with the three above-mentioned research actions.

Because NEST is a new initiative for Community research, the specific features of these actions, their means of implementation and the balance between them may be adapted in the light of progress achieved during the course of the programme.

Participation of partners from third countries is encouraged in appropriate cases.

8.2.2 Technical content

The last NEST Call for proposals in FP6 will only be for the NEST PATHFINDER action line in the five areas indicated below.

8.2.2.1 PATHFINDER initiatives

These are targeted actions, focusing on emerging areas of science and technology which have significant potential for Europe in the long term. They are intended to seed the early development and emergence of research in particular strategic areas, and generate a significant “leverage” effect on the early development and consolidation of European research capabilities. Where the potential of these fields is demonstrated, PATHFINDER actions could form a precursor to more conventional funding through the framework programme.

PATHFINDER initiatives are progressively introduced into the work programme and launched by means of specific calls for proposals on an annual basis. Each PATHFINDER initiative may involve one or more calls for proposals. Topics are identified during the course of implementation of the framework programme, in conjunction with the scientific community, on the basis of their future potential.

Each PATHFINDER initiative consists of a number of STREPs, as well as a Co-ordination Action (or where justified, more than one co-ordination action) to bring together the wider community of actors in Europe within a long term, strategic perspective. Expert groups may also be set up on each PATHFINDER topics to develop strategic orientations. Proposals for STREPS will be selected on an individual basis according to the relevant evaluation criteria in order to create an overall portfolio of projects corresponding to the topic in question. The associated Co-ordination Actions may include activities such as: drafting of roadmaps, identification of emerging opportunities, mapping of excellence within the EU, and organisation of specialised conferences or training activities.

Furthermore, the PATHFINDER Call will be open for Specific Support Actions (SSAs) relating to the initiatives in this Call. SSAs differ from Coordination Actions in that they may involve a single participant and tend to be “one shot” actions of relatively limited duration.

PATHFINDER Initiatives under the 2005 Call for proposals

The following topics for PATHFINDER initiatives are open under the current work programme.

1. Tackling complexity in science

Complexity is a critical challenge for many areas of science and technology. Emerging areas of science such as “systems biology” and “biocomplexity” are founded on the idea that phenomena need to be understood in the context of highly-interactive processes operating at different levels. Similarly, there is an increasingly urgent need to understand and predict the behaviour of highly-interacting man-made systems which permeate the modern world. The same applies to human networks where technology has tended to vastly increase both the complexity and speed of interaction, which is sometimes nearly instantaneous.

Better understanding, appreciation and prediction of the behaviour of such systems will require the development of tractable methods for addressing complexity. On one hand, this implies deep analysis of particular complex systems. On the other, there is clearly a need to develop general methods of analysis by investigating the similarities and commonalities between complex systems in diverse areas.

The first NEST-PATHFINDER Call on “Tackling Complexity in Science” was successful at setting up a diverse but highly complementary group of projects, giving an impetus to European efforts in the area. The earlier call was also successful in setting up a Coordination Action to ensure the articulation of these projects with each other and with the broader Complexity research community in Europe.

The current call seeks to maintain the same strategic orientation, while taking into account the outcome and lessons learnt from the earlier call. *It will support cross disciplinary research on complexity as well as collaboration between the field of “Complex Systems Science” and specific areas of science where complexity is a key issue.* It will promote the creation of new interdisciplinary partnerships between researchers within the field of complex systems and researchers in a range of other fields, as well as the extension and generalisation of successful techniques for dealing with complexity from one area of research into others.

The research supported under **Specific Targeted Research Projects** must have concrete and tangible objectives, addressing specific complex systems problems on the basis of concepts, analytical methods and techniques which can be further generalised, for example:

- **Representing complex systems as networks.** There is an emerging acceptance that the traditional (“reductionist”) approach of the physical sciences has its limits and that complex systems have to be understood as networks of agents, evolving networks and even networks of networks. Bringing together what has been learned in various fields (social and economic systems, the earth system, network technologies, cognitive systems, etc.) could be very valuable for the development of unified approaches.

- **Emergence:** The appearance of totally new and radically different behaviour within a complex system as compared to the underlying (simpler) components, is one of the key aspects that make complex systems interesting and difficult to analyse. The use of common approaches across different problem areas would help to consolidate the field.
- **Predictability and extreme events in complex systems:** The question of how to understand and predict extreme events, in areas such as climate change, financial systems, traffic flows, social systems, etc, is of wide and urgent interest in complex systems science. Related issues are the “robustness” of such complex systems, their ability to cope with failure and or breakdowns, and the qualities necessary to make such systems robust.

The current call seeks to give further emphasis to the link between research in particular areas of science, and the development generalisable tools and approaches. Partnerships will need to bring together and demonstrate a deep knowledge of the complexity research field and of the specific disciplinary fields being addressed.

Proposals for **Co-ordination Actions** need to take into account, and articulate with, the already established NEST – PATHFINDER research projects and Coordination Action, funded in the first call of this initiative. New coordination actions, funded under this call, should focus on promoting collaboration in *particular scientific areas or approaches* to complexity. They may, for example, involve providing access to the large amounts of relevant data available in the community at large, promoting short stays of senior scientists, and supporting advanced training activities such as Summer Schools to promote the use of the techniques of Complex Systems science in other areas of research.

Proposals for **Specific Support Actions**, which are linked to this initiative, are also encouraged. These may include, for example, actions to assist in the mapping and developing a more detailed definition of the fields in question, assessing future development prospects and trends in the fields.

Co-ordination with FET: This Pathfinder initiative will be executed in close co-ordination with the proactive initiative on Complex Systems of the Future and Emerging Technologies (FET) activity area under thematic priority 2. The FET activity covers IST related aspects of Complex Systems - care should be taken not to address issues which are already covered under FET.

2. Synthetic biology

The goal of this PATHFINDER initiative is to stimulate forward-looking cross-disciplinary research to demonstrate key principles and generate tools and parts for *synthetic biology* - a rigorous engineering approach to biology based on the application of systems design to complex biological processes.

The response to the first two calls (2003/2004 and 2004/2005) showed clearly that *synthetic biology* is a truly emerging area with high scientific and technological

potential which needs to be strongly promoted to become fully established in Europe. In view of the strategic importance of this field, the initiative is continued under this work programme, laying the focus even more on new methodological developments related to synthetic biology without restriction on potential application areas.

From a scientific point of view, a *synthetic approach to biology* will contribute in a way that is not easily possible by analysis alone. This will be achieved by providing new insights, discoveries, or even paradigm shifts. In terms of the technology vision it can be expected that *synthetic biology* will create the highly generic capabilities that will be applicable in industry and economy. Europe needs to invest in these developments, in order to build up the necessary intellectual and physical infrastructures, and capture a share of the valuable intellectual property that is at stake.

The research will focus on design and construction of new biologically based (or inspired) parts or systems, which involve a high level of internal complexity and which show logical or complex dynamical behaviour. The engineered parts or systems should show a tangible and useful standardised function or functionality with substantially different characteristics from natural systems.

Projects will need to combine rigorous engineering methods and high quality science, and involve interdisciplinary partnerships that combine expertise in cellular and molecular biology with other scientific and engineering disciplines. The synthetic biology approaches proposed under this initiative should aim to demonstrate a real capacity to drive new discoveries and theories (e.g. by expanding the chemistry of life) and/or show concrete applicability to model areas, such as energy, medicine, production of materials, etc. Where relevant, consideration should be given to ethical, social and regulatory issues. Projects could also investigate safety aspects and develop in particular intrinsically safe technologies to prevent potential risks associated both with legitimate and undesirable uses.

