

# **INTRODUCTION TO THE INSTRUMENTS AVAILABLE FOR IMPLEMENTING THE FP6 PRIORITY THEMATIC AREAS**

## **Speaking Notes**

**These speaking notes are being widely circulated in order to generate an open discussion during these early stages in the design of the instruments available for implementing the priority themes of the Sixth Framework Programme.**

**Further information on the individual instruments is available from the DG Research website:**

*<http://europa.eu.int/comm/research/nfp/networks-ip.html>*

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### *Standard Disclaimer*

*These speaking notes express solely the current views of unit RTD.B.2 of the European Commission’s services. Readers should not regard these views as a statement of the official position of the European Commission nor indeed of its Directorate-General for Research.*

## **Instruments for implementing the priority themes of the Sixth Framework Programme**

The purpose of this paper is to provide the reader with a brief introduction to current thinking on the design of the instruments available for implementing the priority themes of the Sixth Framework Programme (FP6). It concentrates on the main features of the instruments. It is not intended to be a comprehensive document.

For further details on the instruments, readers are referred to the following website: <http://europa.eu.int/comm/research/nfp/networks-ip.html>

### **A wider range of better differentiated instruments**

The following instruments will be available to implement the priority themes:

- integrated projects;
- networks of excellence;
- Article 169 (for the joint implementation of national programmes);
- as a “stairway of excellence”
  - specific targeted research projects,
  - coordination actions;
- specific support actions.

This is a somewhat wider range of instruments than was available for the key actions of the Fifth Framework Programme (FP5), since it now contains a mix of the “new” instruments driven by the concepts of the European Research Area (ERA) and of the more “traditional” instruments similar to those in FP5.

These “new” instruments, notably the integrated projects and the networks of excellence, are characterised by their capacity to mobilise the critical mass of expertise needed to achieve ambitious objectives. They are also characterised by the structuring and integrating effects that they will have on the fabric of European research.

As well as being a wider range of instruments, this paper aims to show that they are also a much better differentiated set. Each instrument has its own distinct character and its own distinct role to play in implementing the priority themes.

*Note: This paper is confined to the use of these instruments within the priority themes. It should be noted however that the instruments do also have roles to play elsewhere in the Framework Programme.*

## **Principles guiding their design**

Before examining each of these instruments in turn, it is worth reflecting on the principles that are guiding the European Commission in their design.

**Simplification and streamlining:** These principles are important both to minimise the overheads of all concerned at all stages of the process, whether applicants, contractors or the Commission itself. Applying these principles will also help to speed up procedures, especially the time taken from evaluation to contract.

**Flexibility and adaptability:** From the point of view of programme management, the instruments need to be designed to be applicable throughout the priority themes – in other words they should be applicable equally to the social sciences or to engineering, as well as to basic research or applied research.

Furthermore, from the point of view of the contractors, instruments are needed that enable projects to adapt to changing circumstances, both in the research and in the partnership.

**Increased management autonomy:** This ability of projects to adapt to changing circumstances is part of a general shift towards increased autonomy for the consortia. The aim is give consortia more freedom in managing their projects, especially by eliminating all unnecessary micromanagement from the projects.

**While preserving public accountability:** In designing these instruments, the Commission will try to push these principles to the limit. However, it must be remembered that we are dealing with public money and that, as a consequence, there are indeed limits set by the need to preserve public accountability and to protect the interests of the European Community.

## **Integrated projects**

**Purpose:** The integrated project is being designed to generate the knowledge required to implement the priority themes by integrating the critical mass of activities and resources needed to achieve ambitious clearly defined scientific and technological objectives.

The integrated project is therefore an instrument to support directly objective-driven research, where the primary deliverable is new knowledge. Of course, by mobilising a critical mass of resources, integrated projects can also be expected to have a structuring effect on the fabric of European research.

**Activities:** Each project must contain a research component and may contain technological development and demonstration components, as appropriate, as well as a training component. A project may be at any point in the research spectrum. A single project may indeed span large parts of the spectrum, i.e. from basic to applied research.

The effective management of knowledge, and its dissemination and transfer, will also be an essential feature of each integrated project as well as, where relevant, the analysis and assessment of the technologies developed and of the factors relating to their exploitation. Projects may also include support for the take-up of new technologies, in particular by SMEs.

