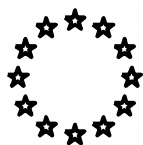


**2002 MONITORING REPORT
ON EUROPEAN RESEARCH AREA
ACTIVITIES (ERA)**



This report is part of the series of the external annual monitoring reports prepared for the EC Framework Programme and the Euratom Framework Programme, and their constituent Specific Programmes.

The Commission has over the years been placing increasing emphasis on the evaluation of Community R&D activities. With the overall Reform of the Commission, evaluation activities are increasingly placed closer to the heart of the decision process.

In line with this continuous effort for improvement, a revised programme-monitoring scheme has been introduced in 2001, based on the system launched in 1995, which involved independent external experts in the monitoring activities. The new mechanism launched this year has been built in order to increase the synergy between the Framework programmes, ERA and specific programmes monitoring. The timely response by the Programme management to the recommendations produced by the experts will be enhanced, providing the basis for a quick response mechanism to programme developments, as the follow up of experts recommendations will be receiving still more attention.

The report highlights progress in relation to the implementation both of ERA dedicated activities and activities in the Framework programmes contributing to ERA objectives. The report should help reinforce establishment of best practices and identify the scope for further improvements in implementation.

The report consists of two parts:

Part A: *External monitoring report prepared by the following independent external experts:*

*Mr Daniel Thomas (Chairman)
Mr Brian Wilkinson (Rapporteur)
Ms Claire Demain-Paternotte
Mr Niels E. Busch*

Part B: *Responses of the Programme management to the external monitoring report.*


THE 2002 EUROPEAN RESEARCH AREA (ERA)

We, the undersigned, are pleased to present our report to the European Commission.

Niels Bush (Denmark)
Director, Bush and Partners



Claire Demain Paternotte (Belgium)
Formerly General Director, Université Catholique de Louvain



Daniel Thomas (France)
Professor, Chairman scientific board, lab. direct., bioengineering
department, Université de Technologie de Compiègne



Brian Wilkinson (United Kingdom)
Formerly Director, Centre for Ecology and Hydrology,
Natural Environment Research Council



PART A:

Report of the external Monitoring Panel

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1. EXECUTIVE SUMMARY

Since 2000 the establishment of the European Research Area [ERA] has broadened European research policy. The Sixth Framework Programme [FP6] is an element of the ERA and there is specific provision within FP6 for 'Strengthening the Foundations of the European Research Area'. The European Commission is required to arrange an annual independent monitoring of its RTD programmes. This was extended in 2001 to include the implementation of the ERA and the first Expert Group undertaking its monitoring offered 30 recommendations for consideration by the Commission. The second Expert Group assessed the response of the Commission to the previous recommendations and found these to be satisfactory in most cases. It extends the work of its predecessor in examining the progress made during 2002. The present Report covers the work of the second Expert Group.

The Group's findings were based on interviews with Commission staff, CREST members and officials from Member States [MS] ministries and others; extensive documentation and self-assessment fiches provided by the Commission; and the Commission's response to the 2001 ERA monitoring recommendations.

The Commission has identified eleven operational objectives in which action is needed to enhance or re-direct activities so as to advance the implementation of the ERA concept and these are considered in some detail in the present Report, together with specific ERA- related activities falling within FP6. In some sectors good progress has been made e.g. pan-European electronic network, Community patent, EIB and EIF involvement in research funding etc, however the principal concern emerging is that three years after the ERA initiative was launched most MS do not appear to be prepared to participate fully. Advancing the ERA depends not only on Commission inputs but also on the engagement and commitment of managers of national research programmes in Member and Associated States, universities, public research organisations, industry etc. The Commission must press the ERA forward through the operational activities, particularly benchmarking and networking.

On 3 March 2003, towards the end of the Expert Group's monitoring work, the Competitiveness Council adopted a contribution to be forwarded to the Spring Council. This highlighted the building of the European knowledge-based economy as one of the three priority areas. Within this area, it identified the exploitation of the potential of the FP6, the use of the Open Method of Co-ordination (OMC) in key areas, activities enhancing the participation of SMEs in research and innovation and increase in research investments as actions of particular importance. The 2002 Expert Group recognises the important role that the OMC will play in engaging the Member States more effectively, through a political mandate, in the implementation of the ERA.

The value and effectiveness of the Commission's international outreach in relation to the ERA objectives are also considered. Such activities, operating through FP6, are important to both research and networking [e.g. EUREKA, COST, INTAS etc] and the Commission should retain and fund them. From the outside the international programme appears complex and needs greater transparency.

New management arrangements came into place in Directorate RTD in 2001 and these have been examined. They appear in general to be working satisfactorily but some refinements may be needed. The new management structure puts more focus on research policy and strategic issues and is necessary to progress the ERA. Commission officers have now to set research needs in a social/political context. Such skills will have to be learnt by some staff or introduced by recruitment.

This ERA 2002 Monitoring Report is complementary to the reports prepared by the 2002 Framework Programme Panel and the Specific Programme Panels. Section 5 of the ERA 2002 Report gives the Expert Group's conclusions and contains 22 recommendations in three groups - operational objectives (14), management (4), networking and external organisations (4). The 2002 Expert Group considers that these, if adopted, will contribute to the implementation of the ERA as endorsed by the Lisbon European Council.

2. PANEL METHODOLOGY

The four external, independent members of the ERA Expert Group [Annex I] were invited by the Commission in early November 2002 to participate in the 2002 Monitoring exercise. A 'Broad Guidelines' document for the monitoring was provided by the Commission. Unfortunately the contractual arrangements between the Commission and the Group members were not put into place until late December 2002. This uncertainty as to whether or not the work was to proceed unfortunately led to one month's disruption in progress. In future the Commission is urged to ensure that members' contracts are in place at the start of the monitoring exercise.

The Broad Guidelines document gives the Terms of Reference, with the main issues as:

- follow-up on the ERA 2001 Monitoring exercise recommendations;
- examination of progress with the operational objectives for the ERA;
- assessment of the contribution of FP6 to the objectives of the ERA.

The approach adopted by the Expert Group involved the following:

- ERA Expert Group meetings in Brussels during the period 8 November 2002 to 30 April 2003. All Group members attended all meetings. One or two Commission Officers from Unit 4 [Planning & Evaluation] were present at all meetings,
- Co-ordination of the ERA Expert Group with the Framework Panel and the Specific Programme Panels through two joint meetings and the participation of the Expert Group Chairman as a member of the Framework Panel,
- Interviews with:
 - selected Commission staff [arrangements made by Unit 4 Officers],
 - national representatives on CREST [some in Brussels, some by telephone],
 - a number of other individuals having a particular insight into ERA issues [however a more widespread discussion, particularly with MS ministries and public bodies, may have been helpful].
- Documentation provided by the Commission [Annex III],
- Commission Self-assessment Fiches provided in relation to the ERA operational objectives,
- The Commission's response to the recommendations provided in the ERA 2001 Monitoring Report.

The Expert Group found the Self-assessment Fiches helpful but all such material should be made available at the commencement of the study. The Group was also pleased with insights the Commission Officers gave during interviews and with the open and helpful way in which they discussed often sensitive internal and external issues.

Although this monitoring exercise has been completed in a relatively short time and there was some loss of momentum in the early stages of the work due to the difficulties over contracts, the members of the Expert Group consider that they have been able to obtain a reasonably good insight into the Commission's and Member States' progress in advancing the ERA and associated issues. This has been helped by having some members from the 2001 monitoring on the 2002 Expert Group ensuring a degree of continuity and ready insight into the more involved issues.

3. INTRODUCTION

There is a long-standing requirement for the European Commission to arrange an annual monitoring by Panels of independent qualified experts of specific programmes within the Framework Programmes. The yearly monitoring of the RTD Thematic Priorities is also required. Since 2000 there has been a broadening of research policy with the establishment of the European Research Area [ERA], consequently FP6 is an element of the ERA and consideration of the contribution that research in the Thematic Priority areas is making to the ERA is pervasive. There is also a specific provision within FP6 for 'Strengthening the Foundations of the European Research Area'. In addition to RTD in FP6 the Commission has identified eleven areas in which action is needed to enhance or re-direct activities so as to advance the implementation of the ERA concept.

