

## **MONITORING 2003**

# IMPLEMENTATION OF ACTIVITIES UNDER THE EC AND EURATOM FRAMEWORK AND CORRESPONDING SPECIFIC PROGRAMMES

**JULY 2004** 

## **PART A:**

# REPORT OF THE 2003 FRAMEWORK PROGRAMME MONITORING PANEL

## **Executive Summary**

This is a report from an independent expert Panel convened to monitor the implementation in 2003 of the sixth (2002-2006) Framework Programmes (FP6) and corresponding specific programmes of the European Community (EC) and of the European Atomic Energy Community (EURATOM). The analysis covered the indirect activities of the programmes; Joint Research Centre activities are covered in a separate exercise.

The 2003 Monitoring Panel (the Panel) is the first to have a more 'light touch' approach focused on a limited set of management issues. The 'implementation' component of the Panel's new mandate was addressed through a focus on the efficiency of the launch process for FP6. The Panel RECOMMENDS that the focus of monitoring should shift from efficiency towards effectiveness as FP6 progresses, just as the focus of implementation shifts from launch towards achievement and outcomes.

Over 100 documents relating to FP6 launch, implementation and initial outcomes were reviewed. On balance, the evidence supported the conclusions of the Commission's FP6 Implementation Report that "the average quality of proposals has been good ... the coverage of the work programmes (is) very satisfactory ... excellent partnerships in key areas of research have been supported ... a clear movement towards greater critical mass."

The Panel was able to affirm that the evaluation procedures had been fair and of high quality, although evaluator training should be improved. On oversubscription, the Panel noted that, while the level is higher than expected, this shows that the Community action is appreciated by and attractive to the research community. The two-stage submission and evaluation procedures should be continued and information on this should be widely communicated

Nonetheless, the Panel also concluded that the task of monitoring could be made easier, and management of the FP6 process could be better supported, if there were changes to objective and indicator setting. It was difficult, for example, to analyse proposal-related workflows or to make comparisons between activity areas. Statistics described participation rates for different countries and types of organisation, but expectations for these were not generally set. Because objectives were interpreted locally within programmes, and expectations might vary between work areas, the connection with overall FP objectives was sometimes unclear.

The Panel therefore RECOMMENDS that the Directorates General involved with FP6 should consider revising their objective and indicator systems so as to support not only evidence based reporting of programme management but also 'light touch' monitoring. Annual Management Plans and follow-up reports require objectives with different levels of precision and prioritised by scientific-technological, socio-economic and administrative objectives in a different manner. A tentative structure is presented by the Panel as a starting point for consideration.

When moving from proposal to contract, a balance is required between efficiency (speed) and effectiveness (value and quality). Targets for time-to-contract should be adapted to the type and complexity of contracts in a stated activity area. A concise table should be produced to show planned and actual proposal-related workflows per activity area. The Panel also suggests that if an analysis of the impact of institutional reform on the efficiency of administration is to be implemented then the Commission should start the necessary preparatory work now.

The 2003 Panel has no further recommendations regarding the Commission's response to the 2002 FP Monitoring Report. On improving dissemination, the Panel suggests that the Commission analyses what communities are targeted and decides how activities are monitored, whether sufficient resources have been allocated, and whether there should be sanctions for inadequate delivery. On improvements in evaluation and assessment, it draws the attention of future Monitoring Panels to this for further review and suggests that the Commission should include assessment of socio-economic outcomes.

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## 0 The work of the 2003 Monitoring Panel

This is a report from an independent expert Panel convened to monitor the implementation in 2003 of the sixth (2002-2006) Framework Programmes (FP6) and corresponding specific programmes for research, technological development and demonstration of the European Community (EC) and for research and training of the European Atomic Energy Community (EURATOM). The analysis covered the indirect activities of the programmes whereas the Joint Research Centre activities are covered in a separate exercise.<sup>1</sup>

The 2003 Monitoring Panel (the Panel) is the first to have a more 'light touch' approach focused on a limited set of management issues. Following an analysis of the monitoring exercises that were carried out in 1999-2002, the independent experts conducting the 2002 Framework Programme (FP) Monitoring exercise recommended that

"the monitoring is brought in line with the programme life cycles of the Framework Programmes, where the monitoring exercises provide the programme management with feedback with a more consistent focus on a small number of major issues in effective and efficient programme management, and when appropriate, strategic issues".

"An alternative option could be to reconfigure the annual monitoring exercise as an essentially internal management process and to complement it with external reviews, especially a mid term review".

The Commission has implemented these recommendations and restructured its annual monitoring exercises. As a consequence, an important difference between the current exercise and that of previous years is that no Monitoring Panels have been set up for the specific priority areas. Thus the remit of the 2003 Panel is more modest than its predecessors.

The mandate set for the Panel (and the relevant sections of this Report) is:

- To monitor the Commission's services follow-up of the recommendations of the monitoring 2002 of the previous FPs and corresponding specific programmes (Section 1).
- To provide an analysis of and comments on the implementation of the sixth framework programmes and the completion of previous framework programmes (Section 2).
- To make a review of the methodologies used for objective setting, the development of indicators, and follow-up mechanisms (Section 3).

The Panel did not address the experiences with the new FP6 instruments as this task is assigned to the Marimón Panel<sup>2</sup>.

The Panel met three times in Brussels in the period mid-April to mid-June. Most information considered by the experts was retrieved either from Commission documents or from a limited set of interviews. The Commission services were able to provide the Panel with more than 100 relevant documents and associated statistical analyses. Those used by the Panel are listed in an Annex.<sup>3</sup>

See Note for the attention of the members of the Board of Governors -24 May 2004- and JRC Annual Activity Report.

Report of the Marimón Panel, "Evaluation of the effectiveness of the New Instruments of Framework Programme VI", 21 June 2004.

We refer to the documents as DOC-XX corresponding to a unique number for each document. The Annex to this report lists all these documents.

The orientation of the Panel's mandate is also in line with the Commission's current administrative reform, which introduced a Strategic Planning and Programming cycle and Activity Based Management (ABM) to improve transparency, accountability and efficiency through better planning, implementation, monitoring and evaluation of activities. The mandate of the Panel required it to analyse relevant components of the key documents in this strategic planning cycle and report on progress and achievements. It was anticipated that the follow-up reports based on the Annual Management Plans (AMP) would provide the most appropriate information to assess progress made.

## 1 Follow up of recommendations from the 2002 monitoring report

The 2002 FP Monitoring Report made 10 recommendations [DOC-2] to each of which the Commission subsequently responded [DOC-41 to 50].

On recommendation (1) that the Commission should increase efforts to develop coherent information on the new instruments - Integrated Projects (IPs) and Networks of Excellence (NoEs) – the Commission responded that a new internal Task Force has been set up to ensure consistency in the implementation of the new instruments. In addition, a high level expert group (the Marimón Panel) conducted a mid-term evaluation. The intensive work activity carried out by this Panel is expected to allow a comprehensive and consistent assessment of the impact of the New Instruments as well as indications to overcome any emerging drawbacks of the mechanisms. The Monitoring Panel has not been able to include their findings in this report, as the Marimón report was not published before the Monitoring Panel's final meeting.

On recommendation (2) that the role of advisory groups should be clarified, the follow-up concerns a reference to the appointment letter by Commissioner Busquin to Advisory Groups members, where stringent role specifications are described. This was reiterated at a meeting the Commissioner had with Advisory Group Chairs in February.

On recommendation (3), the Commission has taken action to widen its role in research infrastructures by launching a call for design studies and construction of new infrastructures. In FP5 its role was limited to providing trans-national access to existing infrastructures. An evaluation of the results of this call will be published in August 2004. The European Strategy Forum for Research Infrastructures (ESFRI) has published its first Annual Report (DOC-50).

Concerning the recommendation (4) to improve links between the Commission's human resource management and its Activity Based Management processes, such needs and redeployment of human resources are under continuous review. In 2003, 50 supplementary posts were granted to enable the smooth transition between FP5 and FP6. The impact of such additional human resources on the effectiveness of services' activities has still to be monitored. Despite this change, however, the follow-up report of, for example, DG Research [DOC-20] mentions continuing staff overload in various activity areas in 2003.

Dissemination of results (recommendation 5) has been a prominent concern for consecutive Monitoring Panels. The Panel believes that improving the dissemination of results has been taken seriously by the Commission, although further work will be needed to build on these actions. It notes that a new action has been launched to set-up a comprehensive internal archiving system of final reports where files and reports will be held from the start of calendar year 2003. How the community can make use of this system needs to be communicated more clearly. A new feature throughout FP6 is the introduction in the model contract of a requirement

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These are self-assessment reports from all Directorates General involved in FP6. In the case of DG Information Society, these components consisted of the part 1.2.2 of its Annual Activity Report for 2003 related to the implementation of the Information Society Technologies (IST) priority of the Sixth Framework Programme (FP6) and of actions related to Networking and Computing infrastructures for research within FP6.

for contractors to engage with actors beyond the research community and to take measures to ensure suitable publicity. The Panel sees this as an important step forward.

The Panel does not feel that a formal recommendation on dissemination is required but suggests that the Commission analyses what communities are targeted for dissemination and decides how activities are monitored, whether sufficient resources have been set against these activities, and whether there are sanctions if contractors do not perform these tasks adequately.

The improvement of evaluation and impact assessment (recommendation 6) has been taken up by the establishment of a multi-annual evaluation plan included in the Annual Management Plan. This plan sets out which Community activity will be evaluated at which moment, whether it is done internally or externally and for what budget. This is intended to increase the coordination between studies and to tackle evaluation more systematically.

In Section 2.4 below, the Panel is able to conclude that evaluation procedures for proposals under FP6 have been fair and of high quality. Despite the fact that the evaluation of new instruments was a new experience for all involved, the fact that it revealed no major or exceptional problems is reassuring.

The five-year assessment of FP5 is underway and should give deeper insight into the achievements of the FP5 activities. *Ex-ante* assessment – including clear objectives and performance indicators - is now a mandatory requirement for all future major activities and will form a basis for evaluations. In so far as the Panel can judge from the DGs' self assessment reports [DOC-20 to 24], however, little effort has thus far been given to impact assessment and monitoring on the level of the priority areas and most efforts are done at the central level.

The Panel was told that the Commission has recently completed the establishment of a dedicated Unit and a working group on *ex-ante* impact assessment. The Panel is particularly keen that this Unit should start work soon and should undertake that work on the basis of clear objectives and *ex-ante* definitions of impacts.

While the Panel is not minded to make any further recommendations on evaluation and assessment, it spent much time in consideration of the issue and the attention of future Monitoring Panels is drawn to this for further review.