The proposals for **Specific Targeted Research Projects** should aim for tangible outputs which should include demonstration of mastering control over key biological processes. The main goal should be the development and application of robust modules (parts or systems). These modules should be amenable to standardisation and aimed to the design of larger systems whose overall functionalities are a result of the rational combination of such modules. While several objectives of synthetic biology overlap with those in other more mature fields it is expected that research projects under this initiative use a truly design-based approach by going clearly beyond the empirical methods of synthesis used in traditional biotechnology or the particular analytical and descriptive methodologies used in systems biology. To fulfil these requirements it will be necessary for the consortia to include adequate high-level expertise in core engineering disciplines.

Proposals for the **Co-ordination Actions** (CAs) should aim to provide not just a mechanism for the research projects funded under the *synthetic biology* initiative to cooperate and interact with each other, but also to build extended networking within the EU on a cross-national and cross-disciplinary basis. Due to the emerging character of *synthetic biology* as a field the CA instrument will be particularly important and it may involve various different types of activity, including meetings, seminars, studies,

promoting short stays of senior scientists, and supporting advanced training activities such as Summer Schools. Based on similar attempts in the US the intellectual and material infrastructure requirements of *synthetic biology* could be addressed, such as the establishment of European registries or repositories. CAs could also develop perspectives and strategies for innovation and industrial translation, including intellectual property, and perform an analysis of the issues related to societal acceptance, including ethical, safety and regulatory aspects.

Proposals for **Specific Support Actions**, linked to this initiative, are also encouraged. These may include, for example, actions to assist in the mapping and developing more detailed definition of the fields in question, assessing future development prospects and trends in the fields.

3. Measuring the Impossible

Measurement is at the heart of scientific work. Ever since Galileo the process of scientific discovery has gone hand-in-hand with the development of methods and techniques for measurement and analysis, influencing decisively the opportunities for scientific progress.

Nowadays science, business and government present challenges to measurement which are intrinsically more complex, problematic and subject to interpretation:

- Many phenomena of significant interest to contemporary science are intrinsically multidimensional and multi-disciplinary, with strong cross-over between physical biological and social sciences.
- Products and services appeal to consumers according to parameters of quality, beauty, comfort, etc., which are mediated by human perception.
- Public authorities, and quasi public bodies such as hospitals, provide citizens with support and services whose performance is measured according to parameters of life quality, security or wellbeing.

Thus, the practical challenge facing scientists is often to “measure the impossible”: to go beyond the existing science of measurement, and the assumptions which surround it. However, in many cases the response is empirical and of limited application.

The objective of this PATHFINDER initiative is to give an impulse to more fundamental advances that will underpin future measurement methods and techniques, by supporting interdisciplinary research and novel investigative methods that could present prospects for significant advance in the scientific basis for measurement of phenomena which are intrinsically multidimensional, and which are mediated by human interpretation and/or perception. This should assist Europe in the creation of high-value products and services of the future and assuring the highest quality of life for its citizens.

This initiative will promote the creation of new, interdisciplinary partnerships between researchers within the field of measurements and researchers in a range of other fields, and cross-fertilization of research relating to complex measurements across different fields of science, by means of ambitious, multidisciplinary projects.

The research supported will have concrete and tangible objectives, addressing specific complex problems, using new or emerging methodologies and techniques.

The response to the first Call on “Measuring the Impossible” in 2004/2005 has successfully laid the basis for the initiative. To complete the research agenda, the initiative is continued under this work programme, maintaining the focus on the measurement but with some adjustments to the emphasis. The scope is broadened to focus on complex issues of interpretation (and not just on perception).

The proposals for **Specific Target Research Projects** must address measurements which are holistic and multidimensional in nature, and which involve complex issues of interpretation and/or mediation by human perception. They should in particular aim to make important advances in linking measurements of physical attributes and quantities with issues of interpretation and perception, including where appropriate cultural and other contextual issues, in ways that are likely to significantly improve understanding and create new openings and anticipate a broad potential impact on the science and technology of measurement.

Projects which are concerned with exploring empirical correlations, which aim to refine existing measurements, or improve the resolution of existing measurements and instruments, or which follow established and well-understood methodologies, will not be considered for funding.

Proposals for **Co-ordination Actions** associated with this PATHFINDER initiative should aim to provide not just a mechanism for the research projects funded under the Mtl initiative to cooperate and interact with each other, but also to build extended networking within the EU on a cross-national and cross-disciplinary basis to help advance the science of measuring complex, holistic quantities and qualities across all relevant areas. The CA instrument may involve various different types of activity, including meetings, seminars, studies, promoting short stays of senior scientists, and supporting advanced training activities such as Summer Schools. Without such a stimulus, progress will be slow and centred on specific sectors, and opportunities for sharing of expertise and the development of more generic approaches will be lost.

Proposals for **Specific Support Actions** linked to the development and implementation of this initiative are also encouraged. These may include for example, activities to assist in the mapping and developing more detailed definition of the fields in question, assessing future development prospects and trends in the fields.

4. Cultural dynamics: from transmission and change to innovation

The development of culture is not only an important achievement of mankind, culture also impacts all sectors of human life. Understanding culture, its continuities and discontinuities should, therefore, be a major concern of scientific analyses. The central issues facing societies everywhere regarding the quality of life (poverty, development, global change, education, innovation, criminality and terrorism, immigration, urban regeneration...) have a significant cultural dimension.

At the same time, as levels of affluence rise, the economy and business depend increasingly on developments and/or factors that are essentially cultural in nature

(markets for culture, entertainment, education; cultural determinants of fashion, consumer trends and purchasing patterns etc.). Knowledge about the ways in which culture and cultural traits are transmitted, and the possibilities these processes allow for influencing cultural developments and cultural change will be critical components of strategies to address these issues.

There are also increasingly strong interactions between culture and technology. Developments in technology not only bring new cultural phenomena or opportunities that can bring huge challenges to society (e.g. the “clash of civilisations” mediated by global communication networks), but also increase the speed of development of new cultural forms.

These interests in culture and cultural phenomena run in parallel with significant opportunities for new perspectives and approaches, and related methods and tools, for better cross-disciplinary understanding of cultural dynamics. In parallel with advances in social science and anthropology – the fields traditionally most concerned with analysing human culture - other research developments open prospects for insights in areas such as:

- Cognitive science, e.g. the study of the cognitive correlates of cultural phenomena, and the cognitive and developmental constraints/controls mediating culture acquisition and cultural change.
- Evolutionary models, such as neo-darwinian models of co-evolution of cultural and biological traits.
- Network analysis and related fields, linking the understanding of very diverse phenomena such as virus epidemiology, social networks, citation systems and the structure of the worldwide web.
- Mathematical and economic theories, such as game theory, contemporary computer power and the massive and detailed data (genetic, geographical and language data) for the *simulation* of cultural dynamics to understand for example consumer behaviour, educational and market development, and problems such as criminality.

More than figures, research should provide meanings to facilitate understanding. More than collecting data on social behaviour, it should emphasize the search for understanding the meaning and/or impact of culturally perceived values and practices on individual and group decisions.

The opportunity now presents itself to develop more precise and useful concepts and better understanding of processes involved in culture transmission, by bringing together research across disciplines. Such research is likely to be particularly useful if it transcends the current barriers in the study of culture by identifying cultural items independently of the cultural values that define the normative standards in a society or if it helps to overcome the related distinction between, broadly, the “science of understanding” culture, and the “technology” of cultural monitoring and intervention (i.e. such things as data mining, media and group working technologies, etc.).