A first Expert Group monitored the implementation of the ERA during 2001. The Group offered 30 recommendations for consideration by the Commission. The current Expert Group assesses the response of the Commission to these recommendations and extends the work of its predecessor by examining the progress made during 2002. Since the new focus on the ERA led to a change in management arrangements in DG RTD, these have also been reviewed.

The eleven 'action' areas have been considered again, together with specific ERA related activities falling within FP6. Advancing the ERA depends not only on Commission inputs but also on the engagement and commitment of managers of national research programmes in Member and Associated States, universities, public research organisations, industry etc. In some sectors good progress has been made e.g. pan-European electronic network, Community patent, EIB and EIF involvement in research funding etc. However three years from the ERA launch the Commission expressed concern that while some sectors and national authorities were responding well others were not and the latter was delaying progress in ERA implementation. The 2002 Expert Group was aware of these difficulties from the outset and considered reasons for the slower than anticipated rate of progress and how this could be improved.

Towards the conclusion of the Expert Group's 2002 monitoring the Competitiveness Council proposed a number of competitive strategies, several of which are directly relevant to RTD and the ERA. Its political mandate, giving opportunity for networking and co-operation of national research programmes through the Open Method of Co-ordination [OMC], is particularly important. This should provide the boost needed to enable the ERA to fulfil its objectives.

This document is the Final Report of the 2002 Expert Group. It contains 22 recommendations.

The Expert Group wishes to acknowledge the support given by Commission Officers in providing relevant documentation and in arranging interviews. It also thanks those who provided information and opinions during the course of many interviews/discussions.

4. ANALYSIS AND FINDINGS

4.1 FOLLOW UP OF 2001 RECOMMENDATIONS

The 2001 ERA Expert Group offered 30 recommendations in its Monitoring Report. Commission Officers made presentations to the 2002 Expert Group in which they described their proposed response to each recommendation and the progress that had been made. This was very helpful in that it led to a constructive dialogue and gave the Group an insight into some of the structural and other difficulties Commission Officers face in addressing recommendations. It also gave reassurance that the recommendations had been carefully considered.

The Commission also provided a written response to each recommendation. The Expert Group considered the Commission's responses to each of the recommendations from 2001 and the impact these have had during 2002 and their assessment is presented in a Table in Annex II. In some cases the 2002 Report's recommendations [section 5] are relevant to or extend those of 2001 and this is also shown in the Table.

4.2 ATTAINMENT OF OBJECTIVES IN TERMS OF IMPLEMENTATION OF THE OPERATIONAL OBJECTIVES OF 2002 SET OUT FOR THE ERA

4.2.1 Operational Objectives

To implement the ERA concept, which was endorsed at the Lisbon European Council, the Commission identified eleven areas in which action was needed to strengthen or redirect ongoing activities. These are discussed in sections 4.2.1.1 to 4.2.1.11 below – no priority is implied through section order.

There are strong interactions between the selected areas and they are flexible and will be modified with time as new, pressing issues arise. At the start of the Expert Group's work [Nov.2002] they presented a sound structure against which much of the Commission's progress in forwarding the ERA during 2002 could be assessed.

On 3 March 2003, towards the end of the Expert Group's monitoring work, the Competitiveness Council adopted a contribution to be forwarded to the Spring Council of 21.03.2003, where it recognised that while progress had been made, it was not yet sufficient to achieve the objectives of the Lisbon strategy.

The Council highlighted the building of the European knowledge-based economy as one of the three priority areas. Within this area, it identified several actions: the exploitation of the potential of the 6th Framework programme, the use of the open method of co-ordination (OMC) in key areas, activities enhancing the participation of SMEs in research and innovation, the increase in research investments (linked to the 3% action plan to be presented by the Commission) and the need develop a common agenda for frontier and leading-edge technologies.

In its contribution, the Competitiveness Council recognised the role that the OMC could play in the field of research and gave a political mandate to the Member States and the Commission to start its implementation in some key areas (3% initiative, human resources, science and society, infrastructure, mutual opening up of national programmes).

Concerning the financial aspects, the 6th Framework Programme contains specific provisions within its chapter 'Strengthening the Foundations of the European Research Area' which should help to set in place a better co-ordination of RTD policy-making and activities. This part of the Framework Programme has a budget of 320 meuros split into two main lines - 'Support for the Co-ordination Activities' and 'Support for the Coherent Development of Policies'. The first line, with a budget of 270 meuros, is discussed below in section 4.2.1.2 [Networking]; the second, which has a budget of 50 meuros, concerns policy tools such as foresight, indicators and benchmarking, will be used to advance the Open Method of Co-ordination along the policy route advocated by the Competitive Council but the detail has yet to be developed.

The Expert Group took into account these recent developments in its consideration of the Operational Objectives, presented below.

4.2.1.1 Benchmarking national RTD policies

It is an important step in establishing the ERA to move to a position where the research policies in Member States are more consistent. There is therefore a need to compare and adapt policies on the basis of mutual learning. This task essential, in that it will contribute to the improvement of the design and implementation of RTD policies at all levels [regional, national and European] and lead hopefully to synergies between and co-ordination of research in Europe, through the Open Method of Co-ordination [OMC] advocated at the Lisbon summit and now given a political mandate by the Competitiveness Council.

A first pilot benchmarking exercise conducted by the Commission involved the present Member States. Future studies will include all countries associated with the Framework Programme. The five themes for which data were collected and analysed were human resources in R&D; public and private investment in R&D; impact of R&D on competitiveness and employment; S&T productivity; and promotion of R&D culture and public understanding of science. The results are being widely disseminated through reports and four workshops have been held in Slovenia, Malta, Germany and Finland, with a major conference in Jan 2003 in Athens.

While some progress has been made in providing baseline data, a number of obstacles have been identified by the Commission, CREST and others. It is considered that the selected themes were too broad, thus the recommendations for actions to improve national RTD policies lacked focus. There was also insufficient involvement of Member States. For future work the Commission considers it necessary for more active participation and resource commitment from the nations involved and to have the targeted topics more closely defined. A lead country for each topic would be sought, with other countries participating on the basis of their particular interests. A Steering Committee [representatives of national administrations] and Working Groups [experts nominated by participating countries] would be established.

The Expert Group acknowledges the progress that has been made but questions why the benchmarking activity is proving to be so difficult. Is the problem due to insufficient understanding in the MS as to the contribution benchmarking can make to the ERA or to insufficient funding and

resources from the Commission and MS? In the Expert Group's view this limited progress and lack of enthusiasm for benchmarking is a consequence of both causes. There is a misunderstanding of the purpose of benchmarking, which is viewed by some as trivial collection of statistics or as political 'hype'. Stronger visible central leadership by the Commission together with sufficient central funding to assist in the establishment of local centres that can 'champion the cause' nationally are necessary to make benchmarking a strong tool for integration in the ERA. For the future the Open Method of Co-ordination will be particularly helpful in this respect with themes being well focussed and linked to policy.

The Expert Group recommends that the unit centrally responsible for benchmarking in DG RTD develops a higher profile and that the role of benchmarking in advancing the ERA is more clearly defined and communicated. Funding should be made more readily available from FP6 or other sources to develop interest and competency in the MS and AS. Such funding could be used as 'seed corn' to encourage new, or to complement existing, activities.

4.2.1.2 Networking the national RTD programmes and policies

Networking national research programmes is at the heart of the ERA and co-ordination and opening of national programmes is a major challenge for the ERA.

There is a range of ways in which networking between MS or between MS and other European countries or European scientific organisations can take place.

The horizontal networking efforts in support of the ERA have their base in FP6 under 'Strengthening the Foundations of the European Research Area' [see 4.2.1]. The element of particular relevance to networking 'Support for the Coordination of Activities' encompasses the following activities:

- ERA-NET (FP6-funding: 150 meuros)
- EUROCORES (ESF, 70 members in 27 countries; FP6-funding: 20 meuros)
- Integrated information system (FP6-funding: 10 meuros)
- COST (FP6-funding: 50-80 meuros)
- EUREKA and thematic international organizations (e.g. CERN, ESA, ESO, EMBL, ESRF, ENO, ILL, etc., FP6-funding: n.a.; EUREKA: approx. 2 meuros)

The activities listed above, which relate to networking with other European scientific organisations, are considered in Section 4.2.3 of this report.