**Scale of the critical mass:** Critical mass will differ widely in scale from field to field, for example from the social sciences to aeronautics research, and possibly also from topic to topic inside a field. The over-riding criterion for judging critical mass is simply therefore the qualitative one that an integrated project must have ambitious objectives and must mobilise whatever activities and resources are needed to achieve those objectives.

The value of the activities integrated by a project are expected to range up to many tens of millions of euros. However, there will be no minimum threshold, provided of course that the necessary ambition and critical mass are there.

**Size of partnership:** There must be a minimum of three participants from three different countries. However, in practice, there are likely to be substantially more participants and probably somewhat more than the average of nine seen in the RTD projects of FP5.

**Duration:** Integrated projects are expected to have a duration of typically three to five years. However, there will be no maximum, so a longer duration could be accepted if it is necessary to deliver the objectives of a project.

**Financial regime:** Community support will be provided in the form of a “grant to the budget” and will be paid as a contribution to actual costs:

- that are necessary for the project;
- that are determined in accordance with each participant’s own accounting conventions; but
- that exclude indirect taxes, contribution to profit and the like.

This is a financial regime that is basically well known from the RTD projects of FP5, but with the important simplification that for integrated projects there will be no pre-defined cost categories. Each participant will simply use its own accounting definitions.

**Cost Methodologies:** It is possible that the three cost methodologies used for RTD projects in FP5 will be carried forward, namely:

- **FC:** full actual direct costs plus full actual indirect costs;
- **FF:** full actual direct costs plus a flat rate (80% of personnel costs) for overheads;
- **AC:** additional direct costs plus a flat rate (20% of additional costs, excluding subcontracting) for overheads.

Possible simplifications to these methodologies are being examined.

**Maximum rates of Community support:** For both of the full cost methodologies, the maximum rates of Community contribution to a participant’s costs will be:

- 50% for its research and technological development activities in the project;
- 35% for any demonstration activities; and
- 100% (of direct costs only) for its project management and training activities.

AC participants will continue to be supported at up to 100% of additional costs for all components of the project.

**Scale of the Community support:** Community support is most likely to fall in the range of several millions of euros to several tens of millions of euros.

**Cost statements:** Annually, each participant will be required to provide the Commission with a summary statement of its costs that has been certified by an independent auditor (or competent public official in the case of a public body). The cost statement should be accompanied by a management-level justification of costs.

**Proposals:** Calls for proposals are likely to be preceded by calls for expression of interest to determine topics for the subsequent call for project proposals. This will help focus the calls for proposals, thereby containing over-subscription. It will also assist in proposal-making and consortium-building.

Proposals themselves will be simplified, in particular to reflect the evolutionary nature of the project.

**Evaluation system:** Evaluation will be by peer review. However, the system used for RTD projects in FP5 will need to be strengthened to reflect the more ambitious nature of the integrated projects.

Possibilities for strengthening the peer review system include: the more systematic use of remote assessment prior to panel meetings; and hearings of applicants by the panel, in particular to allow applicants to answer questions not covered in the proposal itself.

**Specific evaluation criteria:** Successful proposals for integrated projects will need to demonstrate:

- the excellence and relevance of the research proposed;
- the ambition of the project's objectives, in particular in relation to its potential for reinforcing competitiveness or solving societal problems;
- the ability of the consortium to put together the critical mass of activities and resources needed to achieve these ambitious objectives;
- the quality of the plan for the use and dissemination of knowledge and, when relevant, the potential for promoting innovation and the ability to manage knowledge;
- the ability to successfully carry out the project, particularly in terms of its organisation and management.

The complete set of evaluation criteria will be described in the relevant information package.

**Evolution of the implementation plan:** Before the start of the project, the consortium will have agreed with the Commission an outline implementation plan for the full duration of the project together with a detailed plan for its first 18 months. This detailed plan and its associated budget will have been the basis for the initial advance payment for that period.

Then, each year, the detailed 18-month plan will roll forward and so will the advance payment. That way, the project should never be operating without an approved detailed plan, nor without a satisfactory advance payment.