The research supported by this initiative through **Specific Targeted Research Projects** will be aimed at bringing together from different fields of science, technology, the social sciences and humanities, concepts, data and analytical methods,

to promote a better understanding and predictive capacity relating to transmission, change and innovation in human culture.

The research supported should address research questions which involve a conceptual negotiation across disciplinary boundaries at the current state of the art, which are potentially tractable, and which bring the possibility of a high impact. The research may focus on specific issues across a very broad range (organisational culture, social questions, cultural bases of terrorism, etc). However it should not be solely empirical; it should aim to make conceptual and analytical advances which also have the potential for generalisation, in relation to broader questions such as, for example:

- Conditions of continuity and or discontinuity of culture and/or cultural change and loss
- Cultural invasion, interpenetration and fragmentation: why are certain cultures successful and others not? How and when can different cultures co-exist? What factors underlie extreme divergence from societal norms?
- How culture influences or determines beliefs of individuals or groups
- How power is exercised or controlled through culture; influences of public policy and marketing on culture and cultural traits
- The role and influence of, and resistances to, technology and the media and in particular the internet on cultural dynamics.

Proposals for **Co-ordination Actions** are strongly encouraged. They should focus on cross-disciplinary networking, in relation to particular areas of cultural dynamics, or particular research methods or analytical approaches. They may also involve activities such as drawing up a strategic picture of European resources, analysing and assessing recent developments in the various fields, and developing roadmaps for future European research.

Proposals for **Specific Support Actions** linked to the development and implementation of this initiative are also encouraged. These may include for example, activities to assist in the mapping and developing more detailed definition of the fields in question, assessing future development prospects and trends in the fields.

5. What it means to be human (CAs and SSAs only)

The response to the first and second Calls on “*What it means to be human*” has successfully laid the basis for the initiative. **To complete the research agenda, the initiative is continued under this work programme in the form of Coordination and Support Actions.** A particular concern is to further expand the inter-disciplinary aspects and broaden the scope of disciplines brought together.

The “What it means to be human” PATHFINDER initiative involves cross-disciplinary research which brings to bear the latest insights from fields including genetics, biology, neuroscience, psychology, linguistics and anthropology to examine “how and why are human cognitive facilities unique?” Addressing this question from a highly inter-disciplinary perspective is intended to promote a more profound and integrated understanding of the human mind. With its common values, varied

cultures, and strong research tradition in many of the relevant fields, Europe has a vital interest in this area and real potential for fostering scientific advance.

The work is expected to have considerable payoffs in the longer term for society and the economy. For example, by understanding the specific nature and limits of human conceptual reasoning, it may be possible to devise more powerful artificial learning technologies. Improved education strategies should come from better knowledge of specifically human capabilities to perceive and encode information and experience in the process of development. Greater insight into the origins of human motivation, social behaviour and co-operation will assist the design of social and cultural institutions to accommodate human needs better.

The emphasis of the “What it means to be human” PATHFINDER initiative is on human higher cognitive processes, within a comparative and evolutionary perspective, focusing on the question “How and why are humans different? In other words: what features make human cognitive abilities unique, and what are the origins of these features?”

In particular it addresses:

- **The evolutionary dimension of individual human development** (from embryo to adult) as regards human cognitive faculties, taking account of the range of relevant factors from genetics to cultural context.
- **The influence of change of life circumstances**, e.g. bi-pedalism, change of nutrition etc., on the development of cognitive functions, such as the development of language and non-verbal communication.
- **Executive functions, reasoning and decision making**, including co-operative behaviour, which might also take account of relationships between conscious and unconscious aspects of behaviour.

This call aims to deepen cross-national and cross-disciplinary links through CAs that will stimulate a broad European strategic agenda, exploiting the synergies between investigations in different fields. Proposals should reflect the objective of bringing together research from different disciplines and levels of analysis in novel combinations, to address specific questions which have high scientific interest in the context of the quest for an *integrated* understanding of human cognition.

The proposals for **Co-ordination Actions** should help to co-ordinate existing and possible future research activities, including NEST projects already funded. They may also involve activities such as drawing up a strategic picture of European resources, analysing and assessing recent developments in the various fields, and developing roadmaps for future European research.

Proposals may also be submitted for **Specific Support Actions**. These may include, for example, activities to assist in the mapping and developing more detailed definition of the fields in question, assessing future development prospects and trends in the fields, the support of small conferences and workshops, or disseminating results of NEST projects.

PATHFINDER Pre-Proposal Check

For PATHFINDER proposals, a pre-proposal check service will be available until three weeks before the deadline of submission. Applicants are strongly encouraged to submit a pre-proposal to check that the proposal meets the eligibility and scope requirements of the call (see Guide for Proposers for details).

8.2.3 Means of implementation

The activities programmed will be carried out mainly by means of calls for proposals. They will take the form of Specific Target Research Projects (STREPs), Co-ordination Actions (CA) and Specific Support Actions (SSAs).

All proposals should be submitted as full proposals (1 stage evaluation), and should not be anonymous.

The evaluation will be done with the help of external referees (independent experts working remotely at their premises) and/or panels of experts that convene to consolidate the referees' individual assessments.

Expert Groups will also be organised by NEST, in accordance with the applicable rules and procedures, in particular to analyse the need for future actions in specific research areas as well as workshop and conferences, where these serve the strategic objectives of NEST.

8.2.4 Call information (PATHFINDER)

1. **Specific Programme:** “Integrating and strengthening the European Research Area”
2. **Activity:** “Anticipating scientific and technological needs”.
3. **Call title:** New and Emerging Science and Technology- Pathfinder
4. **Call reference number/identifier:** FP6-2005-NEST-Path
5. **Date of publication:** 27 October 2005
6. **Date from which proposals are receivable:** from call date; pre-proposal check service is available. Submission of pre-proposals, no later than 3 weeks before the deadline, is strongly recommended.
7. **Call deadline:** 15 February 2006 at 17.00 (Brussels local time).
8. **Total indicative budget:** EUR 50 million.

Instrument	EUR (millions)
STREP	45
CAs	4
SSAs	1

9. **Topics called and Instruments**¹⁰

Proposals are invited in the following topics, which are described using short titles only. For the full titles and definition of the topics, applicants must refer to the technical content of this Work Programme. The evaluation of proposals will be based on the full definition of topics as described in the Work Programme. For each topic the instruments to be used are indicated.

<u>Topic Ref.</u>	<u>Short titles of topics</u>	<u>Instruments</u> ¹¹
NEST-2005-Path-1	Tackling Complexity	STREPs, CAs, SSAs
NEST-2005-Path-2	Synthetic biology	STREPs, CAs, SSAs
NEST-2005-Path-3	Measuring the Impossible	STREPs, CAs, SSAs
NEST-2005-Path-4	Cultural dynamics	STREPs, CAs, SSAs
NEST-2005-Path-5	What it means to be human	CAs, SSAs

¹⁰ Proposals should specify only one activity code (PATH 1, PATH 2, PATH 3, PATH 4, PATH 5), to ensure allocation to the correct evaluation stream. In ambiguous cases, the Commission will allocate proposals to the activity it considers the most appropriate.

¹¹ STREP = Specific Targeted Research Project; CA = Co-ordination Action; SSA = Specific Support Action.

10. **Minimum number of participants**¹²:

<u>Instrument</u>	<u>Minimum number</u>
STREPs and CAs	Three independent legal entities from three different MS or AS, with at least two MS or ACC
SSAs	One legal entity from 1 MS or AS

11. **Restriction on participation:** none.

12. **Consortia agreements:** It is not mandatory that participants in RTD actions resulting from this call conclude a consortium agreement although it is strongly recommended that participants consider carefully the possible benefits of such an agreement, and implement one if appropriate.