Recommendation (7) to support Candidate Countries (CCs) (today most of them are new Member States) has been met, through continuation of the regular activities of the Action Plan for supporting CCs. A dedicated call focused on CCs has been launched. Regular meetings with Personal Representatives of Research Ministers from CCs as well as Conferences in CCs have been held.

Recommendation (8) to rethink the role of SMEs is in the process of being addressed by the Interservices Task Force on SMEs through several actions aiming at stimulating a wider participation:

- Definition of different targets of SME participation per priority area, taking into consideration inherent variation of potential interest; This varies between a target of 25% for Priority Theme Area 2 (Information Society Technologies) to 8% in Priority Theme Area 4 (Aeronautics and Space) [DOC-68]
- Facilitation measures, such as workshops, information seminars and Integrated Projects dedicated to SMEs (i.e. SME-IP in Priority Theme Area Nanotechnologies [DOC-69]);
- Issue of two monitoring and good practice reports;
- Call for projects specifically dedicated to SMEs (collective and collaborative research).

The Panel did not have the resources to review the impact of the actions of the Inter-services Task Force on SMEs but stresses that the degree of participation of SMEs - especially in programmes addressing areas with important SME populations - remains an important indicator for acceptance of the FPs. This issue should be given due attention in future monitoring.

The Panel noted that recommendation (9) to replace the four year FP structure with a longer 6-7 year cycle, retaining flexibility by adapting the work programmes, would be part of higher level decision-making rather than immediate action.

Finally, as described in the Introduction, the Commission has changed its monitoring process in line with recommendation (10) of the 2002 Monitoring Panel.

There were also recommendations made in the 2002 Monitoring Report of Specific programmes [DOC-40 to 51]. Most of these are either in line with those of the synthesis FP5 Monitoring report or they address issues that are programme-specific. Among these, however, the Panel wishes to draw attention to the following recommendations that have particular and generic relevance to FP6:

• The Monitoring Report Innovation/SME support programme asks the Commission to respond to the concerns of the Panel that the Co-ordination Group, set up to co-ordinate the activities of the "innovation units" under FP5, will not operate under FP6 and that there is no explicit provision to transfer its mandate, or the lessons learned from its operation in FP5, to the new instruments of FP6. The Commission's response was that it is envisaged that the Groups of Directors for each research priority will assure that the innovation dimension is taken into account. The Research and Innovation chapter of FP6 specific programme "Structuring the ERA" foresees an action line to analyse and evaluate innovation in Community research activities (including new instruments) [DOC-43].

The 2003 Monitoring Panel did not have the resources to review the implementation of these actions but would like to stress that the innovation dimension should be addressed explicitly in FP6 research priorities.

• The INCO Monitor Panel recommends the incorporation of the "Gender in Science" dimension into all relevant information and documentation associated with international cooperation in FP6. The Quality of Life Panel also suggests that the impact of gender-related activities should be measured. The Commission's response [DOC-44 and 49] was that the gender dimension is indeed taken into account in all documents related to the implementation of FP6. Gender as a cross-cutting issue has been considered during 2003 evaluations and it has also been strengthened in the 2004 work programme. It is also said that this issue is addressed by a guide for proposers and a related manual.

The Panel has not had time to review documentation on the cross-cutting issue of gender but suggests that this might be reviewed specifically in the future.

• The Growth Monitoring Report recommends that the impact of reform on the efficiency of the administrative process should be investigated as a matter of priority by the 2004 Monitoring Panel, to which the Commission services agreed [DOC-45].

The Panel suggests that if an analysis of the impact of reform on the efficiency of administration is to be implemented then the Commission should start the necessary preparatory work now by defining indicators and collecting information so as to conduct an exercise based on sound and timely evidence.

# 2 Implementation of the sixth Framework Programmes and completion of the previous Framework Programmes

## 2.1 What is meant by implementation?

The Panel's mandate requires it to provide an analysis of and comments on the implementation of FP6. The recommendation on which this builds also suggested that the process of monitoring should provide programme management with feedback with a more consistent focus on a small number of major issues in effective and efficient programme management. This sets a background to the Panel's interpretation of its role and the main focus for its work.

The Panel has, in the course of its meetings and its review of documents, spent some time in debating the possible 'ideal' extent of its work, the necessary constraints on what it can actually do within a 'light touch' approach and the key aspects of implementation that it might most usefully address. It concluded that it needed to distinguish between aspects of implementation that could be seen in terms of management efficiency ('doing things correctly') and aspects seen in terms of strategic effectiveness ('doing the correct things'). Achieving both scientific objectives (funding quality projects that cover all key targets and objectives in research work programmes) and socio-economic objectives (for example: getting the optimal balance of Member States and candidate countries, and the right balance of SMEs and other private sector partners) are part of implementation effectiveness. Achieving management objectives (for example: rapid distribution of calls for proposals, evaluating those proposals in good time and via a quality process and issuing contracts in a timely manner) is part of implementation efficiency.

The Panel was mindful that effectiveness is of prime importance to those most involved in delivering the outcomes of FP6, because this will repay the wider economy in wealth creation and by improving the quality of life. On the other hand, such effectiveness will be a critical consideration for those monitoring committees taking the longer term view, such as the five-year assessment of FP5. Thus, on balance, the Panel accepted advice from the Commission and from the Panel's predecessor directing it to a critical consideration of efficiency. In essence, therefore, the focus of the Panel's analysis was on the efficiency of implementation and programme management, but members were of the firm opinion that this analysis could only be meaningful if understood in the context of effectiveness. The Panel therefore also paid due attention to evidence of effectiveness where it was available.

The Panel RECOMMENDS that the focus of monitoring should shift from efficiency towards effectiveness as FP6 progresses, just as the focus of implementation shifts from launch towards achievement and outcomes. The Commission will recognise that the necessary evidence required for analysis will shift with this focus.

## 2.2 Launch of the Sixth Framework Programme

With the launch of FP6 in late 2002, the year 2003 was the first year in which the new Framework Programme could properly be implemented. Not only was this a large and complex programme in itself but there was also a new set of instruments, in particular the Integrated Projects (IPs) and the Networks of Excellence (NoEs), to explain and make available to the community. The Commission is therefore to be congratulated on the extraordinary efforts that were invested by its skilled and competent staff in taking this launch forwards.

The Commission's FP6 Implementation Report [DOC-13] provides a concise overview of action and outcomes up to March 2004. The Panel found this a useful introduction to its work and noted in particular the Commission's view that "the average quality of proposals has been good ... the coverage of the work programmes (is) very satisfactory ... excellent partnerships in key areas of research have been supported ... a clear movement towards greater critical mass."

The Panel welcomes the fact that the Commission has taken steps to address the critical issues that came out of the first year experience. These steps include:

- Addressing the over-subscription issues through continued focussing of the work programmes and being more prescriptive about the instruments to be used.
- Special calls to promote co-operation with acceding and candidate countries.
- Improvement of the guidance documents related to the NoEs to overcome the initially high level of confusion.
- Launching additional and top-up calls to promote the participation of SMEs in appropriate areas.
- Analysing the use and effectiveness of the two-stage submission and evaluation procedure.

The Implementation Report [DOC-13] and associated statistical information [DOC-14 and 15] allowed the Panel to assess the scale of implementation in 2003 and early 2004.

- To March 2004, 92 calls have been published (including 4 calls under Euratom FP6).
- As of 15 March, 2004, over 23,000 proposals had been received, involving 140,000 participants from over 50 countries in and outside Europe. These proposals also covered human resources and mobility activity. This response demonstrated, as anticipated, a high level of interest among the research community in the opportunities presented by FP6.
- A total of 2187 proposals were retained for funding. As of 15 March, 2004, over 1300 contracts had been signed, with another 650 contracts in the process of being finalised.
- Of the proposals received, around 11,500 had been evaluated by mid-January, 2004.
- The total EU contribution in these contracts amounts to 2.8 Beuro (including one Article 169 action for 200 Meuro). Nearly 0.5 Beuro has already been paid in advance payments.

The Commission has implemented a number of simplifications to project management in FP6 compared to FP5 [DOC–27]. FP6 has considerably simplified proposal submission forms, which are reduced to one summary page, one page of details for each participant and one table of costs/effort for the whole project. There is no requirement to break down project costs into categories other than very broad categories of use (research, demonstration, management, training). Although this is more user friendly for the participants, it also makes the evaluation of proposals more difficult in terms of assessing the match between efforts/deliverables and resources.

The contract preparation forms are simplified in a similar fashion. Guides for proposers are considerably reduced in length and detail and are limited to information needed at the proposal stage. Each guide is tailored to the specific call and instrument for which the proposal is being prepared. Instead of 35 variations of contracts in FP5, FP6 has one standard contract for all instruments (except Marie Curie actions and EURATOM fellowships) with four different Annex IIIs for specific instruments (IPs, NoEs, SME specific actions and integrated infrastructure initiatives). There is complete flexibility for the contract partners as to how eligible costs are allocated, within the limits of the technical work to be carried out. Cost reporting can now be done according to each contractor's own accountancy rules and not according to pre-defined cost categories and rules [DOC-27].

An implementation aspect that is considered to be of great importance to the users of FP6 is the reduction of the time to contract (i.e. the time between proposal deadline and the signed contract for successful applicants) and also the time needed to inform unsuccessful applicants.

The Panel had little quantitative information to benchmark FP6 with FP5 or to assess 'time to contract' and the related workflows: processing the proposals, selecting the successful proposals, carrying out the contract negotiations. Furthermore, the information on the implementation of work programmes [DOC-20 to 24] and progress in workflows is not made in such a way that would allow a comparative overview for all priority areas. Some individual areas did give details on how many proposals have been successful and what proportion of these have signed contracts, but others did not provide this information.

The Panel concluded that a direct comparison between FP5 and FP6 timing and process would have been of limited value, because the new instruments and other changes made such a comparison difficult on any sensible like-for-like basis.

The Panel acknowledges that there is a possible trade-off between increasing the speed of procedures (to allocate funds efficiently) and increasing the 'value for public money' (to enhance effectiveness). Value for money can be expected to increase with careful contract negotiations. Furthermore, there can be no single standard for the average time to contract because negotiations will vary with the type and complexity of typical contracts in a certain activity area. Nevertheless, setting targets for each element of the process should be part of the management framework against which actual activity can be monitored and through which the hard work of the Commission can be more readily demonstrated to the wider community. Each priority area should synthesise timetables for their calls, specifying progress in handling proposals in subsequent stages, against the anticipated time schedule set at the start of these calls. This should not be used to meticulously manage workflows, but to serve as an early-warning system in the exceptional cases where progress faces serious problems.

The Panel suggests that, for future monitoring exercises, a concise table is produced to show the expected and observed proposal-related workflows per activity area. This is linked to its recommendation on objectives and indicators (below).