CREST, comprising representatives from the research, funding and policy organisations in MS and AS, has a significant role to play in co-ordinating and opening up national research programmes. It has, for example organised workshops for MS and AS on the opening of national research programmes in Marine Sciences, Chemistry and Plant Genomics. The Commission sponsors these events.

The ERA-NET scheme will provide support through FP6 for the co-ordination of national and regional programmes in research and innovation. A Work Programme has been adopted and a Call for Proposals launched. The aim is to stimulate and support programme co-ordination in any area of science or technology. To qualify for support these programmes must be of a strategic nature and financed or managed by national or regional bodies [most often public authorities].

In some respects ERA-NET should do the same for the RTD programme managers as COST does for scientists. National programme managers will submit proposals that will then be evaluated by peer programme-director review. It will be a challenge to encourage programme managers in RTD agencies, ministries and Research Councils to submit proposals. They are not used to being at the receiving end. The Commission needs to consider how 'role models' and 'champions' could be established. The ERA-NET is primarily for MS but proposals may draw in adjoining European countries and bodies operating at a pan-European level.

The 2001 ERA Monitoring Report contained recommendations concerning the reciprocal opening of national research programmes, a European information system on national research policies and RTD programmes and the SINAPSE e-network [Scientific Information for Policy Support in Europe]. It is encouraging that an integrated electronic information system will be implemented under FP6, that the ERA-NET scheme is soon to be in place and that SINAPSE will be launched in pilot form in 2003.

Through Article 169 it is possible for the Community to engage in research programmes that are undertaken jointly by several Member States. The ERA-NET project could in principle lead into Article 169 activities and thereby to substantial new funding of jointly managed programmes. A proposal for a pilot programme 'European and Developing Countries Clinical Trials Partnership [EDCTP] has been adopted by the Commission and transmitted to Council and Parliament. At first sight this looks to be an encouraging way to advance the ERA. However Article 169 involves a cumbersome and complicated decision process. EDCTP has been more than three years in preparation along a tortuous route.

Article 169 offers interesting possibilities for research funding in many areas and for MS to take initiatives but the procedures are slow and the likelihood of success uncertain. The Commission has in the past considered a mechanism to create an 'empty shell' proposal i.e. take a suitably formulated generic proposal through the co-decision procedure and then once and for all establish an approved route with acceptable short cuts, but this was unpromising. A revision of the Treaty will be needed in order to give Article 169 more flexibility in an ERA context.

CREST has a crucial role to play in furthering the ERA. Some MS representatives consider that CREST should have a much stronger role in co-ordinating MS national RTD programmes. CREST should be given a stronger position – but how is this to be achieved? CREST has an advisory not an executive role. It is unfortunate that many of the national decision-makers choose not to attend CREST meetings but send alternates. A new definition of CREST's role, particularly in relation to the OMC, is needed.

The Commission has, together with MS, established a number of High Level Groups [HLGs] to examine specific issues of RTD policy. These are chaired by the Commission. The strength in such arrangements is their flexibility, informality and transience. As such the Expert Group accepts their value to the Commission but would be concerned if future HLGs address issues more properly lying within the remit of CREST.

The Expert Group noted the Commission's concern that 'the ERA initiative in its current form seems to be hampered by insufficient participation of the Member States'. It is indeed worrying that, despite some good progress, ERA initiatives receive less than full backing in the Member States. The Expert Group awaits with interest the outcome of the ERA-NET scheme under FP6, any actions to facilitate the use of Article 169 and the change in CREST's role in relation to recent developments of the OMC.

The Expert Group sees the main challenge for the ERA as the interface with MS and the opening of national research programmes and **recommends** that CREST should play a much stronger role in meeting this challenge. This CREST can only do through a deliberate process that leads to better focus and more efficient working methods.

The Expert Group believes that the ERA-NET and potentially Article 169 offer good opportunities for contributions to essential parts of the ERA. The Group is worried by the apparent lack of attention and interest shown by the MS in these possibilities but this situation should change under the new political mandate of the OMC.

At present there are only three members of staff in the Unit promoting this networking. In view of its central function in the development of the ERA, ERA-NET and the related activities should be given a higher profile and more staff.

The Expert Group recommends that the ERA-NET scheme be even more effectively promoted, given a higher profile and stronger central support by the Commission and that the possibilities of a revision to the Treaty be examined so as to free Article 169 from unnecessary political and bureaucratic constraints.

4.2.1.3 Mapping of Excellence

The purpose of mapping excellence was to establish the locations of the research institutes, university departments, units or teams within the ERA that are European or international leaders in their fields. The intention was not only to take a 'snapshot' of excellence but also to consider which groups were growing in capacity and reputation. Having identified such sources of excellence the Commission's intention was to make such capabilities known to the policy makers, the scientific community, industry and more widely. The underlying purpose was to exploit existing strengths and to encourage the growth of excellence, particularly in areas of strategic importance.

Pilot exercises have been undertaken in the areas of life sciences, nanotechnology and economics. Their aims were to assess feasibility, reliability of results and the needs of the potential user community. The exercises were based on bibliometrics and patents. The reports are in preparation but at the time of writing have not been seen by the Expert Group. However the Commission has reported a number of serious technical and methodological problems with the studies. These arise principally from the poor quality of bibliometric data in the Science Citation Index at laboratory level and the difficulties of collecting information on patents.

It appears that what has emerged from these pilot studies are maps of scientific activity rather than of excellence. The Expert Group considers that as the work was largely based on bibliometric data it is probably impossible to develop the maps of scientific excellence that were sought. Nevertheless, maps of activity, particularly for areas of strategic or newly emerging science, will be of importance in giving an overview of possible strengths and weaknesses across Member and Associated States. However other capacity indicators need to be added to those already in use.

The Expert Group therefore **recommends** that mapping of excellence should be discontinued. The Commission should instead focus on mapping activity in a few areas of strategically important science.

4.2.1.4 IPR Systems

Securing Intellectual Property Rights [IPR] from research or development activity, particularly in relation to new scientific advances, is now an integral part of European research policy. Increasing awareness of the importance of IPR across the research community and improving the systems and their use will lead to better exploitation of new knowledge and will be a persuasive factor in encouraging increased research investment. It will give Europe an improved scientific/commercial cutting edge, particularly with respect to new techniques.

The Commission is fully aware of the importance of forwarding the IPR issue but there are many interested parties to deal with – science community, European Patent Organisations, world IPR organisations etc. A number of IPR studies concerning issues such as international collaboration, internet-based research, industry/university links etc have or are being undertaken. Reports have and are being prepared and seminars planned.

There is still a strong need for increased awareness of the necessity to address IPR throughout the European research community. Large, multinational corporations and some universities are already attuned to the strategic importance and complications of intellectual property. Many SMEs do not give due consideration to IPR and they will need assistance in terms of professional and financial support.

The Public Research Organisations [PROs - including both universities and public research bodies] must develop a clear strategy on technology transfer and IPR. An important initiative to foster collaboration is through PRO TON Europe, a pan-European network of Technology Transfer Offices [TTOs] linked to PROs. This is supported by the European Commission as part of its Gate2Growth initiative. Gate2Growth.com provides a means to find relevant investors for a project or company. Investors are given efficient tools to identify appropriate investment opportunities through the following thematic networks: I-Tec Net, Pro Ton Europe, Gate2Growth Incubator Forum, and Gate2Growth Forum.

A significant amount of world-class research is undertaken in European PROs, which has immediate or potential commercial relevance. To capitalise fully on this it is essential that commercialisation becomes an integral part of the research process and issues of the ownership and exploitation of intellectual property rights are explored and new approaches developed. The interface between PROs and industry is dealt with by technology interface structures operating through TTOs.

The Expert Group recommends that the Commission should with some urgency develop guidelines on industry-PRO collaborations. An equitable treatment for the inventors, the body providing the funding and the user must be proposed. Such contractual arrangements must be well balanced such that there are advantages to all concerned parties.