13. **Evaluation procedure:**

- The evaluation is carried out through a combination of referees (remote evaluation) and groups of experts that convene in Brussels.
- Proposals have to be submitted as *full* proposals. *Full* proposals are evaluated non-anonymously.

14. **Evaluation criteria:**

- **For STREPs**, see the criteria and thresholds for the PATHFINDER activity in section 8.2.6 of the Work-programme.
- **CAs and SSAs** will be evaluated according to the criteria in Annex B of the work programme.

15. **Indicative evaluation and selection delays:**

- Evaluation results for proposals: three months from the deadline.
- Contract signature : it is estimated that the first contracts related to this call will come into force seven months after the deadline for submission of proposals.

8.2.5 Information on Expert Groups

Expert Groups will also be organised by NEST, in accordance with the applicable rules and procedures, in particular to analyse the need for future actions in specific research areas as well as workshop and conferences, where these serve the strategic objectives of NEST.

¹² MS = Member States of the EU; AS (incl. ACC) = Associated States; ACC: Associated candidate countries.

8.2.6 Evaluation criteria

8.2.6.1 Evaluation criteria PATHFINDER projects: Specific targeted research projects

1. *Relevance to the objectives of the programme*

- Does the proposed project fully respond to the scope and objectives of the relevant PATHFINDER initiative?
- Does it open up **new or emerging areas of science and technology**, is it highly **novel**, does it have **tangible, ambitious and challenging objectives**, is it a **high impact/high risk project**?
- Does the envisaged research **cut across or lie outside** the thematic priorities?

2. *Scientific and technological excellence*

- Are the objectives tangible and **challenging**, in the sense of a **clearly defined** scientific achievement or basic technology, and highly ambitious?
- Do they represent **clear progress well beyond the current state-of-the-art**?
- Does the research feature **significant and clearly identifiable elements of novelty**? Is it **highly innovative**?
- Is the proposed scientific approach **well thought out and scientifically sound**? Could it enable the project to achieve its objectives?

3. *Potential impact*

- If successful, will the project have a **large impact on Europe's scientific or technological capability**, in areas with a potential, perhaps **long-term, societal or economic impact**?
- Are the **potential benefits** sufficiently large to justify the level of **risk** of the project?
- Will the impact be best achieved if the project is carried out at **European level**?

4. *Quality of the consortium*

- **Do the participants collectively constitute a consortium of high quality**? Do the **key research personnel** have sufficient credibility for the task?
- Is all the necessary **expertise** available in the consortium? Are the participants **well-suited to the tasks** assigned to them? Are they **committed** to the project?
- Is there **good complementarity** between participants?

5. *Quality of management*

- Is the **project management** of demonstrably high quality?
- Are there satisfactory provisions to deal with the inter-disciplinary aspects and **important risk elements**?
- Is there a satisfactory plan for the **management of knowledge** (e.g. dissemination, use, intellectual property, etc.) and for promoting innovation, where relevant?

6. *Mobilisation of resources*

- Are the foreseen **resources** (personnel, equipment, financial, ...) **necessary and sufficient** for success?
- Are these **resources convincingly integrated** to form a coherent project?
- Is the **overall financial plan** for the project adequate?

Thresholds

Criterion	Threshold
1	4
2	4
3	3
4	3
5	3
6	3

8.2.6.2 *Evaluation criteria for Specific Support Actions (SSAs), Co-ordination Actions (CAs)*

All SSAs and CAs will be evaluated according to the criteria in Annex B of the work programme

Annex A : Overview of Calls for Proposals foreseen in this Work Programme (see relevant work programme part for details) - SP1
(last updated : October 2005)

1. Life sciences, genomics and biotechnology for health	(i) FP6-2002-Lifescihealth - publication 17/12/2002; closure 25/03/2003; budget 513 M€ (ii) FP6-2003-Lifescihealth-I - publication 15/07/2003; closure 13/11/2003; budget 411 M€ (iii) FP6-2003-Lifescihealth-II - publication 15/07/2003; closure 15/04/2004; budget 4 M€ (iv) FP6-2003-Lifescihealth-3 - publication 13/12/2003; closure 24/03/2004; budget 12 M€ (v) FP6-2004-Lifescihealth-4 – publication 15/06/2004; closure 09/09/2004; budget 4M€ (vi) FP6-2004-Lifescihealth-5 – publication 15/06/2004; closure 17/11/2004; budget 540M€ (vii) FP6-2005-Lifescihealth-6 – publication 30/6/2005; closure 9/11/2005; budget 362M€ (viii) FP6-2005-Lifescihealth-7 – publication 30/6/2005; closure 9/11/2005; budget 171M€
2. Information Society technologies	(i) FP6-2002-IST-1- publication 17/12/2002; closure 24/04/2003; budget 1070 M€ (ii) FP6-2002-IST-FET Open domain-publication 17/12/2002; closing 31/12/2004; budget 60 M€ (iii) FP6-2002-IST-NMP-1 (joint) - publication 17/12/2002; closing 24/04/2003; budget 60 M€ (iv) FP6-2002-IST-2- publication 17/06/2003; closure 15/10/2003; budget 525 M€ (v) FP6-2004-IST-3- publication 8/06/2004; closure 22/09/2004; budget 28 M€ (vi) FP6-2004-IST-NMP-2 (joint) - publication 8/06/2004; closing 14/10/2004; budget 180 M€ (vii) FP6-2004-IST-FET Proactive initiatives-publication 8/06/2004; closing 22/09/2004; budget 80 M€ (viii) FP6-2004-IST-4 - publication 16 Nov 2004; closure 22/03/2005; budget 1120 M€ (ix) FP6-2004-IST-5 - publication 17 May 2005; closure 21/09/2005; budget 638 M€ (x) FP6-2004-IST-C publication 8 Dec 2004; closure 20/09/2005; budget 60 M€ (xi) FP6-2005-IST-41 publication 18/10/2005; closure 20/12/2005; budget 52.5 M€
3. Nano-technologies and nano-sciences, knowledge-based multifunctional materials, and new production processes and devices	(i) FP6-NMP-1 - publication 17/12/2002; closures 6/03/2003 and 10/04/2003; budget 400 M€ (ii) FP6-2002-IST-NMP-1-(joint) publication 17/12/2002; closing 24/04/2003; budget 60 M€ (iii) FP6-NMP-2- publication 17/12/2002; closure 10/04/2003; budget 40 M€ (iv) FP6-2003-NMP-NI-3- publication 13/12/2003; closure 02/03/2004; budget 245 M€ (v) FP6-2003-NMP-TI-3- publication 13/12/2003; closure 12/05/2004; budget 105 M€ (vi) FP6-2003-NMP-SME-3- publication 13/12/2003; closure 02/03/2004; budget 80 M€ (vii) FP6-2002-STEEL-3(joint) - publication 13/12/2003; closing 17/03/2004; budget 25 M€(with 20 M€from FP6, the balance from the Research Fund for Coal and Steel) (viii) FP6-2004-IST-NMP-2 (joint) - publication 8/06/2004; closing 14/10/2004; budget 180 M€ (ix) FP6-2004-NMP-NSF-1 - publication 8 June 2004; closing 14/10/2004; budget 6 M€ (x) FP6-2004-NMP-NI-4 - publication Dec 2004; closing 17/03/2005; budget 150 M€ (xi) FP6-2004-NMP-TI-4 - publication Dec 2004; closing 15/09/2005; budget 120 M€ (xii) FP6-2004-NMP-SME-4 - publication Dec 2004; closing 17/03/2005; budget 100 M€