The high oversubscription rate was, for the research community, a major issue with these first calls. It has led to disappointment for many in the user communities and particularly with those whose proposals passed the evaluation thresholds. The total funding requested in all proposals was 28736,3 Meuro, those of proposals passing the evaluation 9426 Meuro, while the funding allocated to retained proposals was 4550,08 Meuro [DOC-13]. This leads to a success rate of almost 19% for all proposals and 43% for the successful proposals.

The success rates of proposals passing the evaluation differed between priority areas, with success rates beneath 50% in Food Quality and Safety, and in the priority area of Sustainable Energy Systems [DOC-13]. By contrast, success rates were much higher for DG-Fish projects; compared with FP5, and the over-subscription rate was much lower [DOC-101A]. The Commission's analysis shows that oversubscription was related to two situations common to any research funding programme: (i) where many proposals failed the evaluation thresholds because key messages in the call or associated documentation were not clear enough; and (ii) where funds were too small to support a higher proportion of the proposals that successfully passed the evaluation.

The first situation suggests that there was a large share of proposals that were either out of scope or not of sufficiently high quality. In fact, 5085 out of 11547 proposals reached the evaluation threshold (=44%). Particular issues occurred in Information Society Technologies where only 24% reached the evaluation threshold, in Nanotechnology and Nanoscience (22%), in priority area of Sustainable Energy Systems (19%) and particularly in NEST (13%) [DOC-13]. The Panel recognises that steps are already being taken to address and ameliorate this problem. It is partly a consequence of the progressive, natural shift of FP6 into new areas of and new priorities for research. The lower rate of over-subscription reported in DOC-101A is attributable to the more mature, well-established profile of research in this area.

The Panel noted that a positive aspect of this oversubscription is that it shows that the Community actions and instruments are well appreciated and are attractive to large parts of the

research community. Competition allows a good level of selectivity and appropriate value-formoney to be maintained across the Framework Programmes.

The Panel was told that messages about the level of funding that could be requested in the new instrument were not clear to the proposers [DOC–13]. In particular, the concept of NoEs was not always understood. (The evaluation of the new instruments is addressed by the Marimón Panel's report). In addition, the Panel noted that some work programmes that were open to all types of instruments have suffered from increased over-subscription.

It was clear across all programme areas that the traditional instruments (Specific Targeted Research or Innovation Projects, STRePs) remained very popular [e.g. DOC-101A]. The Panel concluded that due balance in funding between instruments would need to be maintained so as to provide the full range of opportunities to researchers. It would not be appropriate to shift funding too soon or too strongly towards new instruments before their approach and procedures are properly established and their effects fully understood.

The Commission is to be congratulated on its efficiency in managing the transition from FP5 to FP6. The transition from FP4 to FP5 was troublesome and the execution of the first contracts and transfer of funding to the contractors was much delayed. One could expect that with the introduction of the new instruments and significant oversubscription, this would be even worse in FP6, but this was not the case. A comparison of first-year financial execution between FP5 and FP6 shows that, although the projected commitment of funding was 100% in the first years of both, FP6 was better in the actual transfer of funding as 93% of committed funding was spent, while this was only 51% in the first year of FP5 [DOC-61].

## 2.3 Work programmes, general objectives and clarity

The policy documents and promotional publications for FP6 and the separate specific programmes are comprehensive. Nonetheless, it will be widely recognised that FP6 is an ambitious undertaking that also presents new strategic options compared to FP5. Taking into account the increasing number and diversity of members and associated members, it is to be expected that such major changes will not always be immediately understood and adopted by those user groups at whom they are targeted.

The Panel recognised that undue emphasis on statistics relating to the first tranche of project proposals and their evaluation could give rise to unnecessary concern. For example, unreasonable expectations of preliminary results on indicators such as 'coverage per area', 'success ratio', and 'SME participation', could lead to premature assumptions about problems arising from, for example, initially low levels of participation of industrial partners. This would, in turn, promote concern about the flow of technological innovation required to maintain future competitiveness. While such scrutiny and analysis is needed, this must be appropriate to the stage of development. The true picture may not emerge until FP6 has 'settled down'.

FP6 addresses a complex matrix of scientific and technological objectives and uses an extremely large instrumental framework. A common structure is indispensable to making the approach transparent to all parties involved, starting with the translation of the strategic documents mentioned above into systematic and uniform reporting by the DGs and programme correspondents and committees. The Commission has common procedures, rules, reporting models and guidelines to ensure a common approach in the implementation of the FP6 programme. This includes, for example, reporting to the programme committees. At present the various DGs involved in FP6 use somewhat different formats for presenting data and information, as do the programme committees. While the Panel could not reasonably insist on common reporting systems merely for its own convenience, it must be appreciated that this diversity makes general monitoring and benchmarking much more difficult.

Members of the Panel observed that there were clear cultural differences, as well as structural differences, in the approach used for reporting on the various thematic priorities [DOC-101 to 121]. We felt that this could indicate some differences in the ways in which the Commission

services interacted with the various target groups, perhaps based on past experience or of differences in the make-up of the research community. The consequence is, of course, that coverage is focussed in different ways between these different areas. For example, in priority area 'Information Society Technologies' the communication contains more frequent references to the general objectives than other documents [DOC-102]. It provides specific examples illustrating the good results in the various areas, while no problems are mentioned. Future priorities are included in the reports, suggesting that there is a good control on the further implementation of the programme including the coverage of all objectives and specific targets. By contrast, in priority area 'Nanotechnology and Nanoscience' the communication is far more detailed and very analytical, covering all critical aspects of the implementation and leaving room for discussion on future priorities [DOC-103]. These may be equally good approaches but they are less readily comparable for the Monitoring Panel.

The Work Programmes published by the different research priorities play a key role as they establish the specific scientific orientation and breakdown for the calls. As they are aimed at the scientific community in Europe and internationally, their quality is a determinant of FP6 appeal and leadership [DOC-74 to 84 and DOC-101 to 118]. They should be strongly argued documents identifying research directions, opportunities and options, and providing guidance for evaluation. The Work Programme documents are essential to convey the image of a programme adequately led by a blend of political and scientific vision; flexible, but consistent in its components and over time. The Work Programmes are easily accessible on CORDIS (http://www.cordis.lu/fp6/find-doc.htm#wps).

The Work Programmes also allow some flexibility among research activities within the fixed four-year period of an FP. The Commission uses this option frequently. From the launch of FP6 in December 2002, the Work Programmes for 'focusing and integrating community research' have been updated eight times. The programme on 'structuring the European Research Area' has been updated six times, and the nuclear programme has been updated once [DOC-13]. Each of these changes has been related to specific calls.

The Panel concluded, from this evidence, that the coverage of the work areas had been adequate in 2003, but that scale and diversity inevitably lead to some unevenness in implementation. The Commission services will need to consider how they can ensure this does not lead to unevenness of outcome. The problem is that FP6 is large and some priorities inevitably advanced rapidly while others are as yet less well developed. The Panel also noted (in respect of the development of objectives, as we discuss below) that the different programme committees have to some extent made their own interpretation of the overall FP6 objectives. A consequence is that programme aims are not always clearly connected between more disaggregated levels and overall FP6 objectives. Furthermore, there is no overarching mechanism to bring the outcomes of work programmes back together and thereby to consider whether the separate parts have achieved the intended purpose of the whole. This matter will be for later Monitoring Panels to address.

## 2.4 Evaluation procedures

On the basis of the extensive analyses of external experts, reviewed by the Panel, we can state that the evaluation procedures have been fair and of high quality. Despite the fact that the evaluation of new instruments was a new experience for all involved, the fact that it revealed no major or exceptional problems is reassuring.

The most important sources of information on the evaluation procedures are a summary report of independent observers of the first round of FP6 evaluation sessions [DOC-14] and two external monitoring reports on the 1<sup>st</sup> and 2<sup>nd</sup> call proposal evaluation [DOC-34 and 35 in the IST priority]. All reports for the various calls for the programme committees were also made accessible to the Panel [DOC-101 to 121]. The Panel appreciates that the Commission has used external experts to observe these proposal evaluation sessions so as to obtain an independent opinion on the appropriateness of these procedures. The Panel has no detailed

recommendations in this regard but anticipates that these standards will be maintained in the future, in order to make further improvements in the proposal evaluation procedures.

A number of issues arise from these reports. Of these, the key ones noted by the Panel are:

- Evaluators had difficulties in assessing the 'horizontal' aspects of the proposals, especially as there are so many evaluation criteria to be used. One of the major problems for the evaluators was the process of pinpointing scientific and socio-economic considerations and reconciling their evaluation to clearly justifiable marks [DOC-14, 34 and 35].
- The newly introduced hearings added value to the evaluation process.
- The inadequate quality of the consensus and evaluation summary reports reduces the credibility of the EU evaluation process, because these reports are used as feedback to the proposers.
- There is value in feedback from the proposers to the National Contact Points.
- The Independent Observers stated that the two-stage procedure should restrict itself to scientific and technological aspects [DOC–14].
- The complexity of the evaluation process meant that guidance was not always sufficient and briefings were not always clear. The Panel endorses the suggestion that the Commission should provide better training for evaluators.

## 2.5 Participation rates in the response to calls

The report of the 2002 Monitoring Panel [DOC-2] expressed concern about the low expected participation rates in FP6 both of the acceding and candidate countries and of SMEs. We found that these concerns were justified.

Success rates for proposals from the acceding and candidate countries were lower in all priority areas than for partners from the member states and associated countries [DOC-15] and lower than expected [DOC-13]. The biggest difference (11 % candidate compared to 26 % member) was in "Life Sciences, Genomics and Biotechnology for Health" while the smallest difference was in "Food Quality and Safety" (14 % cf. 17%) and "Nanotechnologies and Nanoscience" (8% cf. 11%).

Particular disappointment was caused by the low number of coordinators from acceding and candidate countries. Thus far there have been no coordinators of IPs or NoEs from those countries [DOC-25]. It may be, however, that time is required to build a sufficient basis of experience to equip people for these challenging roles.

Special actions have already been taken to strengthen candidate countries' capacity to participate in European research. In 2003, there was a special call aimed at funding entities to network national contact people in each candidate country, to undertake individual actions for SMEs, to network centres of research excellence, and to organize information events. A second call, restricted to candidate countries, is envisaged this year with the aim of improving research capacities in other ways [DOC-13]. These measures should improve the opportunities for new member states and candidate countries to contribute to the ERA.