A Community Patent could play an important role in advancing the ERA and in giving European science a commercial advantage. Objections to a Community Patent have been raised by some Member States, especially in connection with translation requirements, the role of national patent offices and jurisdictional issues. A political agreement was reached by the Competitiveness Council [3 march 2003] that should lead to a rapid adoption of the Regulations proposed by the Commission in 2000. However a number of steps remain to be taken and it will be several years before it becomes operational. **The Expert Group** welcomes this agreement and **recommends** that the Commission and MS continue efforts towards the introduction of a Community Patent as soon as feasible.

The Grace Period, which allows publication of research while retaining the option of patent application for a defined period [six months/one year], is an important matter for universities, PROs and business. **The Expert Group recommends** that the Commission should seek to promote a Grace Period of an agreed duration within the European Union, so as to be able to speak with one voice with the WIPO.

4.2.1.5 Research Infrastructures

It is widely accepted that access by scientists and engineers to world class research facilities and infrastructures is essential to the advancement of science and technology in almost all fields. Some types of infrastructures and facilities are expensive so that they can be dealt with only through initiatives at a European level. Such facilities and infrastructures, developed through multinational collaboration, have given European science and technology a world lead e.g. CERN, ESA, ECMWF, ESAF, JET, ESO etc.

Progress was made through the FPs 2,3,4 and 5[1989-2002] by improving access to large- scale infrastructure facilities and training/mobility initiatives. The catalogue of 140 facilities supported for access under FP5 makes impressive reading. Numbers of requests from the research community to use such facilities have been high and only about one third of the demand has been met. There have been about 2500 users per year. While such activities have provided good value for money, infrastructure development during this period has been *ad hoc*.

Acceptance of the central role that infrastructure could play in advancing the ERA vision led to an EC conference [Sept 2000]. This identified many of the issues to be addressed if a coherent infrastructure policy for Europe is to be established. The conference report also includes a Commission working document 'A European Research Area for Infrastructures'. Development of a strategy for infrastructure is complex because of the widely differing needs of the disparate science/engineering communities and the range of different laboratory/field based installations or databases that may be required. There is also concern from some of the smaller MS and the Candidate Countries that because the larger MS will be the principal funders they will dominate and consequently barriers to access may arise. It is also often difficult to ensure an independent objective evaluation of new proposals, a review of existing arrangements and measurement of impacts. There are always problems associated with the withdrawal of funding from old facilities. The Commission wishes to encourage the support of infrastructure by the private sector but industry, particularly SMEs, are deterred by the inflexibility, speed of development and IPR issues associated with FP matching funding.

So as to address these and other issues and to foster a more co-ordinated approach to policy making on research infrastructure a European Strategic Forum on Research Infrastructure has been established, following a Commission initiative. The MS have appointed high level representatives to the Forum that presently is an informal body. It explores the value of infrastructure proposals that it considers will have European significance and should also act as an infrastructure 'clearing house'. Representatives report the Forum's findings back to MS who may then decide to take a proposal forward through bi- or multi-lateral arrangements or not. Thus the Forum makes no commitments. The Commission wishes that the Forum be given a more formal status so that it could examine issues both on behalf of Council and on its own initiative and report accordingly. A proposal to change the status of the Forum in this way has been put forward to MS and the Expert Group supports this move.

To date the Forum has focussed on assessing the European worth of large, multinational facilities. There is also a major infrastructure element in FP6 with 450 meuros funding available. This will continue to support and develop existing infrastructure [e.g. through Integrated Infrastructure Initiatives] and new facilities of European significance. A European approach must therefore not only consider the national policies towards the large facilities but also the possible contribution that may come through FP6 and that which may be available through regional Structural Funds. Unless there is an overview strategy for infrastructure development the presently fragmented approach will be perpetuated.

The Expert Group recommends that the Commission develops a proposal that will ensure that infrastructure over a range of scales and from different funding sources is considered in a strategic and integrated manner. The Forum, even though not linked to FP6 or any formal funding sources, should play a role in fostering a European approach.

4.2.1.6 Pan- European electronic network for research

Substantial progress has been made in the creation of an electronic infrastructure throughout Europe, connecting national research and educational networks. This has arisen from GEANT, one of the largest projects in FP5 and with a budget of 200 meuros [80 meuros from FP5 and 120 meuros from MS]. The achievement over the last 2 years has been impressive in that there are now nine links with a 10 Gbps and eleven with 2.5 Gbps connectivity. Global links have also been established and the system is now one of the best world-wide. Unit connectivity costs have been appreciably reduced. From an ERA perspective this system reduces fragmentation and creates cohesion.

The GEANT backbone has been used in FP5 as a test bed for massive distributed numerical analysis and data processing, for example in a project such as Grid [particle physics]. Such activities, which will be continued into FP6, have been led by organisations such as CERN and ESA. This reflects the needs of very demanding research communities such as high energy physics, environment, meteorology etc. The funding in FP6 is to be increased to 300 meuros and this provides an opportunity to expand into a range of other applications e.g. climate change modelling, genomics etc. The Grid system, with GEANT as the carrier, is now moving from an experimental to a service provider phase.

These are important initiatives and the Expert Group looks forward to the continued expansion of the high speed GEANT links into all the MS and AS [a pan-European network] and their future use in distributed computing. The Expert Group, however, has gained the impression that the GEANT achievements and opportunities for use of Grid- type systems, at other than the very large-scale applications, are not appreciated by scientific community at large.

The Expert Group recommends that the Commission raises the profile of GEANT and promotes more widely the opportunities that are, and will soon, become available to researchers and industry to use these impressive data transfer and distributed computing facilities.

4.2.1.7 Regional dimension of the ERA

The involvement of the 220 EU regions in ERA activities is seen as very important by Council and the Commission. However there is recognition that regional decision- makers need to become much more aware of the contribution they can make in advancing ERA. The regions can, for example,

develop policies and use structural funds to enhance research centres, establish technology parks and encourage innovation through science and technology transfer between knowledge creators and users. The Commission has been encouraging the regions to become more pro-active in research/innovation and in this has received the support of the Committee of the Regions. The Committee has accepted that there are opportunities for synergy between projects that may be jointly supported from FP6 and structural funds while recognising that excellence in science/technology has to be the criterion for project acceptance. While there is a strong intention by the Committee to support ERA it looks to the Commission to offer examples of successful ERA enhancing projects or procedures that the regions could use as role models.

The Commission has held a number of workshops on regional involvement in the MS and Candidate Countries and a Communication spelling out the research opportunities for the regions has been widely distributed in both paper and electronic formats. Within the Commission there is now active co-operation between DG RTD, DG Regio and the other relevant policy Directorates. Studies have also been undertaken of the priority research needs of the outermost regions and for Candidate Countries.

FP6 offers opportunities in that the regional authorities can become project partners and the ERANET scheme is particularly relevant in that it is designed to support co-ordination measures at national or regional level. Encouragement is also being given to trans-regional co-operation. This could encompass projects on a substantial scale involving several regions, MS, AS and even third countries lying adjacent to the MS or AS boundaries.

It is highly probable that 8 to 9 beuros from structural funds will be used for RTDI for the period 2000 – 2006. However statistics on the level of RTDI supported through existing structural funding are lacking and should be collected and collated. It is also important that full consideration is given at the time of funding approval to the continued effective operation of research/innovation facilities once structural funding support has ceased. Nevertheless the prospect of linking some of this resource to FP6 projects is an exciting one and must be pursued with vigour.

The Expert Group is encouraged by the momentum building for regional support of the ERA. The Group wishes to see this drive increased and means found to raise the visibility of regional RTDI in an ERA context. One way of achieving this would be to establish a discussion forum of government experts that specifically addresses the regional dimension research/innovation. It may be possible to use such a forum to identify existing projects as models of what can be achieved through RTDI at a regional level or through regional and MS co-operation.

The Expert Group recommends that the Commission:

- encourages the MS and regions to collect and collate statistics on the use of structural funds for RTDI;
- takes every opportunity to involve the regions in FP6 while ensuring that project excellence and foresight are retained;
- explores the means to establish a forum of government experts to focus specifically on RTDI in a regional context.