<p>4. Aeronautics and space</p>	<p>(i) FP6-Aero-1- publication 17/12/2002; closure 20/03/2003; budget 240 M€ (ii) FP6-Aero-2- publication 17/12/2002; closure 20 March 2003 and 23 September 2003; budget 7 M€ (iii) FP6-2002-TREN-1 (joint)-publication 17/12/2002; closures 18,20/03/2003 and 15/04/2003; budget 140 M€ (iv) FP6-2003-TREN-2 (joint)-publication 17/06/2003 closure 17/12/2003; budget 175 M€ (v) FP6-2002-Space-1 - publication 17/12/2002; closure 20/03/2003; budget 60 M€ (vi) FP6-2003-Aero-1 - publication 13/12/2003; closure 31/3/2004; budget 300 M€ (vii) FP6-2003-Aero-2 - publication 13/12/2003; closure 31/3/2004, 28/9/2004, 30/3/2005, and 20/10/2005; budget 7 M€ (viii) FP6-2003-Space-1 - publication 13/12/2003; closure 31/3/2004; budget 60 M€ (ix) FP6-2003-TREN-3 (joint)- publication 8/06/2004; closure 8/12/2004; budget 252 M€ (x) FP6-2004-Hydrogen-1 (joint) - publication 8/06/2004; closure 8/12/2004; budget 35 M€ (xi) FP6-2004-Hydrogen-2 (joint) - publication 8/06/2004; closure 8/12/2004; budget 4.5 M€ (xii) FP6-2005-Aero-1 - publication 12/3/2005; closure 13/7/2005; budget 240 M€ (xiii) FP6-2005-Space-1 - publication 12/3/2005; closure 13/7/2005; budget 46.5 M€ (xix) FP6-2005-TREN-4 (joint)- publication 28/06/2005; closure 4/11/2005; budget 214 M€</p>
<p>5. Food quality and safety</p>	<p>(i) FP6-2002-Food-1 - publication 17/12/2002; closure 15/04/2003; budget 204 M€ (ii) FP6-2003-Food-2A & B - publication 5/11/2003; closures 5/02/2004 and 29/09/2004.; budget 197 M€ (iii) FP6-2004-Food-3-A - publication 24/7/2004; closure 7/10/2004; budget 152 M€ (iv) FP6-2004-Food-3-B - publication 24/7/2004; closure 8/02/2005; budget 59 M€ (v) FP6-2004-Food-3-C - publication 24/7/2004; closure 7/09/2005; budget 5 M€ (vi) FP6-2005-Food-4-A - publication 5/7/2005; closure 5/10/2005; budget 83 M€ (vii) FP6-2005-Food-4-B - publication 5/7/2005; closure 5/10/2005; budget 34 M€ (viii) FP6-2005-Food-4-C - publication 5/7/2005; closure 8/2/2006; budget 8 M€</p>
<p>6.Sustainable development, global change and ecosystems</p>	<p>(a) Sustainable Energy Systems: (i) FP6-2002-TREN-1(joint)-publication 17/12/2002; closures 18,20/03/2003 and 15/04/2003; budget 140 M€ (ii) FP6-2002-Energy 1 - publication 17/12/2002; closure 18/03/2003; budget 198 M€ (iii) FP6-2003-TREN-2(joint)- publication 17/06/2003; closure 17/12/2003; budget 175 M€ (iv) FP6-2003-Energy-2 - publication 4/10/2003; closure 17/12/2003; budget 3 M€ (v) FP6-2003-TREN-3 (joint)- publication 8/06/2004; closure 8/12/2004; budget 252 M€ (vi) FP6-2004-Hydrogen-1 (joint) - publication 8/06/2004; closure 8/12/2004; budget 35 M€ (vii) FP6-2004-Hydrogen-2 (joint) - publication 8/06/2004; closure 8/12/2004; budget 4.5 M€ (viii) FP6-2004-Energy-3 - publication 8/09/2004; closure 8/12/2004; budget 190 M€ (ix) FP6-2005-TREN-4 (joint)- publication 28/06/2005; closure 4/11/2005; budget 214 M€ (x) FP6-2005-Energy-4 - publication 22/09/2005; closure 10/01/2006; budget 20 M€</p> <p>(b) Sustainable surface transport: (i) FP6-2002-TREN-1(joint)-publication 17/12/2002; closures 18,20/03/2003 and 15/04/2003; budget 140 M€ (ii) FP6-2003-TREN-2 (joint)-publication 17/06/2003 closure 17/12/2003; budget 175 M€ (iii) FP6-2002-Transport 1 - publication 17/12/2002; closure 15/04/2003; budget 170 M€ (iv) FP6-2002-Transport 2 - publication 17/12/2002; closure 3 April 2003 and 23 September 2003, and 1/9/2005 budget 5 M€ (v) FP6-2003-Transport-3 - publication 13/12/2003; closure 6/4/ 2004; budget 150 M€ (vi) FP6-2003-Transport-2 - publication 13/12/2003; closure 6/4/2004 and 22 September 2004; budget 5 M€ (vii) FP6-2003-TREN-3 (joint)- publication 8/06/2004; closure 8/12/2004; budget 252 M€ (viii) FP6-2004-Hydrogen-1 (joint) - publication 8/06/2004; closure 8/12/2004; budget 35 M€ (ix) FP6-2004-Hydrogen-2 (joint) - publication 8/06/2004; closure 8/12/2004; budget 4.5 M€ (x) FP6-2004-Transport-4 - publication 12/3/2005; closure 1/9/ 2005; budget 150 M€ (xi) FP6-2005-TREN-4 (joint)- publication 28/06/2005; closure 4/11/2005; budget 214 M€</p> <p>(c) Global change and ecosystems: (i) FP6-2002-Global 1-publication 17/12/2002; closure 8/4/2003; budget 170 M€ (ii) FP6-2003-Global 2-publication 3/07/2003; closure 9 October 2003 and 17 February 2004; budget 180 M€ (iii) FP6-2004- Global 3-publication 16/06/2004; closure 26 October 2004; budget 205 M€ (iv) FP6-2005- Global 4-publication 19/07/2005; closure 3 November 2005; budget 205 M€</p>