FP6 new instruments place significant requirements on the management capacity of participant organisations. This might reduce the willingness of smaller institutions to coordinate, or even to participate in, the IPs or NoEs. A widespread concern is the low interest and success rate of SMEs, for which the overall participation target is 15% in budgetary terms. After 92 calls, the overall result in FP6 is only 13.1 % [DOC-25]. The SME participation rate varies between priority areas and themes. For example, it is naturally low in aerospace and global change

research, but in (nano)materials and food - which are traditionally SME sectors - one would expect a higher participation rate. This range of involvement is not surprising and reminds us that uniform targets are inappropriate. DG InfSo addressed a related concern, noting that there seem to be no SMEs in FP6 that were not already participants in FP5. This is worrying in terms of Community innovation strategies, which aim to have a broad and long lasting impact on the industrial fabric of Europe. There are several actions planned for increasing SME participation, e.g. via top-up calls, and via calls on topics of specific SME interest for SME integrated projects and STREPS. The implementation of these measures should significantly increase their capacity to participate in FP6.

Industrial participation in general is currently being analyzed by the Commission services. There may be general trends in industry that have led to decreased direct company interest in FP6, alongside a shift from corporate research to academic-based collaboration [DOC-13]. Regarding the low industrial interest in NoEs, the Commission has obtained feedback that suggests that industry does not identify a need for more networking by means of the FP6 instruments. One additional problem with the new instruments may be the requirement for a long-term commitment, which may not be compatible with the shorter planning cycle and R&D flexibility of the industrial sector.

## 2.6 Management Information Systems: tools for programme management

The DGs' self-assessment reports [DOC-20 to 24] frequently report on the lack – or rather the late operational availability - of management tools and systems and the burden this imposed on the implementation of FP6.

The FP6 IT System is described in a document presented to the Panel [DOC-100]. The IT System is intended to be a common system for all DGs to enable the processing of funding proposals, evaluation, the development of contracts and the management of projects throughout FP6. It consists of a suite of linked modules, which can be used (either stand-alone or as a whole) as needed by each DG in order to support its requirements.

The Panel was told that the development and implementation of the FP6 IT system had met a number of challenges. The most generic of these was described as the "management of change", in persuading programme managers to adopt the common electronic system. There were also specific challenges, which held-up development and implementation. For example, the Marie Curie Fellowships programme used a cost measure of "person months" rather than Euros and this required a translation tool to link resource measures.

Despite these problems, contracts for new proposals were linked to the system by the end of 2003. DG InfSo had shown a rapid migration to the new system and a strong commitment to its future use. Other DGs appeared more likely to take a "menu" approach, using some modules and not others.

The Panel believes that further work with system users will be needed where the level of information available for interpretation was initially of variable quality. Additional encouragement will also overcome the concerns of those users who found that specific components which they required were unavailable or had changed at a late stage, due to difficulties of development and implementation during late 2003.

The Panel accepted that it was problematic to develop a complex system alongside the rapid implementation of the Framework Programme. Nonetheless, the Panel noted that this was a challenge faced by developers for many IT applications and it would be impossible to complete and then freeze the development of an FP. It was therefore necessary pragmatically to accept user needs in developing a system that was straightforward, robust and flexible in supporting the different DG cultures. The Panel particularly noted the comments made by the external monitors of the FP6 IST thematic priority (DOC-34), that a simplification in approach might be desirable. Gradual increase in sophistication over several cycles might be more workable than

an attempt to complete all the desirable aspects of the IT system in a single cycle. Furthermore, it is unclear what further changes may be required for FP7.

## 2.7 Completion of previous Framework Programmes

A considerable number of projects from previous Framework Programmes, particularly from FP5, are still ongoing. The Commission is managing the follow-up and payment of these projects. A small number of units in DG Research report difficulties in completing contracts and making the allocated payments in a minor share of the FP4 projects [DOC-20]. As the self-assessment reports do not identify what share of human resources is used for managing previous Framework Programmes and what for implementing FP6, the Panel cannot make a judgement as to what degree the continuing management of previous FPs influences, and perhaps impedes, the workflows in 2003.

The Commission's preparation of the impact assessments of the previous Framework Programmes, in particular the Five Year Assessment of FP5, is underway [DOC-20 and 63].

In 2003, work focused on the operational preparation of the Five Year Assessment 1999-2003 [DOC-20], which combines *ex ante*, intermediate and *ex post* evaluation aspects. This work is planned and closely monitored by the Interservices Steering Group set up for this purpose. Several impact studies are (about to be) launched in preparation of the Five Year Assessment, in addition to a bibliometric study, and research landscape analyses.

The studies completed during the first semester of 2003 include:

- Impact study on FP3 and FP4 activities.
- Review of monitoring efforts 1999-2002, included in 2002 monitoring.
- Methodological pilot evaluation on Technology Implementation Plans (FP5).

## 2.8 Concluding remarks

The Panel concluded that the overall implementation of the Framework Programme in 2003 was carried out in an efficient fashion, in so far as the evidence allowed us to see, and that the evaluation procedures had been fair and of high quality.

We RECOMMENDED that, as considerable attention was focused on launching FP6 and its new instruments, effort should in future be made to consider not only the efficiency of the Commission's actions but also its effectiveness (Section 2.1).

Critical issues - particularly those concerning the new instruments and oversubscription - have been identified by the Commission and actions to address them have been undertaken. The Panel was not able to assess whether these actions have yet been effective.

Attention is required in the following areas:

- Improved dissemination of results and the active involvement of contractors in this activity.
- Continuation of specific actions for evaluating and improving SME participation in FP6.
- A comparative analysis of proposal related work-flows. This includes information per priority area (and per instrument) on the progress to contract, set against stated targets.
- Improved objective and indicator setting to support efficient programme management, together with the development and implementation of a system of indicators that addresses the effectiveness of all FP6 activities, across the DGs concerned.

- Better training for evaluators, and better reconciliation of effectiveness evaluation to justifiable marks.
- Continuation of introducing ex-ante and ex-post impact assessment exercises at the level of the Commission's priority areas and closely linked to the overall objectives of FP6.

## 3 Methods and processes for defining objectives, development of indicators and follow-up mechanisms

Monitoring of a management process should use the objectives and indicators set by managers for their own use. So long as the methodology for objective setting and for the development of indicators is well founded and properly used, then the process is more effectively implemented and the cost of monitoring is minimised. Monitoring becomes 'light touch' and supports management rather than imposing additional accountability.

The Panel expected to see an evident relationship between the objectives used in the different levels of FP6, while anticipating that management goals would be reflected in clear differences in the indicators appropriate to each area and specific to each programme.

We expected that it would be possible to see a relationship between overall FP6 'effectiveness' objectives and the 'efficiency' objectives that naturally predominate in the implementation work and Annual Management Plans (AMPs) of the DGs.

We also expected to see the objectives and indicators set for Work Programmes. These are underpinned by the

Overall objectives FP6

Work
Programmes

Follow-up
Reports

Commission's own strategic planning and programming cycle and activity based management in the AMPs, captured by the follow-up reports. We expected that these reports would identify the actual levels of activity achieved against threshold indicators set for each objective.

If all these expectations were met then the implementation of FP6 would be entirely susceptible to 'light touch' monitoring (see Introduction). The Secretariat General has developed a detailed guide for 'Defining Objectives and Indicators' [DOC-62]. This should have enabled the DGs to move towards an effective structure of programme and project objectives at different hierarchical levels. Indeed, the proposition that the monitoring of FP6 implementation can take place with the time frame and mandate indicated for the Monitoring Panel's cycle of work presupposes that a well developed structure of indicators is both sought and expected.

In practice, the Panel's hopes were not fully met. The Panel noted, however, that there are many signs of emerging good practice and that there is every reason to suppose that - in the near future - work could be completed in a pattern close to the ideal model.

First, we recognised that FP6 has multiple objectives articulated at different levels in the Commission (overall Community objectives stated in the Decisions to launch FP6 and its specific programmes, the Commission's Annual Policy Strategy, the annual objectives at DG level, and the specific objectives in the work programmes). These objectives are not always translated unambiguously through the chain of policy implementation. This manifests itself in the uneasy interface between socio-economic, scientific and administrative objectives. For

example, [DOC-20] (self-assessment report of DG Research) identifies both SME participation and participation of candidate countries among its indicators under each AMP activity headings. Considerable statistical information was supplied that related to these indicators [e.g. DOC-15 to 19] but the Panel was left to make its own judgment about whether the outcomes for different countries were appropriate and sufficient.

Second, observers have suggested that the culture of the Commission has historically been orientated more towards efficiency rather than effectiveness. Consequently, we detected a gap in management's approach to objectives, so that budget implementation is defined as an indicator while the effectiveness of that deployment remains unmeasured. As we noted above, this effectiveness is perhaps an issue for later review elsewhere, but that does not avoid the need for *ex-ante* objectives and indicators to be set.

Third, the Panel found that many 'indicators' were in fact nothing of the kind. They were actually more akin to disaggregated goals or objectives, which could have been nested under the principal objectives. Fourth, and allied to this problem, we found that few 'indicators' were given any clear threshold or expected value to index achievement. We are conscious that this may sound as if we expected an extensive application of quantitative indicators but this is not so; indeed, we caution against a solely quantitative approach. We did expect, however, that where an indicator appeared then it would be qualified by a statement about what value or level of achievement might be expected during the monitoring period.

Fifth, the Panel found that the challenge it faced due to the lack of clear indicators was amplified by the lack of consistency between programmes and DG reporting approaches. We are sympathetic to cultural distinctions between directorates that arise from their historical roles. At the same time, monitoring is difficult when comparisons across programmes are obscured by such differences. We are not therefore able to comment on divergences or convergences in methodology, nor can we comment on discrepancies in approach.

Well developed indicators and target setting were found in DOC 54 (AMP, DG-Enterprise), but the respective self-assessment report, DOC 22 (DG Enterprise, 2003 self-assessment report) contains neither indicators nor commentary. Future self-assessment reports on Research and Innovation should provide a detailed review of the progress achieved as these strands of FP6 develop and data become available. On the other hand, DG-Research self-assessment provided a comprehensive set of indicators with an attached commentary [DOC-20], but these indicators actually had no target values. DG Information Society provided an extract of its Annual Activity Report for 2003 [DOC-102B] with information on the implementation of the Information Society Technologies (IST) priority of the FP6 and of actions related to Networking and Computing infrastructures for research within FP6 together with a self-assessment report [DOC-21]. This report was not explicitly structured around the implementation of FP6 but was instead destined as a contribution to the Five Year Assessment exercise and therefore more focussed on FP5 than on the implementation of FP6. DG-Enterprise [DOC-22] provided insufficient information on indicators and expected achievements. DG-Fisheries [DOC-23] provided a well structured document, like DG-Research, but the indicators were again subobjectives and we could not judge whether FP6 implementation plans had been met. However, other evidence - including presentations to the Panel - has convinced us that it is entirely feasible for much more relevant objectives and indicators to have been developed across the DGs and that these could be applied with only minor changes in management approach.

An examination of the central guidance from the Secretary General [DOC-62] reveals some weaknesses. We believe that further development is required to help the DGs address their task. In particular, the Panel suggests that the 'key recommendations' in chapter 4 require better examples than is at present the case. This approach to indicators, which we entirely endorse, cannot be readily employed by users without simpler examples that properly reflect the methodology.