**Evolution of the consortium:** The consortium may itself decide to take in new participants as the project evolves, though without additional financing from

the Community. The contract will specify when the addition of new participants must involve a competitive call. These calls will be organised by the consortium in accordance with guidelines set out in the contract. All costs associated with such calls will be chargeable to the contract.

## Networks of Excellence

**Purpose:** The network of excellence is being designed to strengthen excellence on a particular research topic by networking together the critical mass of resources and expertise needed to be world force in that topic. This expertise will be networked around a joint programme of activity aimed primarily at creating a progressive and lasting integration of the research activities of the network partners while, of course, at the same time advancing knowledge on the topic.

It is important that these networks do not act as “closed clubs” and strengthen excellence only within the network. Each network will, as a consequence, also be given a mission to spread excellence beyond the boundaries of its partnership.

The network of excellence is therefore an instrument designed primarily to address the fragmentation of European research on a particular research topic, where the main deliverable will be a restructuring and reshaping of the way that research is carried out on that topic. Of course, by investing money in a partnership of excellent teams, the networks can also be expected to generate knowledge, though this is not their main purpose.

**What constitutes a joint programme of activity?** A joint programme of activity (JPA) will consist of at least three components:

- first, a programme of **jointly executed research**, possibly of a long-term character;
- second, a set of **integrating activities** designed to help bring about the restructuring and reshaping of how the partners carry out research on the topic. This will certainly include the coordinated programming of the partners’ activities in research, training and so on. It may also include the creation of research facilities for common use, staff mobility and exchanges, the relocation of staff, perhaps of whole teams and equipment, and the reinforcement of electronic communication networks to support interactive working between the teams involved;
- third, a set of **activities designed to spread excellence**, for example, dissemination and communication activities, the training of researchers especially from outside the network and, more generally, networking activities to help transfer knowledge to teams external to the network.

All the network’s activities should be carried out within a unified management structure.

**Scale of the critical mass:** Each network of excellence is expected to have ambitious goals and to assemble the critical mass of resources and expertise

needed to achieve those goals. It is not possible to fix a value for this critical mass as it will vary from topic to topic. However, some of the larger networks can be expected to involve several hundreds of researchers. Of course, networks may be of a much more limited size, but the necessary ambition and critical mass must be there.

**Duration of the Community support:** The duration of the Community support is another important aspect of critical mass, since a network must be supported long enough for its integration to take on a lasting nature. Support, in many cases, may therefore be needed for five years and perhaps more.

**Size of the partnership:** There must be a minimum of three participants from three countries. However, as an indication, there should generally not be less than six participants. A minimum number may be specified in the relevant call for proposals.

**Financial regime:** Community support will be in the form of a “fixed grant for integration”. The grant is intended to act as an incentive to overcome the barriers to a lasting integration of the activities of the partners on the topic that is the subject of the network. These barriers are, of course, not only organisational and financial, but also human and cultural.

There will be considerable freedom for the partnership to distribute the grant as it wishes between the partners and between the activities covered by the JPA.

**Calculation of the grant:** The grant will be calculated on the basis of an amount in euros for each researcher involved in the network’s JPA. The amount will be specified in the relevant call for proposals. The figure will have been calculated to ensure that it does not exceed one-quarter of the value of the capacities and resources being integrated per researcher.

By way of illustration, the average annual grant could vary with the number of researchers involved in the JPA in the following manner:

50 researchers	€1 million/year
100 researchers	€2 million/year
150 researchers	€3 million/year
250 researchers	€4 million/year
500 researchers and above	€5 million/year

In this illustration, a network involving 200 researchers would receive a 5-year grant totalling €17.5 million.

**Disbursement of the grant:** It is intended to disburse the grant in annual instalments with a profile that reduces disbursements towards the end of the contract in order to minimise the risk of creating dependence on Community

support. Any such dependence would naturally prejudice the lasting nature of the partners' integration. The disbursement schedule will be specified in the contract.

Payment of the annual disbursements will depend primarily on the basis of the network's progress towards achieving a lasting integration of the partners' activities. In addition, no participant may receive in any year a Community contribution that exceeds the costs incurred in carrying out its part of the joint programme of activities for that year. Each participant will therefore be asked to present annually a certificate from an independent auditor (or competent public official in the case of public bodies) stating that that relationship has been observed. Cost statements will not be required.