7. Citizens and governance in a knowledge-based society	(i) FP6-2002-Citizens 1-publication 17/12/2002; closure 15/04/2003; budget 20 M€ (ii) FP6-2002-Citizens 2-publication 17/12/2002; closure 15/04/2003, budget 33 M€ (iii) FP6-2002-Citizens 3-publication 17/12/2002; closure 10/12/2003; budget 48 M€ (iv) FP6-2002-Citizens-4-publication 8/12/2004; closure 13/04/2005; budget 60 M€ (v) FP6-2002-Citizens-5-publication 8/12/2004; closure 13/04/2005; budget 52 M€ (vi) FP6-2002-Citizens-6-publication 8/12/2004; closure 13/04/2005; budget 4 M€
8. Policy support and anticipating scientific and technological needs	(a) Policy-oriented research: (i) FP6-2002-SSP 1 - publication 17/12/2002; closure 13/03/2003; budget 149,1 M€ (ii) FP6-2003-SSP-SARS 1 - publication 3/7/2003; closure 30/09/2003; budget 9 M€ (iii) FP6-2003-SSP3 - publication 4/10/2003; closure 5/01/2004; budget 83.1 M€ (iv) FP6-2004-SSP-4 - publication 28 Oct 2004; closure 1/2/2005; budget 77.8 M€ (b) New and Emerging S&T problems and opportunities: (i) FP6-2003-NEST-A-publication 26/02/2003; closure 22/10/2003; budget 28M€ (ii) FP6-2003-NEST-B1, B2, B3, B4 - publication 17/12/2003; closure 14/4/2004 and 15/9/2004; budget 30M€ (iii) FP6-2003-NEST-Path - publication 17/12/2003; closure 14/4/2004; budget 35M€ (iv) FP6-2004-NEST-Path - publication 01/12/2003; closure 13/4/2005; budget 35M€ (v) FP6-2004-NEST-C1, C2 - publication 01/12/2003; closure 13/4/2005; budget 30M€ (vi) FP6-2005-NEST-Path - publication 27/10/2005; closure 15/2/2006; budget 50M€
9. Horizontal research activities involving SMEs	(i) FP6-2002-SME 1-publication 17/12/2002; closure 27/11/2003; budget 155 M€ (ii) FP6-2002-SME 2-publication 17/12/2002; closure 6/03/2003; budget 40 M€ (iii) FP6-2003-SME 1-publication 17/12/2002; closure 21/10/2004; budget 75 M€ (iv) FP6-2003-SME 2-publication 17/12/2003; closure 6/04/2004; budget 41 M€ (v) FP6-2003-SME 3-publication 17/12/2003; closure 6/04/2004; budget 2 M€ (vi) FP6-2004-SME-COOP-publication 15/12/2004; closure 14/09/2005; budget 75 M€ (vii) FP6-2004-SME-COLL-publication 15/12/2004; closure 26/05/2005; budget 65 M€
10. Specific measures in support of international co-operation	(i) FP6-2002-INCO- DEV 1 - publication 17/12/2002; closure 11/09/2003, budget 50 M€ (ii) FP6-2002-INCO- MPC 1-publication 17/12/2002; closure 7/05/2003; budget 25 M€ (iii) FP6-2002-INCO- WBC1-publication 17/12/2002; closure 7/05/2003, budget 13.5 M€ (iv) FP6-2002-INCO- DEV/SSA 1 - published 17/12/2002; open call; final closure 6/03/2006; budget 1 M€for 2003, 1.9 M€for 2004, 2M€in 2005, 2.4M€in 2006 (v) FP6-2002-INCO- MPC/SSA 2 - published 17/12/2002; open call; final closure 6/03/2006; budget 0.6 M€for 2003, 0.9 M€for 2004, 0.9M€in 2005, 1M€in 2006 (vi) FP6-2002-INCO- WBC/SSA3 - published 17/12/2002; open call; final closure 8/09/2004; budget 0.6 M€for 2003, 0.9 M€for 2004 (vii)FP6-2002-INCO-Russia+NIS/SSA-4 - published 17/12/2002; open call; final closure 6/03/2006; budget 0.6 M€for 2003, 0.9 M€for 2004, 0.8M€in 2005, 0.7M€in 2006 (viii) FP6-2002-INCO-COMultilatRTD/SSA 5 - published 17/12/2002; open call; final closure 6/03/2006; budget 0.6 M€for 2003, 1.5 M€for 2004, 1.5M€in 2005, 2.2M€in 2006 (ix) FP6-2003-INCO-DEV-2 - publication 17/12/2003; closure 14/09/2004, budget 36.2 M€ (x) FP6-2003-INCO-MPC-2 - publication 17/12/2003; closure 14/9/2004; budget 27.1 M€ (xi) FP6-2003-INCO-Russia+NIS-1 - publication 17/12/2003; closure 27/4/2004, budget 14 M€ (xii) FP6-2004-INCO-DEV-3 - publication 17/12/2004; closure 13/9/2005, budget 60 M€ (xiii) FP6-2004-INCO-MPC-3 - publication 17/12/2004; closure 13/9/2005, budget 10 M€ (xiv) FP6-2004-INCO-WBC-SSA-3- publication 17/12/04; closure 07/03/2005, budget 3 M€ (xv) FP6-2005-INCO-WBC-SSA-3- publication 17/12/05; closure 06/03/2006, budget 4 M€
11. Support for the co-ordination of activities	(i) FP6-2002-ERA-NET-1-CA-SSA - publication 17/12/2002; open call; final closure 4/10/2005; budget, 51.4 M€for 2005 (25.1 M€for the 2/3/2005 closure date and 26.3 for the 4/10/2005 final closure)
12. Support for the coherent development of policies	(i) FP6-2005-KNOW-REG-2 - publication 31/12/04; closure 19/05/2005, budget 8.5 M€ (ii) FP6-2006-FORESIGHT - publication 14/11/2005; closure 27/2/2006; budget 0.471 M€ (iii) FP6-2005-RTD-OMC-NET - publication 2/9/2005; closure 3/2/2006; budget 8.7 M€ (iv) Cf. FP6-2005-INNOV-9 - publication 05/10/2005; closure 05/1/2006; budget 2 M€

<p>D. Promotion of co-operation with Associated Candidate Countries: “Reinforcement of the Associated Candidate Countries’ Research Capacities”</p>	<p>(i) FP6-2003-ACC-SSA-General - publication 26/03/2003; closure 26/06/2003, budget 9 M€ (ii) FP6-2003-ACC-SSA-NMP; FP6-2003-ACC-SSA-Aero-Space; FP6-2003-ACC-SSA-Food; FP6-2003-ACC-SSA-Energy; (iii) FP6-2003-ACC-SSA-Transport - publication 26/03/2003; closure 26/06/2003, budget up to 4 M€ (iv) FP6-2004-ACC-SSA-2 - publication 15/06/2004; closure 14/10/2004, budget 19.8 M€</p>
<p>E. Promotion of co-operation with targeted third countries</p>	<p>(i) FP6-2004-TC-SSA-General - publication 15/06/2004; closure 14/10/2004, budget 2.9 M€</p>

Annex B
(last updated : December 2003)

Common evaluation criteria for evaluating proposals

A number of evaluation criteria are common to all the programmes of the Sixth Framework Programme and are set out in the European Parliament and the Council Regulations on the Rules for Participation (Article 10). These are:

- a) “Scientific and technological excellence and the degree of innovation;
- b) Ability to carry out the indirect action successfully and to ensure its efficient management, assessed in terms of resources and competences and including the organisational modalities foreseen by the participants;
- c) Relevance to the objectives of the specific programme;
- d) European added value, critical mass of resources mobilised and contribution to Community policies;
- e) Quality of the plan for using and disseminating the knowledge, potential for promoting innovation, and clear plans for the management of intellectual property.”

Furthermore, in applying paragraph (d) above, the following criteria are also to be taken into account:

- a) “For networks of excellence, the scope and degree of the effort to achieve integration and the network’s capacity to promote excellence beyond its membership, as well as the prospects of the durable integration of their research capabilities and resources after the end of the period covered by the Community’s financial contribution;
- b) For integrated projects, the scale of the ambition of the objectives and the capacity of the resources to make a significant contribution to reinforcing competitiveness or solving societal problems;
- c) For integrated initiatives relating to infrastructure, the prospects of the initiative’s continuing long term after the end of the period covered by the Community’s financial contribution.”

As set out in the Rules for Participation, the calls for proposals determine, in accordance with the type of instruments deployed or the objectives of the RTD activity, how the criteria set out above are applied by the Commission.

The purpose of this annex is to indicate how these criteria shall be applied. In particular, as the Sixth Framework Programme contains a differentiated set of instruments, the way in which each criterion translates into the issues to be examined as the basis for marking proposals will differ. In evaluating against these criteria, the checklists of issues set out in the following pages are intended to be universal for each type of instrument.

Unless otherwise specified in the relevant parts of this work programme, the principal issues set out below (i.e. the main numbered headings) will be given equal weighting in the evaluation. For each principal issue, a minimum score to be achieved is also

indicated as well as a minimum overall score for each instrument. Proposals that fail to achieve these minimum threshold scores shall be rejected. Any departures from these threshold scores are indicated in the relevant part of this work programme.