Specific indicators should not be introduced solely for the purpose of enabling the monitoring system. Monitoring should consist of three simple steps: first, checking that the Commission's

processes used for establishing objectives and indicators are well founded and appropriate; second, confirming that the indicators developed by each DG responsible for part of FP6 are relevant and meet standard criteria (as suggested in DOC-62); third, reporting on the extent to which actual performance reflected in self-assessment reports meets targets and thresholds.

The Panel RECOMMENDS that the DGs involved with FP6 should consider revising their objective and indicator systems so as transparently to support not only evidence-based reporting of programme management efficiency but also 'light touch' monitoring. A distinction between indicators for project monitoring, process evaluation and impact assessment should be made so they can be used appropriately in different exercises.

The Panel recognised that much hard work has gone into thinking about well structured systems and implementing them, but this is not yet captured in simple reporting mechanisms. We suggest the following tentative structure as a starting point for consideration:

Principles of efficient and effective implementation	Possible outline indicators	
The calls for proposals attract sufficient high quality research proposals	Targets for how many proposals are expected to be submitted and what share are expected pass the evaluation thresholds	
Call information and guidelines and research area descriptions are sufficiently clear to avoid excessive numbers of proposals outside the scope of the intended research	Target for over-subscription, particularly of those proposals below the threshold	
The evaluation of proposals is balanced to provide a timely response and at the same time provide the Community with good value for public money	Targets for each type of programme and instrument of how rapidly proposal negotiations are likely to be completed	
	Qualitative description of what type of actors should be expected to take part	
The proposals that are selected fulfil the objectives set out in the work programmes in terms of the type of	Quantitative target of how many SMEs should be expected	
earch actors expected to take part	Quantitative target as to how many new member state participants, etc should be expected	
The proposals that are selected fulfil the objectives set out in the work programmes in terms of the relevance of the research to socio-economic objectives	Review of extent to which funded proposals meet these objectives	
The proposals that are selected fulfil the objectives set out in the work programmes in terms of the relevance of the research to the scientific objectives and to coverage of the target research areas	Review of extent to which funded proposals meet these objectives and the extent to which required research is being covered	

We perceive a natural reluctance on the part of programme managers in the past to make specific statements about participation rates when responses to calls could be unpredictable However, sufficient track record exists for estimates and projections now to be more readily made. The Commission should make better use of existing R&D statistics, market, sector and technology studies, in order to assess *ex-ante* what type of participants could be expected to participate in particular calls and *ex-post* to identify possible blind spots in the population of participants. This includes the systematic use of feedback loops (e.g. through National Contact Points) to track and comment on the observed divergences in participation rate of industries, candidate countries, and other specific target groups.

The Panel reaffirms the need to avoid undue emphasis on measures that can be quantified, although these will tend to provide significant information about the efficiency of FP6 implementation. It is absolutely clear that qualitative measures are critical to contextual

understanding and that summary reviews of these qualitative aspects are likely to be particularly important in understanding the effectiveness of FP6 implementation.

#### 4 Conclusions and recommendations

All users and observers recognise that the task faced by the Commission in running a Framework Programme across 15, and now 25, countries, involving many participants in many disciplines, from different sectors, using a wide range of languages and contrasting research administrative systems is extremely challenging. The Panel therefore wishes ahead of any other comments to congratulate the Commission on its notable achievements:

- Efficient handling of the transition from FP5 to FP6 in a short time despite hampering factors (e.g. constraints on the FP6 IT System, last minute changes in contractual arrangements).
- Launching a large number of calls that successfully attracted a huge number of proposals.
- Executing these proposals in a faster time than the first year of FP5.
- Maintaining a high standard of evaluation.
- Making preparations for the Five Year Assessment (1999-2003).

Nonetheless, it is the responsibility of a Monitoring Panel to report in detail on the exceptions rather than to dwell at greater length on the excellent and efficient performance it has generally found. There are a number of issues on which further progress needs to be made. In particular, the Panel spent much time considering the better use of the Annual Management Plans as a tool for effective and efficient programme management and it particularly noted concerns regarding impact assessment and dissemination.

I. (Defining objectives and indicators, Section 3) The Panel RECOMMENDS that the DGs involved with FP6 should consider revising their objective and indicator systems so as transparently to support not only evidence-based reporting of its efficient programme management but also 'light touch' monitoring.

The system of Annual Management Plans, follow-up reporting and monitoring does not yet seem to work well enough to serve as a management tool. This is due in part to objectives that have been stated with different levels of precision and by prioritising scientific-technological, socio-economic and administrative objectives in a different manner. In addition the current series of reported indicators and their lack of value labels set a challenge to the Panel in monitoring progress. The Panel was told of other indicator systems, but did not receive specific reports on these.

For future monitoring exercises that have the same 'light touch' construction, the Panel suggests the following. The Panel should be provided with a limited set of documents focusing on implementation according to the Annual Management Plans and based on a clear set of indicators with targets that the Panel can assess. Preferably this information should be harmonised across all DGs (in so far as this does not undermine or cut across other reporting requirements) in order to facilitate an overall comparison.

A distinction between sets of indicators for project monitoring, process evaluation and impact assessment should be made so that they can be used appropriately in different exercises.

The Panel also suggests that if an analysis of the impact of institutional reform on the efficiency of administration is to be implemented then the Commission should start the necessary preparatory work now by defining indicators and collecting information so as to conduct an exercise based on sound and timely evidence.

II. (Implementation, Section 2.2) The Panel suggests that, for future monitoring exercises, a concise table is produced to show the expected and observed proposal-related workflows per activity area. This is linked to its recommendation on objectives and indicators (below).

In a time where scientific and technological developments are extremely rapid and industrial R&D cycles become shorter, it is important that successful applicants can commence their research activities as fast as possible. The flow of proposal related work goes through several stages, not all of which can be influenced by the Commission. The Panel recognised there are also some merits in taking due time to move from proposal to a signed contract. Careful and reflective assessment of proposed activities and deliverables by programme officers can be beneficial if it creates 'value for public money'. The ideal mean provides a balance between efficiency (speed) and effectiveness (value and quality). In addition, particularly with the new instruments and the large size of consortia, the research partners need time to come to fair and appropriate agreements. Thus targets for time-to-contract cannot be prescriptive but should be adapted to the type and complexity of typical contracts in a certain activity area.

III. (Implementation, Section 2.1) The Panel RECOMMENDS that the focus of monitoring should shift from efficiency towards effectiveness as FP6 progresses, just as the focus of implementation shifts from launch towards achievement and outcomes. The Commission will recognise that the necessary evidence required for analysis will shift with this focus.

In addition to the many input-oriented efficiency indicators, the Commission should develop a framework of effectiveness indicators that address anticipated outcomes in scientific-technological terms as well as socio-economic terms. This should be introduced at the level of its activity areas. Many anticipated outcomes can only be measured in the medium to long term, so attaching a time frame to these indicators will be necessary.

We do not underestimate the challenge in developing useful indicators of effectiveness. We have noted the problem that evaluators already face in reconciling marks in this regard.

It may also be that, in due course and after a number of trial cycles, the experience of the light touch approach will indicate a shift from an annual monitoring exercise to a more continuous process of monitoring that makes best use of the intellectual capital and experience built up in each successive group of experts.

(Follow-up 2002 - Dissemination). The Panel does not feel that a formal recommendation on dissemination is required but suggests that the Commission should analyse which communities are targeted for dissemination and decide how activities are monitored, whether sufficient resources have been set against these activities, and whether there are sanctions if contractors do not perform these tasks adequately.

Measures so far taken by the Commission have been instrumental to the creation of indispensable tools for effective dissemination actions: CORDIS website, archiving system, communication and editorial support to contractors. The introduction of binding conditions for contractors to "engage with actors beyond the research community" is a prerequisite for any increase in effective dissemination.

Making dissemination and interaction with wider audiences a part of the contract is an improvement that the Panel applauds. The Commission will need to take a proactive position in this to ensure that these activities are not left until the project is nearly complete. Generally speaking, scientific players take less interest in dissemination beyond the research community, i.e. political, social and economic stakeholders. Hence, only limited resources are dedicated to dissemination and this is regarded as a secondary objective of FPs. A stronger emphasis on dissemination of results would help, however, in getting political support for increased resources for European scientific and technological development. Indeed, greater and more transparent

public accountability by FPs is required to maintain and increase resources devoted to European research in the future.

A stronger and more proactive approach will be necessary to improve dissemination and technology transfer. At the same time, it is accepted that these activities are inherently complex and remain intertwined with legal aspects related to intellectual property.

(Follow-up 2002 – Evaluation and assessment). While the Panel is not minded to make any particular recommendations on evaluation and assessment, other than those made regarding objectives and indicators, it spent much time in consideration of the issue and the attention of future Monitoring Panels is drawn to this for further review.

On the basis of the extensive analyses of external experts observing the evaluations in FP6, the Panel was able to conclude that the evaluation procedures have been fair and of high quality. Despite the fact that the evaluation of new instruments was a new experience for all involved, the fact that it revealed no major problems is reassuring.

It did note that the reconciliation by evaluators of 'effectiveness' considerations to clearly justifiable marks is a problem that has still to be resolved, that evaluation summary reports are not always of sufficient quality and that training, guidance, and briefing for evaluators could be improved.

Because of the large effort required to process the volume of calls, proposals and contracts, there has been only limited attention available for designing a framework for monitoring the results of the actions and instruments, particularly on the priority area levels. The Panel appreciates that *ex-ante* evaluations have become a recognised tool in the Commission's programme management.

In particular, the Panel has suggested (above) that the Commission should also insist on including an assessment of anticipated socio-economic impacts of projects carried out within FP6. As some of the project management responsibility has shifted to the research consortia, the Commission needs to instruct these consortia in an early stage as to which indicators should be developed and monitored at the project level to support later evaluation.

(Implementation, Section 2.2 – Oversubscription). The Panel noted that the level of oversubscription is higher than expected. It also noted that this shows that the Community action and instruments are well appreciated by and attractive to the research community and that action is being taken to ameliorate any excess.

We suggest that, in order to avoid future excessive over-subscription, the Commission should continue with its two-stage submission and evaluation procedures taking into account the lessons that it has learned from the experiences in 2003, such as limiting the evaluation of first stage proposals to the scientific-technological aspects. This should be communicated clearly to the wider community in order to re-attract those that have been disappointed in the past.