4.2.1.8 Increasing investment in R&D

The Barcelona European Council [March 2002] gave an objective to the EU to increase research funding from the present 1.9% to 3% of GDP by 2010, most of the increase to come from private investment. There are major difficulties to be overcome in achieving this goal. For example there

are many players involved – DGs, ministries, industry, EIB, investment organisations – all with differing policies and cultures. Coherence in approach from these disparate bodies has to be established in order to increase investment in R&D. The Commission has, in this regard:

- Opened a debate with national authorities, industry and the financial sector on the issues;
- Established five expert groups to identify good practice and policy measures to improve the effectiveness of public R&D financing instruments;
- Entered into a co-operation agreement with the EIB Group [EIB & EIF] so that successful Framework Programme participants can seek financial support from EIB which will be complementary to Programme grants etc. The capital of EIB has been increased by 50% to 150 beuros [Jan 2003] and this will allow EIB to strengthen its support for Community policy including RTD. DG RTD is preparing a paper on 'Innovation & Participation of SMEs' that summarises options available to SMEs wishing to participate in FP6. A chapter on 'Complementary Financing' highlights EIB and EIF financing opportunities.

Under FP6, the premiums payable for obtaining a loan guarantee are eligible for 50% of costs. This is certainly progress.

The Expert Group fully recognises that to achieve more investment in R&D a change in culture and mentality is necessary and this takes time. This is particularly the case with respect to SMEs that, as a major source of innovation, play an important role in present and future European competitiveness. The increased participation of SMEs in FP6 must be facilitated. Recognising this FP6 has been structured to create the largest programme in the world to support SME research. In addition to the horizontal research activities involving SMEs, FP6 specifies that 15% of the budgets available for the seven priority thematic areas should be reserved for SMEs. The Commission has prepared a practical guide for participation of SMEs in FP6 but the SMEs still consider that their participation will be more difficult than before. Some of the perceived difficulties are as follows:

- An Integrated Project in FP6 requires the participation of at least three legal entities. In reality, the number taking part needs to be much higher. The capacity of some SMEs to negotiate with a large number of parties will be limited. They will be concerned of being outmanoeuvred by those negotiating for large companies/organisations, and of not being able to secure an appropriate activity or possibly defend their IPR.
- Businesses will be financed as to 50% of the direct and indirect costs but they will have to find the remaining 50%. Their own funds may not be sufficient to cover this, and their capacity to obtain bank loans is limited although the developments with EIB and EIF are encouraging.

The Expert Group recommends that the Commission:

- monitors closely the involvement of SMEs in FP6 and adjusts policy as necessary if the 15% target is not being met;
- publicises widely the loan opportunities available from EIB/EIF to FP6 participants;
- collects examples of good practice in the field of fiscal incentives and makes recommendations to Member States.

4.2.1.9 Mobility of researchers

Mobility of researchers is a crucial element in the development of the ERA. The aims of mobility are to:

- provide good people for employment;
- widen researchers' career prospects;
- foster the training and development of competencies at any stage of a career;
- promote excellence in European research;
- improve relationships between PROs and industry thus facilitating technology transfer;
- provide for uninhibited movement of researchers in the ERA market place.

Funding for mobility has been doubled in FP6 compared to FP5. The Commission has recognised that there are obstacles to mobility and has put in place or is developing initiatives and policies in association with MS and AS to overcome these.

In 2002, three important initiatives were taken by the Commission:

- the "Researchers' Mobility Web Portal" which is a system linking existing useful web sites or portals developed by national, regional, community and other organisations. This gives information on the legal and administrative situation, grants and employment opportunities for researchers. The Researchers' Mobility Web Portal will improve the availability and quality of information at the disposal of researchers and host institution. All the Member States and Candidate Countries are involved in this initiative and it is to be extended to the Associated Countries. The Portal will go on line in May 2003 and will be officially launched in the Autumn (<http://europa.eu.int/eracareers>).
- The development of a European Network of Mobility Centres, involving all Member States and Candidate Countries, will provide proximity assistance and advice to mobile researchers and their families. This project is under way. Each country has designated one or several bridgehead organisations with the aim of identifying and organising mobility centres at national level. This initiative will also be extended to the Associated Countries. Streamlining, co-ordination and exchange of information will be needed permanently to assure links between different mobility centres.
- In October 2003 the Commission will propose a Directive and an Action Plan for Measures on the conditions of entry and stay of researchers from a third country. Such an initiative results from close co-operation between the relevant services in the Commission, Member States and Candidate Countries.

The Expert Group welcomes these initiatives but the Commission must ensure that they operate effectively. With respect to the Research Mobility Web Portal the Commission should support close co-operation between all participating countries in order to achieve compatibility between the different systems.

The European Network of Mobility Centres still needs a lot of streamlining, co-ordination and exchange of information. These Centres are highly heterogeneous in character, scope and impact, and there is a lack of effective links between them. There may be difficulties in communication between the Centres and their national authorities. Whatever the reason it is disturbing that there is a lack of understanding of the basic issues between those who make the rules [ministries, national and regional authorities] and those who have to implement them.

To measure the effectiveness of a mobility strategy, comprehensive statistics are required. Some information is available on mobility between universities and research centres but hardly anything exists about mobility between academia and industry. The Commission recognises the importance of reliable statistical information on mobility and also the difficulties associated with its collection. A series of surveys are planned for 2003.

In some cases there is a lack of recognition within a researcher's career of time spent working at an institution outside Europe or in industry. Such attitudes are a hindrance to mobility and means of giving such attachments a more prestigious status should be examined. The Commission will present a Communication on this topic in June 2003.

The Expert Group recommends that the Commission:

- collects comprehensive mobility statistics;
- seeks to improve level of compatibility between national systems for the research mobility Web Portal;
- provides guidelines to assist MS and AS to establish comparable arrangements for their European Network of Mobility centres;
- examines means of giving recognition to a researchers career time spent in industry or outside Europe;
- draws the attention of evaluators for FP6 Integrated Projects to the importance of mobility within proposals.

4.2.1.10 International co-operation and enlargement

International co-operation in RTD plays an important role in advancing the ERA by helping to develop a science area that is authoritative and open to the world. Looking at Europe from outside, the ERA should be seen as an entity - not 16 partners. Good progress has been made in international science in this respect, but there is still some way to go.

International science in FP6 has three elements:

- (i) Opening of "Focusing and Integrating Community Research" to third countries.

The international dimension of FP5 has been given an even higher priority in FP6 with a budget of 285 meuros. This will be available to fund third country participation in the seven Thematic Priority areas and the NEST and SME activities of the 'Specific activities covering a wider field of research' of FP6. Four selected groups of countries [Russia and the other New Independent States (NIS), Mediterranean Partner Countries, Western Balkan countries, developing countries] are eligible for support. Other third countries can participate with funding if their involvement is essential to the project.

- (ii) Specific measures in support of international co-operation.

The continuation of specific international co-operation (INCO 3) is endowed with an FP6-budget of 315 meuros for the same target group of countries. Its strategic objective is to lend support to the implementation of the Community's foreign and development aid policies. Work Programme content based on mutual interest is identified through dialogue with partner regions.

(iii) International activities in the areas of mobility.

The international mobility scheme, which will be available for both incoming and outgoing Fellowships, is likely to have a budget around 108 meuros.

Work Programmes for all areas have been developed and several calls are open allowing or explicitly demanding international participation by INCO target countries.

The Programme Committee of the Specific Programme 1 'Focusing and Integrating the European Research Area' (SP1) supervises all SP1 activities. It meets in thematic and horizontal configurations, including international issues. The Committee had not until recently discussed international co-operation in science and technology and its role in advancing ERA.

An internal steering group (International Co-operation Steering Group), with participation from DG Infso, DG Tren, DG Fish and DG RTD, has been established to ensure overall coherence across the Framework Programme and complementarity between different types of international co-operation activities.

The responsibility for opening the 7 Thematic Priorities as well as for NEST and SME support to third countries [under (i) above] lies with the operational RTD Directorates in charge of these Thematic Priorities, while the Units in charge of international co-operation have a support and co-ordination role. Financial contributions to international scientific co-operation under Article 164 of the Maastricht Treaty will thus be handled by the services in charge of the respective parts of SP1. The experience from the International Co-operation Units [RTD/05 and 06] must be imparted to these thematic directorates, if they are to carry this responsibility efficiently. It is understandable that such transfer of "professional culture" takes time and effort, but it is important that the uncertainty is quickly replaced by clear guidelines and awareness that relations with third countries require well-established trust.