Since the grant is not being paid as a contribution to costs, there will be no need to account for or track the use of the Community contribution.

**Proposals:** Calls for proposals are likely to be preceded by calls for expression of interest to determine topics for the subsequent call for network proposals. This will help focus the calls for proposals, thereby containing over-subscription and also assisting in proposal-making and partnership-building.

Proposals themselves will be simplified, in particular to reflect the evolutionary nature of the networks.

**Evaluation system:** Evaluation will be by peer review. However, the system used for RTD projects in FP5 will need to be strengthened to reflect the more complex goals of the networks of excellence. Possibilities for strengthening the peer review system include: the more systematic use of remote assessment prior to panel meetings; and hearings of applicants by the panel, in particular to allow the applicants to answer questions not covered in the proposal itself.

**Specific evaluation criteria:** Successful proposals for networks of excellence will need to demonstrate:

- the excellence and ambition of the network as a whole, of its joint programme of activities and of its individual members;
- the ability of the partnership to put together the critical mass of resources and expertise needed to achieve the network's objectives and to be a world force on the topic;
- the extent, the depth and the lasting nature of the integration proposed;
- the contribution of the network to spreading excellence;
- the ability of the partnership to successfully carry out the network, particularly in terms of its organisation, management and governance.

The complete set of evaluation criteria will be described in the relevant information package.

**Evolution of the joint programme of activities:** At the start of the project, the partnership will have agreed with the Commission an outline JPA for the full duration of the contract together with a detailed JPA for its first 18 months.

Then, each year, the detailed 18-month JPA together with an associated advance payment will roll forward.

**Evolution of the partnership:** The partnership may itself decide to take in new partners as the network evolves, though without additional financing from the Community. The contract will specify when the addition of new partners must involve a competitive call. These calls will be organised by the partnership in accordance with guidelines set out in the contract. All costs associated with such calls will be chargeable to the contract.

**Output monitoring by the Commission:** Since, in effect, disbursements of the grant will be paid according to a system of “payment by results”, the Commission will need to develop a robust scheme of output monitoring to act as a sound basis for the disbursement of the grant. Such a scheme might consist of:

- **annual reviews:** coinciding with the annual cycle of reporting and planning;
- **a mid-term review:** which would trigger a go/no-go decision on whether to continue the contract to its foreseen end;
- **an end-of-term review:** primarily to assess the impact of the network on Europe’s research capacity in the topic.

The Commission will probably involve independent experts in all stages of this monitoring scheme.

**Governance of the network:** Because of the structuring nature of a network and the tendency therefore for the partners to become mutually dependent, the network must establish an effective system of governance that ensures the engagement of its partner organisations at the policy-making level.

One way of achieving that would be for each network to establish a “governing council”, consisting of high-level representatives of the partner organisations. It might be preferable also to include in the council a number of independent external experts.

The main role of such a governing council would be to oversee the integration of the partners’ activities and to ensure that, as well as strengthening excellence, the network will also fulfil its mission to spread excellence.

## **Article 169**

“Article 169” is a reference to the article in the Treaty that enables the Community to participate in research programmes undertaken jointly by several Member States, including participation in the structures created for the execution of those programmes. States associated to the Framework Programme may also take part in these arrangements.

Article 169 is not strictly a “new” instrument in that it was available to be used in previous framework programmes. However, to date, no use has been made of this article.

In terms of the European Research Area and, in particular, in terms of the need to help integrate and structure research in Europe, Article 169 is potentially a most powerful instrument. To illustrate that, whereas integrated projects and networks of excellence tend to integrate the activities of individual performers of research, Article 169 arrangements can integrate the activities of whole national programmes on a particular topic.

It has however become clear, during the run-up to FP6, that it may be difficult to use Article 169 in large numbers during this framework programme and that its use will be restricted to research initiatives that are beyond the scope of the integrated projects or networks of excellence.

Each possible Article 169 arrangement requires a co-initiative between a number of Member States, possibly represented by their national programmes, and the Commission just to generate the proposal. Formally, it is then only the Commission that can submit a proposal to co-decision by the Council of Ministers and the European Parliament. The decision-making procedure for each Article 169 arrangement is therefore the same as it is for the Framework Programme itself.