ANNEX
List of documents seen by the Monitoring Panel

No	Title		
1	2002 Synthesis External Monitoring Report on the activities conducted under the European Research Area and the EC/Euratom Research Framework Programmes		
2	2002 External Monitoring Report on European Research Area Activities (ERA)		
3	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Quality of Life and Management of Living Resources		
4	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: User-Friendly Information Society (IST)		
5	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Competitive and Sustainable Growth		
6	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Energy, Environment and Sustainable Development (EESD) Sub-Programme: "Sustainable Development, Global Change and Ecosystems Sub priority Global Change and Ecosystems"		
7	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Energy, Environment and Sustainable Development (EESD) Sub-Programme: Non-Nuclear Energy		
8	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Confirming the International Role of Community Research		
9	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Promotion of Innovation and Encouragement of Participation of SMEs		
10	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Improving the Human Research Potential and the Socio-economic Knowledge Base		
11	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Research and Training in the field of Nuclear Energy Sub-Programme: Controlled Thermonuclear Fusion		
12	2002 External monitoring report on the Specific Programme for Research and technological Development in the field of: Research and Training in the field of Nuclear Energy Sub-Programme: Nuclear Fission and Radiation Protection		
13	FP6 Implementation Report (March 2004) (=Commission's appraisal of launch of FP6)  - Annex 1: Overview of the Work Programme updates so far for the EC 'integrating and strengthening' and 'structuring' programmes and for the Euratom specific programme  - Annex 2: Table on First Call Result for 2003 as of 16/1/04  - Annex 3: Information regarding the Two-Stage Submission and Evaluation Procedure  - Annex 4: Proposed Work Programme Update Schedule for 2004		

14	Meeting of Independent Observers of the 1st Round of the FP6 Evaluation Session - Summary Report Günther Von Sengbusch - Rapporteur (=Synthesis of the recommendations of external observers of the evaluation sessions of the first call of FP6)
15	Participation in FP6 submitted proposals - FP6 activity areas FP6 all countries (=Statistics)
16	Participation in FP6 submitted proposals - FP6 activity areas FP6 Member States (=Statistics)
17	Participation in FP6 submitted proposals - FP6 activity areas FP6 Candidate Countries (=Statistics)
18	Participation in FP6 submitted proposals - FP6 activity areas FP6 Associate Countries (=Statistics)
19	Participation in FP6 submitted proposals - FP6 activity areas FP6 Third Countries (=Statistics)
20	DG Research - Follow up on FP activities 2003 (=Self assessment DG Research)
21	The Implementation, Effectiveness and Impact of EU Society Research and Technology Development 1999-2003 - An assessment by DG-Information Society of the European Commission (=Self assessment IST)
22	DG Enterprise 2003 - Self Assessment Report
23	DG Fisheries 2003 - Self Assessment Report
24	DG Energy and Transport 2003 - Self Assessment Report
25	Powerpoint presentation of the Sixth Framework Programme by (Brendan Hawdon)
26	SP1: 'Integrating and strengthening' programme (EC Treaty) (Brendan Hawdon)
27	Some examples of major project management simplifications in FP6 compared with FP5 (Brendan Hawdon)
28	Standard Model Contract for RTD Projects (Brendan Hawdon)
29	Basic steps to access and use the Commission Extranet "CIRCA"
30	Directorate General Research Organigramme
31	The Sixth Framework Programme 2002-2006 - Towards a European Research (=Brochure on FP6)
32	RTD Info - Special Edition FP6 November 2002 (=Brochure on FP6)
33	FP6 Instruments - Implementing the priority thematic areas of the Sixth Framework Programme (=Brochure on FP6)
34	External Monitoring of the FP6 IST Thematic Priority - 1st Call Proposal Evaluation (=Monitoring of the second call of FP6 in IST)
25	External Monitoring of the FP6 IST Thematic Priority - 2nd Call Proposal
35	Evaluation - Final Report 12 Febr. 04

36	Décision du Conseil arrêtant un programme spécifique de recherche, de développement technologique		
	et de démonstration: "Intégrer et renforcer l'Espace européen de la recherche"		
37	The New Instruments mid-term evaluation Key issues that should be address by the high level panel of experts (=mandate of the Panel Marimón)		
38	Terms of reference of the Five-Year Assessment 1999-2003 (Draft)		
39	DG Fisheries AMP2003 (extracts)		
40	Follow up of the recommendations of the 2002 External monitoring report of the Specific Programme for Research and technological Development in the field of: Improving the Human Resources Potential		
41	Follow up of the recommendations of the 2002 the External monitoring report of the Specific Programme for Research and technological Development in the field of: Energy, Environment and Sustainable Development (EESD) Sub-Programme: "Sustainable Development, Global Change and Ecosystems Sub priority Global Change and Ecosystems")		
42	Follow up of the recommendations of the 2002 External monitoring report of the Specific Programme for Research and technological Development in the field of:  Energy, Environment and Sustainable Development (EESD)		
	Sub-Programme: Non-Nuclear Energy) )  Follow up of the recommendations of the 2002 External monitoring report of		
43	the Specific Programme for Research and technological Development in the field of: Promotion of Innovation and Encouragement of Participation of SMEs)		
	Follow up of the recommendations of the 2002 External monitoring report of		
44	the Specific Programme for Research and technological Development in the field of:  Confirming the International Pole of Community Possageh))		
	Confirming the International Role of Community Research))  Follow up of the recommendations of the 2002 External monitoring report of		
45	the Specific Programme for Research and technological Development in the field of: Competitive and Sustainable Growth)		
46	Follow up of the recommendations of the 2002 External monitoring report of the Specific Programme for Research and technological Development in the field of:  Research and Training in the field of Nuclear Fission and radiation protection		
47	Follow up of the recommendations of the 2002 External monitoring report of the Specific Programme for Research and technological Development in the field of: Improving human potential (IHP) (ASPECTS)		
48	Follow up of the recommendations of the 2002 External monitoring report of the Specific Programme for Research and technological Development in the field of: Research and Training in the field of Nuclear Energy Sub-Programme: Controlled Thermonuclear Fusion)		
49	Follow up of the recommendations of the 2002 External monitoring report of the Specific Programme for Research and technological Development in the field of: Quality of Life and Management of Living Resources)		
50	Follow up of the recommendations of the 2002 Synthesis External Monitoring Report of the activities conducted under the European Research Area and the EC/Euratom Research Framework Programmes)		
51	Follow up of recommendations of the 2002 External Monitoring Report of European Research Area Activities (ERA))		
52	DG Energy and Transport AMP2003 (Extracts)		
53	DG Information Society AMP2003 (Extracts)		

54	DG Enterprise AMP2003 (Extracts)
55	Evaluation Plan of DG RTD
	Decision-Making (general) (=modalities of preparation and adoption of FPs and
56	SPs)
57	6th Framework Programme: Chain of legislation
58	Presentation of the Annual Policy Strategy 2004, the Commission's Legislative and Work Programme 2004 and the preparation of the Annual Management Plan 2004 in DG RTD (PowerPoint)
59	Advisory Groups under FP6 (http://www.cordis.lu/fp6/eags.htm) (=list of members)
60	Timing of successive framework-programmes
61	First Year Financial Implementation FP5/FP6
62	Defining objectives & Indicators (=rules of definition of objectives and indicators in the context of ABM)
63	DG Research AMP2003 (Extracts)
64	Contracts FP6
65	Manuel d'évaluation FP6
66	Participation rules FP6
67	Participation rules - Council Regulation
68	SME Task Force - Progress report - May 2003 (=progress report on participation in DG RTD of SMEs in the first calls of FP6)
69	SME Task Force - Progress report 2 - September 2003 (=progress report on participation in DG RTD of SMEs in the first calls of FP6)
70	SME participation in the FP5/IST Programme (= study on SMEs participation in IST under FP5)
71	SMEs and EC RTD Programmes Task Force - Report of survey (= study on SMEs participation in IST under FP5)
72	Terms of reference of the monitoring 2003
73	Calls / Info Packages (http://www)
74	Work programme: Information Society Technologies (IST)
75	Work programme: Specific measures in support of international co-operation (INCO)
76	Work programme: Human Resources and Mobility
77	Work programme: Science and Society
78	Work programme: Sustainable Energy Systems
79	Work programme: Research and Innovation (SME's)
80	Work programme: Support for the Coherent Development of Policies
81	Work programme: Global Change and Ecosystems
82	Work programme: Euratom Research and Training Programme on Nuclear Energy
83	Work programme: Food Quality and Safety
84	Work programme: Nanotechnology and nanosciences
85	Statistics on the Implementation of FP5
86	Statistics on the Implementation of FP5 (SMEs only)
87	External comments regarding the results of the first calls of P6
88	Première analyse des résultats disponibles des appels à propositions du 6ème Programme cadre dans les domaines thématiques prioritaires (=First analysis of the results of the calls of FP6 in thematic priorities)
89	Evaluation Procedure FP6 (=Processes involved from the preparation of the call to the signature of the contract)
90	Procedure to Modify an FP6 Work Programme
91	SME participation FP6 - IST - submitted proposals (=statistics and comments)

92	SME participation FP6 - IST - funding requested (=statistics and comments)
93	SME participation FP6 - IST - funding submitted (=statistics and comments)
94	SME participation FP6 - IST - number of SMEs participating in main-listed proposals (=statistics and comments)
95	Marimón Panel: issues which appear to be of particular concern to Panel Members
96	External Monitoring of the 6th Framework Programme IST Thematic Priority 1st call Proposal Evaluation / June 2003 (=brochure) (http://europa.eu.int/information_society/programmes/evaluation/worddoc/ist_c all_1_monitoring_report.pdf)
97	External Monitoring of the 6th Framework Programme IST Thematic Priority 2nd call Proposal Evaluation / February 2004 (=brochure) http://europa.eu.int/information_society/programmes/evaluation/ist_rtd/monitoring/index_en.htm (soon available)
98	Follow-up to the Monitoring Panel recommendations (PPT presentation by Peter Johnston - DG INFSO)
99	Current status of FP6 IT applications (presentation by David Gould)
100	FP6 IT system (=leaflet)
101 A to C	Information documents related to the 1st calls of FP6 - Specific Programme 1 - Thematic priority 1 (Life sciences, genomics and biotechnology for health)
102 A to C	Information documents related to the 1st calls of FP6 - Specific Programme 1 - Thematic priority 2 (IST)
103 A to J	Information documents related to the 1st calls of FP6 - Specific Programme 1 - Thematic priority 3 (NMP)
104 A to B	Information documents related to the 1st calls of FP6 - Specific Programme 1 - Thematic priority 4 (Aeronautics and Space)
105 A to D	Information documents related to the 1st calls of FP6 - Specific Programme 1 - Thematic priority 5 (Food quality and safety)
106 A to D	Information documents related to the 1st calls of FP6 - Specific Programme 1 - Thematic priority 6 (Sustainable Development, global change and ecosystems)
107 A to B	Information documents related to the 1st calls of FP6 - Specific Programme 1 - Thematic priority 7 (Citizens and governance)
108	Information documents related to the 1st calls of FP6 - Specific Programme 2 (Research and innovation)
109 A to K	Information documents related to the 1st calls of FP6 - Specific Programme 2 (Human resources and mobility)
110 A to B	Information documents related to the 1st calls of FP6 - Specific Programme 2 (Research Infrastructures)
111 A	Information documents related to the 1st calls of FP6 - Specific Programme 2 (Science and Society)
112 A to D	Information documents related to the 1st calls of FP6 - Cross-cutting activities 1 - Research for policy support
113	Information documents related to the 1st calls of FP6 - Cross-cutting activities 1 - New and emerging science and technology (NEST)
114 A to C	Information documents related to the 1st calls of FP6 - Cross-cutting activities 1 - SME activities
115 A to O	Information documents related to the 1st calls of FP6 - Cross-cutting activities 1 - Specific measures in support of international co-operation (INCO)
116	Information documents related to the 1st calls of FP6 - Cross-cutting activities 1 - JRC activities
117	Follow up of the recommendations of the 2002 External monitoring report of the Specific Programme for Research and technological Development in the field of: IST