The Expert Group notes with appreciation the establishment of an International Co-operation Steering Group. However the Steering Group has not yet managed to convey a clear picture of international S&T co-operation in FP6 to all stakeholders. Uncertainty still reigns not only within some Commission Services but also among CREST members and in the Member States concerning the ways and means of multilateral and bilateral international co-operation in FP6. **The Expert Group recommends** that doubts about intentions and policies be removed, together with managerial uncertainties and inadequacies.

On a broader front than 'internationalising' the 7 Thematic Priorities under FP6, there is a need to open ERA to its neighbours and other international partners and develop a coherent, global policy for its international research. This can take place through a structured dialogue concerning priorities, action plans and activities between the Community, the MS and other public and private partners. These activities are often slow to advance due to the complexity of international arrangements but the Commission has made some good progress in establishing:

- an on-going dialogue within the frame of ASEM (Asia Europe Meeting) and workshops on priority themes for future S&T co-operation;
- an on-going dialogue and workshops on bi-regional co-operation under the ALCUE umbrella (with Latin America, Caribbean and EU) and in the context of the preparation of association agreements with MERCOSUR and Chile;

- a taskforce on research co-operation between the EU and the ACP countries (70 countries from Africa, Caribbean and the Pacific);
- Monthly meetings between science advisers from Member States, the Commission and delegations from the (now mostly former) applicant countries;
- a “permanent” conference in Australia, organised by Member States;
- action plans for research co-operation with Russia and the other NIS.

There is a range of interaction spanning open dialogue with Member States and partner regions on the policy side to promote and support collaborative research and research co-ordination. Researcher mobility and exchange programmes have long existed, both at bilateral and European levels, as an effective way to ensure mutual knowledge and trust in addition to promoting scientific excellence. FP6 – SP2 - offers an interesting expansion of possibilities in this respect. One aim is to enable third-country researchers to work in laboratories in MS, with financial support for the laboratories, in addition to the existing possibilities of support such as the International Mobility Programme.

Of the two units entrusted with international co-operation, DG RTD Unit 05 is responsible for co-ordinating the policy aspects of international S&T co-operation including the implementation of the INCO programme, the ongoing political dialogue with third countries, negotiations of international agreements, etc. The Expert Group considers that the staff resource working on policy issues is insufficient. This limits follow-up activities even when frameworks for co-operation have been established. **The Expert Group recommends** that the apparent staff shortage in Unit 5 be examined so that international obligations can be met adequately.

The other international co-operation unit, DG RTD Unit 6, is responsible for conceiving and developing the instruments of international S&T co-operation, particularly in the context of FP6 implementation. In collaboration with RTD/05 it ensures the implementation of INCO activities as well as the provision of the secretariat of the International Co-operation Steering Group etc. It is instrumental in making the significant change from FP5, with its strong horizontal Specific Programme 'Confirming the international role of Community research', to FP6's division of labour between the Thematic Directorates and the horizontal aspects of the international co-operation programme. **The Expert Group recommends** that the experience of Unit 6 be drawn upon to achieve the cultural change in the Thematic Directorates that will allow them to meet the international challenges associated with third countries' participation in FP6.

There are a number of organisations and instruments that also have a relevance to the international dimension of the ERA e.g. INTAS, COST, EUREKA etc. These will be discussed in Section 4.2.3 of this report.

4.2.1.11 Science and society

There are many challenges facing the Europe Union – economic, political, social and environmental. It is indisputable that scientific and technological research and innovation in the EU, its MS and AS will play an important role in addressing these issues. However, while the overall European population recognises in general terms the essential contribution that Science and technology can make most lack any understanding of science/technology principles and feel

alienated by it: in some cases threatened. This state of affairs has to be ameliorated in that such lack of awareness is detrimental to the advance of S&T and to the ERA.

It is therefore fully appropriate for the Commission to include Science & Society as one of its principal operational activities within the ambit of the ERA. The Commission is endeavouring to encourage MS individually and jointly to:

- increase public awareness and understanding of science, thus giving S&T a high and attractive profile that will encourage more young people to follow scientific or technical careers;
- ensure that policy making is based on sound ethical science and that its contribution to policy is transparent;
- centre S&T activities around citizens' needs and in particular the fuller participation of women in S&T.

This is a wide- ranging and complex spread of activities. The Commission is addressing these through the production of a 38 point Science & Society Action Plan. Good progress has been made in the past by the Commission and continues with respect to 'Women in Science'. The inclusion of a gender appraisal and consideration of ethics in the evaluation of FP6 proposals is very much welcomed by the Expert Group.

However admirable this drawing together of science and society issues and publication of the Action Plan may be, implementation is going to be difficult. This will be due principally to differing cultural and educational perspectives in MS and this will be exacerbated with enlargement of the EU. Nevertheless the Expert Group commends the Commission in taking a lead in these challenging areas.

Following the detailed assessment of the Science and Society sector by the 2001 Expert Group it was considered that the 2002 Group did not need to focus on this area to the same degree. Nevertheless it is very important in the ERA context and **the Expert Group recommends** that it should be thoroughly examined on a future occasion.

4.2.2 Management aspects

In 2001 there was a major restructuring of management in DG RTD. These changes were necessary in order to:

- develop policy and implement strategies to advance the ERA;
- make preparations for the development of Work programmes and the new operation Instruments [Networks of Excellence and Integrated Projects, Special Actions] under FP6;
- smooth the integration of Candidate Countries into the ERA and FP6;
- expand the international dimension of the ERA and FP6 etc.

This major re-organisation took place at a time when Commission financial and personnel management reforms were also being introduced. The arrangements that came into place in 2001 and have been operating during 2002 comprised eight Operational Directorates [E to L] with specific responsibility for the principal Thematic Priorities of FP6 and four Directorates [A to D] and six Units with a cross- cutting horizontal and/or policy focus. Advancing the ERA is the responsibility of all Directorates and Units in DG RTD but Directorates A to D and two Units are particularly important in this respect.

Consequently the Expert Group concerned itself primarily with the management of these Directorates and Units. The Expert Group was pleased to note that the new arrangements appear, in general, to be working well. There are, however, some concerns, as follows:

- There appear to be 20 Directors or Heads of Units with direct line responsibility to the Director General. **The Expert Group** considers that this DG RTD management structure is too broad and **recommends** that the Commission considers a restructuring so as to give the Deputy Directors General a more prominent role.
- Responsibilities for some of the Thematic Priorities of FP6 may lie in more than one of the Directorates. Such cross-cutting arrangements can be very beneficial to the research programme in that they lead to exchange of experience between the Directorates and Units. However there is some confusion within the European science community as to 'who is responsible for what?'. **The Expert Group recommends** that DG RTD finds a means to give greater transparency as to where its specific research responsibilities are located within the Directorate.

In order to progress the ERA, the role of DG RTD has to be transformed from that of a research agency towards that of a research ministry. The new management structure, giving more focus on research policy and strategic issues, is a positive move in this direction. The Commission has modified its recruitment policy and is now looking to engage officers who can set research needs in a social/political context and who have good written and verbal communication skills. A high level of scientific/technological skill is needed in new Science Officers but this is not enough on its own. Staff in DG RTD are now employed on the same terms as other Commission staff making it easier for them to move between DG RTD and the policy Directorates. It is also now possible to recruit officers through open competition and retain them for 5 to 10 years, afterwards giving them the opportunity to move on. So as to address a specific, specialist and short-term need staff can be appointed on a three-year contract. The Expert Group welcomes this newly available greater flexibility but notes that in some MS research ministries and the US National Science Foundation this need is met by seconding specialists from Public Research Organisations [PROs] and the universities. **The Expert Group recommends** that DG RTD explores short-term secondment arrangements from MS and AS, particularly to attract high quality staff to the research policy sector. Overall the new arrangements, described above, appear to be working. In the past there has been a relatively poor response within the Commission to vacancies in RTD, now there are many applications.