In addition to the basic checklists below and any specific criteria or interpretations of the criteria required for a call, the following issues are also addressed for all proposals at any appropriate moment in the evaluation:

- Are there **gender** issues associated with the subject of the proposal? If so, have they been adequately taken into account?
- Have the applicants identified the potential **ethical** and/or **safety** aspects of the proposed research regarding its objectives, the methodology and the possible implications of the results? If so, have they been adequately taken into account in the preparation of the proposal?

An ethical check will take place for all proposals during the evaluation. A specific ethical review will be implemented following the evaluation for proposals recommended for funding and which deal with specific sensitive issues or whenever recommended following the ethical check during the evaluation. To this end, additional information on ethical aspects may be requested from proposers to allow the specific ethical review to be carried out. (See the section “The ethical review of proposals” below for more details on the criteria to be applied).

When appropriate, the following additional issues may also be addressed during the evaluation:

- To what extent does the proposal demonstrate a readiness to engage with actors beyond the research community and the public as a whole, to help spread awareness and knowledge and to explore the wider **societal implications** of the proposed work?
- Have the synergies with **education** at all levels been clearly set out?
- If **third country participation** is envisaged in the proposal, is it well justified and the participation well integrated in the activities?

Specific Targeted Research Projects

The following set of issues is intended to be a common basis for the evaluation of proposals for (1) Specific Targeted Research Projects.

1. Relevance (threshold score 3 out of 5)

- The extent to which the proposed project **addresses the objectives** of the work programme.

2. S&T excellence (threshold score 4 out of 5)

The extent to which:

- the project has clearly **defined and well focused objectives**.
- the objectives represent **clear progress beyond the current state-of-the-art**.
- the **proposed S&T approach** is likely to enable the project to achieve its objectives in research and innovation

3. Potential impact (threshold score 3 out of 5)

The extent to which:

- the proposed project is likely to have an **impact on reinforcing competitiveness or on solving societal problems**.
- the proposal demonstrates a clear **added value** in carrying out the work at European level and takes account of research activities at national level and under European initiatives (e.g. Eureka).
- exploitation and/or dissemination plans are adequate to ensure **optimal use of the project results**.

4. Quality of the consortium (threshold score 3 out of 5)

The extent to which:

- the participants collectively constitute a **consortium of high quality**.
- the participants are **well-suited and committed to the tasks** assigned to them.
- there is **good complementarity** between participants.
- the opportunity of involving SMEs has been adequately addressed.

5. Quality of the management (threshold score 3 out of 5)

The extent to which:

- the **project management** is demonstrably of high quality.
- there is a satisfactory plan for the **management of knowledge**, of intellectual property and of other innovation-related activities.

6. Mobilisation of resources (threshold score 3 out of 5)

The extent to which:

- the project foresees the **resources** (personnel, equipment, financial...) necessary for success.
- the **resources** are **convincingly integrated** to form a coherent project.
- the overall **financial plan** for the project **is adequate**.

Overall threshold score 21 out of 30.

Coordination Actions

The following set of issues is intended to be a common basis for the evaluation of proposals for coordination actions.

1. Relevance (threshold score 3 out of 5)

- The extent to which the proposed project **addresses the objectives** of the work programme.

2. Quality of the coordination (threshold score 4 out of 5)

The extent to which:

- the research actions/programmes to be coordinated are of **demonstrably high quality**.
- the **coordination mechanisms** proposed are sufficiently **robust** for ensuring the goals of the action

3. Potential impact (threshold score 3 out of 5)

The extent to which:

- the proposal demonstrates a clear **added value** in carrying out the work at European level and takes account of research activities at national level and under European initiatives (e.g. Eureka).
- the Community support would have a real impact on the action and its scale, ambition and outcome.
- the project mobilises a critical mass of resources in Europe
- exploitation and/or dissemination plans are adequate to ensure **optimal use of the project results**, where possible beyond the participants in the project.

4. Quality of the consortium (threshold score 3 out of 5)

The extent to which:

- the participants collectively constitute a **consortium of high quality**.
- the participants are **well-suited to the tasks** assigned to them.
- the project combines the **complementary expertise** of the participants to generate added value with respect to the individual participants' programmes.

5. Quality of the management (threshold score 3 out of 5)

The extent to which:

- the **project management** is demonstrably of high quality.
- there is a satisfactory plan for the **management of knowledge**, of intellectual property and of other innovation-related activities.

6. Mobilisation of resources (threshold score 3 out of 5)

The extent to which:

- the project provides for the **resources** (personnel, equipment, financial...) necessary for success.
- the **resources** are **convincingly integrated** to form a coherent project.
- the overall **financial plan** for the project **is adequate**.

Overall threshold score 21 out of 30.

Specific Support Actions

The following set of issues is intended to be common to all parts of FP6 for the evaluation of proposals for specific support actions.

1. Relevance (threshold score 4 out of 5)

The extent to which

- the proposal addresses key issues to defined in the work programme/call, specific programmes or ERA, as appropriate.

2. Quality of the support action (threshold score 3 out of 5)

The extent to which:

- the proposed objectives are sound and the proposed approach, methodology and work plan are of a sufficiently high quality for achieving these objectives.
- the applicant(s) represent(s) a high level of competence in terms of professional qualifications and/or experience.
- the proposed activities are innovative and original (*if applicable*).

3. Potential impact (threshold score 3 out of 5)

The extent to which:

- the impact of the proposed work can only be achieved if carried out at European level.
- the Community support would have a substantial impact on the action and its scale, ambition and outcome.
- exploitation and/or dissemination plans are adequate to ensure **optimal use of the project results**, where possible beyond the participants in the project.

4. Quality of the management (threshold score 3 out of 5)

- The extent to which the management structure is credible in terms of professional qualifications, experience, track record and capacity to deliver.

5. Mobilisation of resources (threshold score 3 out of 5)

The extent to which :

- the project provides for the **resources** (personnel, equipment, financial...) necessary for success.
- the overall **financial plan** for the project **is adequate**.

Overall threshold score 17.5 out of 25.

The ethical review of proposals

In accordance with Article 3 of the Framework Programme and Article 10 of the Rules for Participation, the evaluation procedure includes a check of any ethical issues raised by proposals. A specific ethical review of proposals involving sensitive ethical issues may take place after the evaluation and before any selection decision by the Commission. For this purpose, an ethical review (ER) panel may be convened.

The ER panel assesses the following elements:

- The awareness of the proposers of the ethical aspects of the research they propose
- Whether the researchers respect the ethical requirements of the 6th Framework Programme. In this respect, a declaration to the minutes of the Council meeting of 30.09.2002 was made; this is set out at the end of this section.
- Whether the proposers have taken into account the legislation, regulations and/or guidelines in place in the country(ies) where the research takes place
- Whether the relevant international conventions and declarations are taken into account¹³
- Whether the relevant Community Directives are taken into account.
- Whether the proposer is seeking the approval/favourable opinion of relevant local ethics committees

For research involving human beings, the ER panel assesses in particular:

- The information which is given to the participants (healthy volunteers, tissue donors, patients, etc.)
- Measures taken to protect participants' personal data (including genetic data) and privacy
- Recruitment criteria and means by which the recruitment is to be conducted
- Level of care offered to participants

For research involving isolated or banked human embryonic stem cells in culture and foetal tissues and cells (for which restrictions apply, see the declaration to the Council minutes below) the ER panel assesses in particular:

- Whether the proposers have taken into account the legislation, regulations and/or codes of conduct in place in the country(ies) where the research using human embryonic stem cells in culture will take place. The procedures for obtaining informed consent
- The source of the human embryonic and foetal tissues/cells.
- Measures taken to protect personal data (including genetic data) and privacy
- The nature of financial inducements, if any.