118 A	Information documents related to the 1st calls of FP6 - Euratom - Controlled thermonuclear fusion	
119	Information documents related to the 1st calls of FP6 - Euratom - Management of radioactive waste	
120	Information documents related to the 1st calls of FP6 - Euratom - Radiation protection	
121	Information documents related to the 1st calls of FP6 - Euratom - Other activities in the field of nuclear technologies and safety	
123	Observation of the Board of Governors of the JRC on the JRC 2003 Annual Activity Report	
124	Set of common rules for FP6 implementation	
125	Rules of procedure programme Committee	
126	Evaluation model report FP6	

## **PART B:**

Responses of the Programme Management to the external Monitoring Report

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
All users and observers recognise that the task faced by the Commission in running a Framework Programme across 15, and now 25, countries, involving many participants in many disciplines, from different sectors, using a wide range of languages and contrasting research administrative systems is extremely challenging. The Panel therefore wishes ahead of any other comments to congratulate the Commission on its notable achievements:  • Efficient handling of the transition from FP5 to FP6 in a short time despite hampering factors (e.g. constraints on the FP6 IT System, last minute changes in contractual arrangements).  • Launching a large number of calls that successfully attracted a huge number of proposals.  • Executing these proposals in a faster time than the first year of FP5.  • Maintaining a high standard of evaluation.  • Making preparations for the Five Year Assessment (1999-2003).	positive comments of the panel concerning the achievements of the Commission in the implementation and management of framework programmes.		

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
Nonetheless, it is the responsibility of a Monitoring Panel to report in detail on the exceptions rather than to dwell at greater length on the excellent and efficient performance it has generally found. There are a number of issues on which further progress needs to be made. In particular, the Panel spent much time considering the better use of the Annual Management Plans as a tool for effective and efficient programme management and it particularly noted concerns regarding impact assessment and dissemination.			
I. (Defining objectives and indicators, Section 3) The Panel RECOMMENDS that the DGs involved with FP6 should consider revising their objective and indicator systems so as transparently to support not only evidence-based reporting of its efficient programme management but also 'light touch' monitoring.  The system of Annual Management Plans, follow-up reporting and monitoring does not yet seem to work well enough to serve as a management tool. This is due in part to	The Commission services agree that the objective and indicator systems are crucial in supporting both evidence-based reporting of programme management and 'light touch' monitoring by external experts. This is entirely in line with the principles of the Commission's ABM/SPP. The services consider the revision of current systems in two phases, first in the context of FP6 as far as this is possible and second in view of FP7.  However, the identification of clearer objectives and indicators is challenging, not	towards better objectives /indicators setting could be based in particular on: - clarification of objectives, targets through road map in calls - implementation of the Guidelines on	Second semester 2004

RESPONSES BY COMMISSION SERVICES TO THE 2003 MONITORING REPORT			
Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
			<u>.                                      </u>
objectives that have been stated with different levels of precision and by prioritising scientific-technological, socio-economic and administrative objectives in a different manner. In addition the current series of reported indicators and their lack of value labels set a challenge to the Panel in monitoring progress. The Panel was told of other indicator systems, but did not receive specific reports on these.  For future monitoring exercises that have the same 'light touch' construction, the Panel suggests the following. The Panel should be provided with a limited set of documents focusing on implementation according to the Annual Management Plans and based on a clear set of indicators with targets that the Panel can assess. Preferably this information should be harmonised across all DGs (in so far as this does not undermine or cut across other reporting requirements) in order to facilitate an overall comparison.  A distinction between sets of indicators for project monitoring, process evaluation and impact assessment should be made so that they can be used appropriately in different exercises. The Panel also suggests that if an	least in the context of research, and qualitative changes can only be made progressively. The Commission services agree that the objectives and indicators should be linked and conceived at three levels: "operational" (administrative/management level); results and outcomes (short to medium term project/programme outputs); and "impacts" (including longer term socio-economic effects).  Objectives and indicators across DGs implementing research programmes should converge to the extent possible while taking account of the different contexts in which they are set. For instance, the Marie Curie Fellowships have an ongoing Impact assessment study with a methodology developed for their particularities and their objectives (trans-national training of researchers).  For FP6, a number of core initiatives are foreseen to promote these changes. A first opportunity is the preparation of the AMP 2005 by end 2004 which could benefit from the major initiatives undertaken in the context of the follow-up of recommendations of the Marimon report on new instruments and on the	projects  - diffusion of good practices of thematic priorities to better assess the performances of projects  - pilot actions in FP6 related to objectives/indicators defined for FP7  - methodological studies.  For FP7: definition of objectives/indicators in the context of the ex ante impact assessment of FP7	End 2005

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
analysis of the impact of institutional reform on the efficiency of administration is to be implemented then the Commission should start the necessary preparatory work now by	action plan agreed in the frame of the Task Force on "Rationalisation and Acceleration of Framework programme implementation" set up in September 2004.		
defining indicators and collecting information so as to conduct an exercise based on sound and timely evidence.	In this context, various measures are envisaged, notably:		
	- the classification of instruments according to the goals which they are expected to contribute to and establishing targets for their implementation in terms of audience, EU contribution, size of consortia etc. and		
	identification of performance indicators  - the development of other management indicators, linked to the life cycle of projects and concerning both administration and scientific and technological issues.		
	Other steps likely to contribute to the definition of indicators of performance and impact will include: - the further exploitation of the data gathered		
	through the "project reporting in FP6" which now details the type of information the contractors should regularly deliver, including contract management information as well as data on the impact of the project, for example		

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
			1
	on local employment, number of patents, of		
	spin-off); - the dissemination of good practices of several		
	thematic priorities concerning the assessment		
	of impact of projects;		
	- pilot actions in FP6 concerning indicators		
	defined for FP7;		
	- the realisation of methodological studies		
	focusing on the definition of indicators.		
	As concerns <b><u>FP7</u></b> , in conformity with the		
	guidelines for impact assessment and ex-ante		
	evaluation, the Commission services will identify in preparation of its proposals for FP7		
	a set of verifiable objectives (where possible		
	quantifiable) for each action/programme of the		
	new FP, and an associated set of indicators.		
	These objectives and indicators for FP7, once		
	defined, could also be the basis for reflexion		
	on how to improve the impact evaluation of		
	FP6 research activities.		
	The Commission Reform implied a major		
	change of the management culture inside the		
	institution, with the introduction of the		
	Strategic Planning and Programming (SPP)		
	cycle and of the Activity Based Management		
	(ABM), which aimed at improving		

Experts « conclusions and recommendations »:	IMISSION SERVICES TO THE 2003 MONIT  Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
	transparency, accountability and efficiency through better planning, implementation, monitoring and evaluation of activities.  These new tools and procedures, decided at the level of the political authorities of the Union for the whole Commission, are still being refined and it is only at this level of decision that a review of the effects of this Reform can be decided and initiated.		
II. (Implementation, Section 2.2) The Panel suggests that, for future monitoring exercises, a concise table is produced to show the expected and observed proposal-related workflows per activity area. This is linked to its recommendation on objectives and indicators (below).	Following in particular the recommendations of the monitoring panel and the observations from Members States and Associated States in the horizontal configurations of the Programme Committees for the specific Programmes "Integrating and Strengthening ERA" and "Structuring ERA", it was decided	Provision to participants to the projects of a road map with procedural steps and deadlines for each call in Guides for proposers.	Second semester 2004
In a time where scientific and technological developments are extremely rapid and industrial R&D cycles become shorter, it is important that successful applicants can commence their research activities as fast as possible. The flow of proposal related work goes through several stages, not all of which can be influenced by the Commission. The Panel recognised there are also some merits in taking due time to move from proposal to a	by the Director General for Research to establish a Task Force "Rationalisation and acceleration of Framework Programme implementation". The aim is to consolidate stated problems (in particular, a lack of clear time tables for the finalisation of the different procedural steps has been recognised), refine and clarify the issues and to identify specific actions that could be taken within the short term to address these problems and to ensure an efficient and consistent application of the		

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
signed contract. Careful and reflective assessment of proposed activities and deliverables by programme officers can be beneficial if it creates 'value for public money'. The ideal mean provides a balance between efficiency (speed) and effectiveness (value and quality). In addition, particularly with the new instruments and the large size of consortia, the research partners need time to come to fair and appropriate agreements. Thus targets for time-to-contract cannot be prescriptive but should be adapted to the type and complexity of typical contracts in a certain activity area.	Framework programme.  The Task Force was established with members from all Directorates General implementing the FP6 and began work in September 2004.  The Action Plan foresees in particular to provide to the participants via its introduction in the Guides for proposers, a road map with deadlines for each instrument for each step of the process and to define a concrete timetable for the negociation of the individual contracts. This information would accompany each call for proposal.		

III. (Implementation, Section 2.1) The Panel RECOMMENDS that the focus of monitoring should shift from efficiency towards effectiveness as FP6 progresses, just as the focus of implementation shifts from launch towards achievement and outcomes. The Commission will recognise that the necessary evidence required for analysis will shift with this focus.

The Commission had already taken into account the recommendation of the 2002 Monitoring panel suggesting that "the monitoring is brought in line with the programme life cycles of Framework Programmes". Thus, the mandate for the 2003 exercise puts an emphasis on the launch of the Sixth Framework Programme.