The new Instruments of FP6 are likely to lead to much larger projects than those in FP5 and greater autonomy being given to the consortia for project management. In the short term putting such new arrangements in place will impose a heavy work-load on Directorates E to L but in the medium and long term work loads should be significantly reduced. The Expert Group has identified two Units [B.2 and 5, see sections 4.2.1.2 and 4.2.1.10, respectively, above] where the present staff resource appears to be inadequate for the task in hand in relation to promoting the ERA. **The Expert Group recommends** that the Commission examines and adjusts as necessary the balance of staff resources in relation to the changes taking place within DG RTD in its move to be in the vanguard of European research policy and innovation.

The management of FP6 is undertaken through Programme Committees that will be constituted differently according to the Specific Programme and issues to be discussed. The Commission services provide support to the PCs. The PCs will be required, for a specific field, to address work programmes and their review, content of the Calls for Proposals and approvals. In addition the PCs, in a different configuration, will consider horizontal measures concerning the programme as a whole to achieve coherence between fields. This is a new arrangement to that operating for the FP5

PCs. FP6 is at the start of its cycle and it is therefore not possible to assess the effectiveness of this changed approach but it is an issue which succeeding monitoring groups should examine.

The Expert Group considered that there was good linkage between monitoring activities and management so that recommendations from groups are now having more impact on the Commission services' thinking and policy implementation than formerly. Thus the monitoring activity is increasingly seen as being positive and beneficial to the FPs and the ERA. The monitoring and evaluation processes are currently under review by the Commission.

4.2.3 Links with other policies and activities

There are a number of Europe-based activities that involve collaboration and funding between national organisations but also substantial support from the EU. These networking activities are relevant to the ERA. The principal areas are EUREKA, COST and INTAS.

The EUREKA initiative, which is directed towards the industrial take up of RTD, is funded through 34 members; 2 meuros come from FP6 as a Community contribution to the budget of the Secretariat. EUREKA projects cannot be funded by FP6 unless they fit within its scope and are evaluated through the same procedure as all other FP6 projects. To facilitate such evaluation and include views that are specific to the EUREKA aims, it would be helpful to have evaluation criteria more relevant to EUREKA and to invite EUREKA to appoint evaluators. The Expert Group finds that EUREKA's strengths are its potential closeness to the market place, its freedom to support projects not covered by FP6, and its capability of mobilizing public and private national funds. These remain good reason for maintaining and supporting EUREKA. **The Expert Group recommends** that the Commission makes best use of its membership of EUREKA to further the interaction between FP6 and EUREKA.

COST is an inter-governmental co-ordination between research teams from 34 member countries. Non-European organisations are involved. COST is a long-standing bottom-up mechanism, which has for a long time successfully delivered one of the priorities of ERA policy. In order for COST to continue to fulfill its intergovernmental role within ERA, and because the Commission wishes to end its involvement in the administration of COST, COST's management structure is being examined on the basis of an assessment report published in 2002.

The Expert Group understands that a contract is under preparation between the Commission and European Science Foundation concerning the future COST Scientific Secretariat and that a grant of at least 50 meuros and up to 80 meuros will be available to COST. **The Expert Group recommends** that the Commission considers the new proposals urgently and seeks to implement them as quickly as possible, such that the COST activities will suffer minimal damage from disruption.

The INTAS objective is to promote, through international co-operation, research in Russia and the other Newly Independent States [NIS] so as to contribute to social and economic progress and consolidate democracy in these countries. The INTAS role has been to provide a small level of support to individual researchers to help the best science in the NIS survive the drastic societal disturbance of the 1990s. It has now changed so as to stimulate groups of NIS scientists to participate in FP6's seven Priority Thematic Areas. The Commission wishes to maintain INTAS but there is a legal difficulty in that the Commission provides the money for INTAS and sits on the INTAS board but only has partial responsibility.

INTAS may have a limited lifetime as the NIS become more self-reliant. However, for the present, it provides a valuable service in maintaining contact with and support for the weaker NIS and by assisting the consolidation of research groups in the stronger so that they are able to participate more fully in and obtain support from the Framework Programmes. If INTAS did not exist then contact with some NIS might be lost. In the view of the Expert Group INTAS cannot function without central funding from the Framework Programme. **The Expert Group** notes with appreciation the grant of 70 meuros allocated to INTAS under FP6 and **recommends** that the Commission continues to make full use of and further develops this instrument for interaction with NIS.

The European Advisory Board [EURAB] was established as an independent body to advise the Commission on the design and implementation of EU RTD, particularly in relation to the development of the ERA. EURAB has been working since 2001 and has published its first advice to the Commission. EURAB considers that if ERA is to contribute to the social and political objectives set out in the Lisbon and Barcelona Councils its activities must be based on discovery, innovation and education. The focus of its recommendations is on competitive science, improved mobility, attracting young people into science and more effective innovation through better links between universities and industry, including improved IPR/patent arrangements. EURAB also offers advice on the evaluation procedures to be used for FP6 and supports the establishment of a European Research Council(s) [ERC(s)].

The Expert Group supports in general the EURAB recommendations but notes that its concerns are predominantly directed towards the university science sector and that the contribution that the PROs and engineering disciplines can make to ERA receives much less attention.

The Expert Group agrees with EURAB that the FPs have been concerned primarily with applied research and that more fundamental, curiosity-driven research has not been prominent. A number of previous FP Monitoring Panels have recommended that basic research should play a greater role in the FPs but the Commission has not acted on these recommendations. EURAB suggests that one way forward may be through the establishment of a European Research Council. In October 2002 the Danish Research Councils organised a European conference to examine the contribution an ERC could make to the ERA. A majority of participants believed there was a need for an ERC that would focus on top quality, peer reviewed fundamental research in science, engineering, humanities and social sciences. Funding should be 'fresh money' and could come from the EU, national governments and industry but the ERC should be independent in its operation. The Expert Group considers that a properly constituted ERC may contribute to the ERA but there is a requirement to demonstrate clearly that it would be providing answers to problems that cannot be addressed through existing structures [e.g national research councils, European Science Foundation etc].

The Expert Group considers that ERA must have tools that are outside the Framework Programmes for its effective and rapid development. COST, INTAS, and EUREKA are examples of such tools. The creation of one or more suitably defined European research councils could be another mechanism. Providing suggestions of this nature falls outside the scope of this monitoring report. However, the Expert Group is unclear as to where such issues are being considered within the Commission [other than in EURAB] and how these ideas are being taken forward with national research bodies, ESF etc. **The Expert Group recommends** that the Commission more actively pursues the identification of such extra-FP mechanisms for opening and integration of European research. These mechanisms need central leadership, financing, political attention and greater transparency.

4.3 PREPARATION OF THE CONTRIBUTION OF THE SIXTH FP, IN PARTICULAR THE CONTRIBUTION TO THE REALISATION OF THE OBJECTIVES OF ERA

The Sixth Framework Programme [2002 - 2006] was adopted on 03.06.2002 and is an element of the ERA. As such the ERA pervades throughout the Programme's three activities:

- focussing and integrating Community research [12585 meuros];
- structuring the European Research Area [2605 meuros];
- strengthening the foundations of the European Research Area [320 meuros].

The 2002 monitoring the preparation and implementation of the Specific Programmes under FP6 is being undertaken by a number of Panels. These have to consider the final stages of FP5 and any transitional arrangements from FP5 to FP6. The establishment of the ERA has led to a new philosophy in FP6 from that in FP5 and some major new instruments have been introduced to respond to this. These are principally the Networks of Excellence and Integrated Projects that will encourage the formation of larger consortia than previously, thereby developing more extensive co-operation. During 2002 the Commission has devoted a considerable effort to informing the research community of these new arrangements through electronic means, publications, conferences etc. Overall it appears that the Commission has been effective in this regard but as the first call for FP6 proposals have only recently been made a definitive judgement is not possible. The effectiveness of the Commission's efforts will also vary from between programmes and reference should therefore be made to the individual Specific Programme Monitoring reports.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

Although the difficulties over the Experts' contracts at the start of the monitoring led to a disruption in progress with the work the Group has nevertheless obtained a sufficient level of insight to undertake the task set within the Commission's brief.

The Commission has generally made well-considered verbal and written responses to the 30 recommendations from the 2001 monitoring.