¹³ Charter of Fundamental Rights of the European Union, signed in Nice, 7 December 2000
 Convention on Human rights and Biomedicine – Oviedo, 4.04. 1997 -
 Council of Europe and the Additional protocol on the prohibition of Cloning of human beings (1998)
 Universal declaration on the Human genome and human rights - Unesco - 11 November 1997
 Declaration of Helsinki (in its latest version) - World Medical Association
 Convention on the Rights of the Child – United Nations - 20 November 1989
 Amsterdam protocol on an animal protection and welfare

For research involving animals, the ER panel assesses in particular:

- Whether the proposers are applying the ‘Three Rs’ principle: Replacement, Reduction and Refinement, and in particular:
 - ◆ Are animal experiments replaced by alternatives whenever possible?
 - ◆ Is animal suffering avoided or kept to a minimum?
 - ◆ Is animal welfare guaranteed and are the principles of biodiversity respected?

With respect to research involving human embryonic stem cells (as mentioned above), the relevant declaration to the minutes of the Council meeting of 30 September 2002 is as follows:

“The Council and the Commission agree that detailed implementing provisions concerning research activities involving the use of human embryos and human embryonic stem cells which may be funded under the 6th Framework Programme shall be established by 31 December 2003. The Commission states that, during that period and pending establishment of the detailed implementing provisions, it will not propose to fund such research, with the exception of the study of banked or isolated human embryonic stem cells in culture. The Commission will monitor the scientific advances and needs as well as the evolution of international and national legislation, regulations and ethical rules regarding this issue, taking into account also the opinions of the European Group of Advisers on the Ethical Implications of Biotechnology (1991–1997) and the opinions of the European Group on Ethics in Science and New technologies (as from 1998), and report to the European Parliament and the Council by September 2003.

The Council states that it intends to discuss this issue at a meeting in September 2003.

In the review of any subsequent proposal submitted to Council when applying Article 5 of the Decision 1999/468/EC the Commission recalls its statement concerning Article 5 of Decision 1999/468/EC, according to which the Commission, in order to find a balanced solution, will act in such a way as to avoid going against any predominant position which might emerge within the Council against the appropriateness of an implementing measure (cf. OJ C 203, 17.7.1999, p. 1).

The Council notes the intention of the Commission to submit to the programme Committee, established under the specific Research programme "Integrating and strengthening the ERA", procedural modalities concerning research involving the use of human embryos and human embryonic stem cells, in accordance with Article 6, paragraph 3, first indent.

The Council further notes the intention of the Commission to present to Council and Parliament in Spring 2003 a report on human embryonic stem cell research which will form the basis for discussion at an inter-institutional seminar on bioethics.

Taking into account the seminar's outcome, the Commission will submit, based on article 166 (4) of the Treaty, a proposal establishing further guidelines on principles for deciding on the Community funding of research projects involving the use of human embryos and human embryonic stem cells.

The Council and the Commission will do their utmost, counting on the support of the European Parliament, to complete the legislative procedure as early as possible and at the latest in December 2003.

The Council and the Commission expect that the above mentioned seminar will contribute, as suggested by the European Parliament, to a Europe-wide and well-structured discussion process on the ethical issues of modern biotechnology, particularly on human embryonic stem cells, in order to enhance public understanding.

The Council and the Commission note that the ethical acceptability of various research fields is related to the diversity among Member States, and is governed by national law in accordance with the principle of subsidiarity. Moreover, the Commission notes that research using human embryos and human embryonic stem cells is allowed in several Member States, but not in others.”

Annex C

List of Groups of target countries for specific measures in
support of International Co-operation
(last updated : February 2005)

**DEVELOPING
COUNTRIES
(ACP, ASIA,
LATIN
AMERICA)**

- ACP

AFRICAN

- Angola
- Benin
- Botswana
- Burkina-Faso
- Burundi
- Cameroon
- Cape Verde
- Central African Republic
- Chad
- Comoros
- Congo (Republic)
- Congo (Democratic Rep. of)
- Côte d'Ivoire
- Djibouti
- Equatorial Guinea
- Eritrea
- Ethiopia
- Gabon
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Kenya
- Lesotho
- Liberia
- Madagascar
- Malawi
- Mali
- Mauritania
- Mauritius
- Mozambique
- Namibia
- Niger
- Nigeria
- Rwanda
- Sao Tome and Principe
- Senegal
- Seychelles
- Sierra Leone
- Somalia
- South Africa
- Sudan
- Swaziland
- Tanzania
- Togo

- Uganda
- Zambia
- Zimbabwe

CARIBBEAN

- Antigua and Barbuda
- Bahamas
- Barbados
- Belize*
- Cuba*
- Dominica
- Dominican Rep.
- Grenada
- Guyana*
- Haiti
- Jamaica
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and Grenadines
- Suriname*
- Trinidad and Tobago

PACIFIC

- Cook Islands
- East Timor **
- Fiji
- Kiribati
- Marshall Islands
- Micronesia, Federal States of
- Nauru
- Niue
- Palau
- Papua New Guinea**
- Solomon Islands
- Tonga
- Tuvalu
- Vanuatu
- Western Samoa

- ASIA

- Bangladesh
- Bhutan
- Brunei
- Cambodia
- China***
- India***
- Indonesia
- Lao (People's Democratic Rep. of)
- Malaysia

- Maldives
- Mongolia
- Nepal
- Pakistan
- Philippines
- Singapore
- Sri Lanka
- Thailand
- Vietnam

- LATIN AMERICA

- Argentina
- Bolivia
- Brazil
- Chile
- Colombia
- Costa Rica
- Ecuador
- El Salvador
- Guatemala
- Honduras
- Mexico
- Nicaragua
- Panama
- Paraguay
- Peru
- Uruguay
- Venezuela

**MEDITERRANEAN
PARTNER
COUNTRIES¹**

- Algeria
- Egypt
- Jordan
- Lebanon
- Morocco
- Syrian Arab Rep.
- Tunisia
- West Bank and Gaza Strip

¹ Mediterranean partner countries are the 12 countries involved in the Barcelona process: Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Syrian Arab republic, Tunisia, Turkey, West bank and Gaza strip. However, Cyprus and Malta are now Member States; Turkey (Candidate Country) and Israel are associated countries to FP6.

**RUSSIA AND THE
OTHER NEW
INDEPENDENT STATES**

- Armenia
- Azerbaijan
- Belarus
- Georgia
- Kazakhstan
- Kyrgyzstan
- Moldova
- Russia **
- Tajikistan
- Turkmenistan
- Ukraine
- Uzbekistan

**WESTERN BALKAN
COUNTRIES**

- Albania
- Bosnia-Herzegovina
- Croatia****
- Former Yugoslav Republic of Macedonia (FYROM)
- Serbia and Montenegro²

* For participation in the « Specific measures in support of international co-operation », these countries can be considered both in ACP and Latin American region

** For participation in the « Specific measures in support of international co-operation », these countries can be considered both in ACP and Asian regions

*** For participation in the « Specific measures in support of international co-operation » China, India and Russia may be considered individually as a region, however, in this case, at least 3 different partners from different provinces or states within China, India or Russia are necessary

**** On 18-06-2004 Croatia became a Candidate Country, however, Croatia is not yet an associated country to FP6 and thus remains a target country for INCO.

² Including Kosovo as defined by UNSC resolution 1244 of 10 June 1999