The Commission had suggested to replace this complex and lengthy procedure, where each Article 169 arrangement needs its own co-decision, by a single framework decision of the Council and Parliament that would have enabled individual Article 169 arrangements to have been decided at the level of the Commission. This suggestion has not been retained.

It should be noted, however, that the Council has invited the Commission to present a small number of “pilot” Article 169 proposals in early 2002. The Commission services are currently working on these pilots with the interested national programmes.

## **“Stairway of excellence”**

The “stairway of excellence” – a term coined by the European Parliament – has been introduced to smooth the transition from the “traditional” instruments in FP5 to the “new” instruments in FP6 by supporting research activities of a more limited scope and ambition, particularly for smaller research actors, including SMEs and participants from the candidate countries.

The stairway consists itself of two instruments:

- **specific targeted research projects:** an evolved form of the shared-cost RTD projects and demonstration projects used in FP5;
- **coordination actions:** an evolved form of the concerted actions/thematic networks used in FP5.

In keeping with its transitional nature, the stairway may be used degressively as FP6 proceeds, though no decision will be taken on that until the Commission has arranged an independent evaluation in 2004 of the use of the instruments.

## **Specific support actions**

Specific support actions are an evolved form of the accompanying measures used in FP5. They are intended to complement the implementation of the Framework Programme and may be used to help in preparations for future Community research policy activities.

They will support, for example, conferences, seminars, studies and analyses, working groups and expert groups, operational support and dissemination, information and communication activities, or a combination of these as appropriate.

## Classification of the instruments

It is the Commission's intention to design a range of well-differentiated instruments, each with its own distinct role to play in implementing the priority themes. The following classification is meant to illustrate that:

### Integrated projects

- **Main purpose:** to support the objective-driven research needed to generate the knowledge required to implement the priority themes;
- **Primary deliverable:** new knowledge;
- **Other deliverables:** because they mobilise the critical mass of expertise needed to achieve ambitious objectives, integrated projects can also be expected to have a structuring effect on the fabric of European research;
- **Scale of effort mobilised:** medium to high;
- **Community contribution:** from several millions to several tens of millions of euros;
- **Financial regime:** grant to the budget, paid as a contribution to actual costs.

### Networks of excellence

- **Main purpose:** to address the fragmentation of European research;
- **Primary deliverable:** the restructuring and reshaping of the way research is carried out in Europe on a particular topic in order to strengthen excellence in that topic;
- **Other deliverables:** because they support the work of excellent research teams, networks of excellence will also generate new knowledge;
- **Scale of effort mobilised:** medium to high;
- **Community contribution:** from several millions to some tens of millions of euros;
- **Financial regime:** a fixed grant for integration, disbursed in annual instalments on the basis of progress towards achieving a lasting integration.

### Article 169

- **Purpose:** to support the joint implementation of national research programmes;
- **Scale of effort mobilised:** high. Because of the heaviness of the procedures envisaged, Article 169 arrangements will be justified only for large-scale initiatives that are beyond the scope of IPs and NoEs;
- **Community contribution:** from some tens of millions of euros upwards.

### **Specific targeted research projects**

- **Purpose:** to support research, technological development and demonstration activities of a more limited scope and ambition, particularly for smaller research actors;
- **Deliverable:** new knowledge;
- **Scale of effort mobilised:** low-medium;
- **Community contribution:** from hundreds of thousands of euros to a few millions of euros;
- **Financial regime:** grant to the budget, paid as a contribution to actual costs.

### **Instruments to be used in priority**

With such a wide range of distinct instruments available, calls for proposals will need to identify for each theme which instruments are to be used, which have priority and for what.

It has been agreed that, from the outset, integrated projects and networks of excellence will be the priority means of implementing those themes where it is already deemed appropriate. However, all themes will, at least initially, keep open the use of specific targeted research projects and coordination actions as a transitional measure.

Then in 2004, once there is practical experience of using the instruments, the Commission will organise an independent evaluation of their use. The result of the evaluation may lead to a subsequent adjustment in their relative weightings.