It is intended to continue with this approach by

Targeted mandate of the next monitoring exercise

First semester 2005

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
In addition to the many input-oriented efficiency indicators, the Commission should develop a framework of effectiveness indicators that address anticipated outcomes in scientific-technological terms as well as socio-economic terms. This should be introduced at the level of its activity areas. Many anticipated outcomes can only be measured in the medium to long term, so attaching a time frame to these indicators will be necessary.  We do not underestimate the challenge in developing useful indicators of effectiveness. We have noted the problem that evaluators already face in reconciling marks in this regard.  It may also be that, in due course and after a number of trial cycles, the experience of the light touch approach will indicate a shift from an annual monitoring exercise to a more continuous process of monitoring that makes best use of the intellectual capital and experience built up in each successive group of experts.	covering successively in the next years aspects which are more related to the management of projects - including projects of former Framework Programmes- and progressively issues more linked to the dissemination of results and with the analysis of the impact of the research undertaken, including socioeconomic aspects.  In order to ensure that the panels have the necessary evidence at their disposal, it is already planned - to undertake a number of studies at Framework Programme and at specific programme levels, adding to those being produced for the Five Year Assessment panel. These studies are included in the multi annual evaluation plan of DG RTD which is part of the Annual Management Plan. Concerning new indicators, this issue is already covered under point I above, although the Commission takes note of the panel's awareness of the challenges involved in this task.  In addition to analyses targeted directly to priority areas such as 'Nanotechnologies and nanosciences knowledge-based multifunctional materials and new production process and devices' or 'International Cooperation', the	Strategic and impact studies both at FP and specific programmes (covering thematic priorities and horizontal programmes) evel	As from July 2004

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
			1
	analyses currently planned will relate also to broader issues such as for instance gender, the networking impact of Community research or its structuring impact on infrastructures and human resources. More generally, the Commission services agree with the Panel that in essence, analyses have in the past focused more on efficiency of implementation and programme management than on effectiveness, and that this focus should be changed, "as effectiveness will be a critical consideration for those monitoring committees taking long term views such as the Five Year Assessment".		
	As concerns the monitoring approach, the Commission services fully agree with the pragmatic and continuous approach proposed by the panel, which is in line with the Reform of the Commission.		
IV. (Follow-up 2002 - Dissemination). The Panel does not feel that a formal recommendation on dissemination is required but suggests that the Commission should analyse which communities are targeted for dissemination and decide how activities are monitored, whether sufficient	At a collective level, an important effort recognised by the Panel has been undertaken recently by the Commission services to improve the dissemination of results of Community research activities.		

RESPONSES BY COMMISSION SERVICES TO THE 2003 MONITORING REPORT			
Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
resources have been set against these	During the Fifth Framework Programme, the		
activities, and whether there are sanctions	initiatives taken have concerned notably		
if contractors do not perform these tasks	CORDIS: the projects database (over 60,000		
adequately.	records) contains 'projects achievements'; the		
	results database (ca. 10,000 records) contains		
Measures so far taken by the Commission	the 'exploitable results' of the projects; the		
have been instrumental to the creation of	Technology Market Place re-launched in 2002,		
indispensable tools for effective dissemination	offers selected results (over 1,000 records) re-		
actions: CORDIS website, archiving system,	edited to become 'easy to understand' and in		
communication and editorial support to contractors. The introduction of binding	five languages; the e-mail alert service informs		
conditions for contractors to "engage with	users automatically about new research results;		
actors beyond the research community" is a	archiving of final reports according to Internal		
prerequisite for any increase in effective	Control Standard 13.		
dissemination.	Under the Sixth Framework Programme, the		
dissemilation.	Commission have also been pro-active and a		
Making dissemination and interaction with	series of new initiatives have been taken as		
wider audiences a part of the contract is an	regards public awareness, such as:		
improvement that the Panel applauds. The	regards public awareness, such as.		
Commission will need to take a proactive	<ul> <li>bilateral meetings with Directors and</li> </ul>	Two day meeting for	
position in this to ensure that these activities	communication specialists, training	large projects	
are not left until the project is nearly	meetings with Scientific Officers	coordinators.	
complete. Generally speaking, scientific		New similar event	
players take less interest in dissemination	• the organisation of a first event (11/12	planned in Nov. 2005.	
beyond the research community, i.e. political,	May 2004) in Brussels to provide Sixth	1	
social and economic stakeholders. Hence,	Framework Programme coordinators		
only limited resources are dedicated to	with information and training on	Website accessible on	
dissemination and this is regarded as a	possibilities of communicating on their	the above conference	
secondary objective of FPs. A stronger			

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
recommendations »:			
		(if any)	
emphasis on dissemination of results would help, however, in getting political support for increased resources for European scientific and technological development. Indeed, greater and more transparent public accountability by FPs is required to maintain and increase resources devoted to European research in the future.  A stronger and more proactive approach will be necessary to improve dissemination and technology transfer. At the same time, it is accepted that these activities are inherently complex and remain intertwined with legal aspects related to intellectual property.	<ul> <li>public (TV, presentation of projects to the press);</li> <li>the creation of a website offering to the Sixth Framework Programme contractors tips and tools related to communication (how to write press releases);</li> </ul>		First part of 2005

		(if any)	
A let coord offer disse  It h Fram impo comp conce more to ha disse have perio "plar know servithus the C this contra contra shoul of al	ect measures to ensure suitable publicity". etter is systematically sent to all projects redinators explaining the possibilities red by the Commission services to support emination related to projects activities.  That not been foreseen in the Sixth nework Programme research contract to ose sanctions against contractors not applying with their contractual obligations as cerns the dissemination of results. It is appropriate to encourage the contractors ave a more active attitude concerning the emination at the various stages where they are to deliver the activity report (interim, odic and final reports). If it appears that the nor for using and disseminating the weldge" is not sufficient, the Commission ices should not approve the report, and decide not to make payments. Further, if Commission does not approve the reports could lead to the termination of the tractor concerned. Moreover, attention all also be drawn on the actual execution all contractual commitments made by the tractors, including as concerns possible	vis of the contractors as concerns dissemination activities  More restrictive attitude concerning approval of reports if the plan of dissemination is not in conformity with initial commitments. Further definition of a strategy for dissemination including at programmes level, especially to promote the exploitation of projects results monitoring of these activities, review of current target audience, analysis of resources dedicated to dissemination)	

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
	More generally, services agree with the necessity of a review of the target audience for dissemination, of an analysis of the resources dedicated to these activities and of the modalities of their monitoring in the perspective of a more pro active approach.		
V. (Follow-up 2002 – Evaluation and assessment). While the Panel is not minded to make any particular recommendations on evaluation and assessment, other than those made regarding objectives and indicators, it spent much time in consideration of the issue and the attention of future Monitoring Panels is drawn to this for further review.	As concerns the quality of the <u>evaluation of proposals</u> , the Commission services appreciate the positive comments of the panel. Various measures have already been implemented to further improve the performance of the system. The services have drawn up a set of explanatory material and slides for use in the briefing of evaluators to help them deal with the "horizontal" evaluation criteria. The		
On the basis of the extensive analyses of external experts observing the evaluations in FP6, the Panel was able to conclude that the evaluation procedures have been fair and of high quality. Despite the fact that the evaluation of new instruments was a new experience for all involved, the fact that it revealed no major problems is reassuring. It did note that the reconciliation by evaluators of 'effectiveness' considerations to clearly justifiable marks is a problem that has	horizontal criteria are not marked, but simply commented on in the evaluation.  Furthermore, the services had already identified problems with the quality of feedback to proposers in its stock-taking exercise in late 2003 and have undertaken a thorough analysis of ways of improving the quality of the evaluation summary reports. The recommendations from this analysis have been presented to all services involved in the		

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
still to be resolved, that evaluation summary reports are not always of sufficient quality and that training, guidance, and briefing for evaluators could be improved.  Because of the large effort required to process the volume of calls, proposals and contracts, there has been only limited attention available for designing a framework for monitoring the results of the actions and instruments, particularly on the priority area levels. The Panel appreciates that <i>ex-ante</i> evaluations have become a recognised tool in the Commission's programme management.  In particular, the Panel has suggested (above) that the Commission should also insist on including an assessment of anticipated socioeconomic impacts of projects carried out within FP6. As some of the project management responsibility has shifted to the research consortia, the Commission needs to instruct these consortia in an early stage as to which indicators should be developed and monitored at the project level to support later	evaluation of proposals. A number of practical steps have been proposed to improve the quality of feedback.  As part of the stock-taking exercise on the first calls under FP6, the Commission services also examined possibilities to improve the understanding of the evaluators of the evaluation process. A number of practical measures have been proposed and are in the process of implementation. In particular, the practice of arranging "staged" briefings of evaluators was strongly recommended. In addition, improved standard briefing and presentation materials have been prepared for use in all evaluation sessions.  Regarding programme evaluation, as mentioned by the Panel, an <i>ex ante</i> impact assessment is now required to prepare major future political initiatives such as the 7 <sup>th</sup> Framework Programme. This ex ante impact assessment includes information on objectives, measures planned, resources and expected results and impacts. Regular evaluation of	Ex ante evaluation by DGs involved in the	Final Report first semester 2005
evaluation.	activities is also required (ex post or interim evaluations not exceeding 6 years). In addition, an evaluation programme has also to be included in the Annual Management Plan and		

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
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	the current one mentions impact studies related to several programmes.  But it is true that a still increased attention must be granted to the analysis of the results of activities, including in the management of consortia and on the basis of better defined indicators both for scientific and technological aspects and for the socio-economic dimension.		

RESPONSES BY COMMISSION SERVICES TO THE 2003 MONITORING REPORT			
Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments	Deadline
		(if any)	
VI. (Implementation, Section 2.2	The Commission confirms that the level of		
Oversubscription). The Panel noted that	interest of researchers in Community RTD		
the level of oversubscription is higher than expected. It also noted that this shows that	activities remains very high. There will undoubtedly be a "learning effect", as		
the Community action and instruments are	proposers become more familiar with the new		
well appreciated by and attractive to the	instruments and the Commission has already		
research community and that action is	published additional information material to		
being taken to ameliorate any excess.	help improve this understanding. It is hoped		
being taken to amenorate any excess.	that this could have the effect of lowering		
We suggest that, in order to avoid future excessive over-subscription, the Commission should continue with its two-stage submission and evaluation procedures taking into account the lessons that it has learned from the experiences in 2003, such as limiting the evaluation of first stage proposals to the scientific-technological aspects. This should be communicated clearly to the wider community in order to re-attract those that have been disappointed in the past.	oversubscription, with fewer proposals presented that do not meet the criteria for the instruments in question.  In order to reduce the importance of subscription -which should be measured as the % of non-funded excellent proposals over the total of excellent proposals- different options are available, in particular:  - the possible greater use of two-stage submission and evaluation with short and simple proposal at first stage only developed at second stage (with the drawback of an extension of the time to contract);	Corrective measures where appropriate	Second Semester 2004
	- clearer, focused information in work programmes, calls and guides on classification		

Experts « conclusions and recommendations »:	Commission Services' Responses	Services' Commitments (if any)	Deadline
	of instruments, critical mass, expected size of proposals (by instruments and topics)		