Progress with the eleven operational objectives has been considered in some detail and a number of recommendations are given below. The principal concern emerging is that three years after the ERA initiative was launched most MS do not appear to be prepared to participate fully. This could prevent the programme from reaching its objectives. However there have been some notable achievements. The Group's conclusion is that the Commission must press the ERA forward through the operational activities [particularly benchmarking and networking]. The political mandate to apply the Open Method of Coordination [OMC] will help the MS and AS greatly to move towards the goals of Lisbon and Barcelona. CREST is a principal forum through which the OMC will operate and it needs to be strengthened to fulfill this role effectively.

Europe is rich in scientific and technological skills and may produce one third of the world's scientific and technical knowledge, but laudable as this may be there is the need to bridge the gap between such knowledge and the application and innovation leading to the development of sound science-based European policies and commercial take up. Both will give European enterprises a competitive edge globally. An important factor in this respect is to increase awareness of the

importance of IPR across the research community and to establish a climate through the ERA leading to closer links between SMEs, universities and public research organisations. The political agreement reached by the Competitive Council, which should lead to rapid adoption of a Community Patent, is a major advance in this respect and very important in an ERA context.

The involvement of EU regions in ERA activities is essential but the regional decision-makers need to become more aware of the contribution they can make in advancing the ERA and the value to them in being associated with it. While the Directorate RTD is taking the issue forward more direct contacts with those working in the regions are needed.

The objective of increasing EU research funding to 3% of GDP is applauded by the Group. There are major difficulties to be overcome, nevertheless the Commission has entered into a constructive debate with national authorities, industry and the financial sector. A small but important step has been made through a co-operative agreement between the Commission and the EIB and EIF such that successful FP participants can seek financial support from these sources. These opportunities need to be more widely publicised, particularly to SMEs. The latter play a vital role in European competitiveness. In recognition of this FP6 has been structured so as to create the largest programme in the world to support SME research. However the SMEs consider their participation in the current FP will be more difficult than formerly. Their engagement is crucial and these perceived or real difficulties must be addressed.

Mobility of researchers is an essential element in the development of the ERA and funding for this has been doubled in FP6 compared to FP5. The Commission has taken a number of important initiatives e.g. the development of a European Network of Mobility Centres. A number of obstacles still need to be removed before the uninhibited movement of researchers in the ERA market place is achieved.

International co-operation in RTD helps to develop the ERA as a science area authoritative and open to the world. FP6 is well founded in this respect but the programme has to become more transparent internally and externally and management uncertainties over who is responsible for what need to be removed.

Europeans recognise the essential contribution science and technology make to the economic, political, social and environmental scene but many feel remote from it. This detachment is detrimental to the ERA. The inclusion of Science & Society as one of the Commission's principal operating activities within the ambit of the ERA is therefore necessary and some good progress has been made.

The new management arrangements that came into place in 2001 and have been operating during 2002 appear in general to be working satisfactorily but some refinements may be needed. The new management structure puts more focus on research policy and strategic issues and this is needed in order to progress the ERA. However this implies that Commission officers have now to set research needs in a social/political context. Such skills will have to be learnt by some staff or introduced by newly recruited staff.

There are a number of European activities that involve collaboration and funding between national organisations and also substantial support from the EU [e.g. EUREKA, COST, INTAS etc]. Such networking activities support the ERA and the Commission should retain and fund appropriate arrangements for this.

The FPs have been concerned primarily with applied research. More fundamental, curiosity-driven research has not been prominent. Previous FP monitoring panels have expressed the view that basic research should play a greater role in the FPs but such recommendations have not been fully accepted by the Commission. A way forward may be via a European Research Council (s). Properly constituted research council(s) could contribute to the ERA and should provide answers to problems that cannot be addressed through existing structures e.g national research councils, European Science Foundation etc.

5.2 *RECOMMENDATIONS*

The ERA 2002 Expert Group makes the following recommendations:

5.2.1 **Operational Activities**

1. The unit centrally responsible for **benchmarking** in DG Research should develop a higher profile and the role of benchmarking in advancing the ERA should be more clearly defined and communicated. Funding should be made available from FP6 or other sources to develop interest and competency in the MS and AS. Such funding could be used as 'seed corn' to encourage new, or to complement existing, activities [see 4.2.1.1].
2. As a principal interface with Member States, **CREST** should play a much stronger role in the opening of national research programmes. This CREST can only do through a deliberate process that leads to better focus and more efficient working methods [see 4.2.1.2].
3. The **ERA-NET** scheme should be even more effectively promoted, given a higher profile and stronger central support by the Commission. The possibility of a review of the Treaty should be examined so as to free Article 169 from unnecessary political and bureaucratic constraints [see 4.2.1.2].
4. **Mapping of excellence** should be discontinued. The Commission should instead focus on mapping activity in a few areas of strategically important science [see 4.2.1.3].
5. The Commission should with some urgency develop guidelines on industry-PRO collaborations in relation to **IPR**. An equitable treatment for the inventors, the body providing the funding and the user must be proposed. Such contractual arrangements must be well balanced such that there are advantages to all concerned parties [see 4.2.1.4].
6. The Commission and Ms should continue efforts towards the introduction of a **Community Patent** as soon as feasible [see 4.2.1.4] and seek to obtain an agreed length of time for the '**Grace Period**' within the European Union, so as to be able to speak with one voice with the WIPO [see 4.2.1.4].
7. The Commission should develop a proposal that will ensure that **infrastructure** over a range of scales and from different funding sources is considered in a strategic and integrated manner. The European Strategic Forum on Research Infrastructure, even though not linked directly to FP6 or any formal funding source, should play a role in fostering a European approach [see 4.2.1.5].
8. The Commission should raise the profile of GEANT and promote more widely the opportunities that are, and will soon, become available to researchers and industry through the

pan -European electronic research networks to use these impressive data transfer and distributed computing facilities [see 4.2.1.6].

9. The Commission should:

- encourage the MS and **regions** to collect and collate statistics on the use of structural funds for RTDI;
- take every opportunity to involve the regions in FP6 while ensuring that project excellence and foresight are retained;
- explore the means to establish a forum of government experts to focus specifically on RTDI in a regional context [see 4.2.1.7].

10. The Commission should:

- monitor closely the involvement of **SMEs** in FP6 and adjust policy as necessary if the 15% target is not being met;
- publicise widely the loan opportunities available from EIB/EIF to FP6 participants;
- collect examples of good practice in the field of fiscal incentives and make recommendations to Member States [see 4.2.1.8].

11. The Commission should:

- collect comprehensive **mobility** statistics;
- seek to improve the level of compatibility between national systems for the research mobility Web Portal;
- provide guidelines to assist MS and AS to establish comparable arrangements for their European Network of Mobility centres;
- examine means of giving recognition to a researchers career time spent in industry or outside Europe;
- draw the attention of evaluators for FP6 Integrated Projects to the importance of mobility within proposals [see 4.2.1.9].

12. Doubts about the Commission's intentions and policies in relation to multi- and bi-lateral **international co-operation** in FP6 should be removed together with managerial uncertainties and inadequacies. The apparent staff shortage in Unit 5 should be examined so that international obligations can be met adequately [see 4.2.1.10].

13. The experience of Unit 6 should be drawn upon to achieve the cultural change in the Thematic Directorates that will allow them to meet the **international challenges** associated with third countries' participation in FP6 and doubts over managerial uncertainties should be removed [see 4.2.1.10].

14. A detailed assessment of the **Science and Society** sector should be undertaken by a future monitoring group [see 4.2.1.11].

5.2.2 Management

15. The Commission should consider a restructuring of the DG RTD management so as to give the Deputy Directors General a more prominent role [see 4.2.2].

16. DG Research should find a means to give greater transparency as to where its specific research responsibilities are located within the Directorate [see 4.2.2].
17. DG RTD should explore short-term secondment arrangements from MS and AS to attract high quality staff to the research policy sector [see 4.2.2].
18. The Commission should examine and adjust as necessary the balance of staff resources in relation to the changes taking place within DG RTD in its move to be in the vanguard of European research policy and innovation [see 4.2.2].

5.2.3 Networking with external organisations

19. The Commission should make best use of its membership of EUREKA to further the interaction between FP6 and EUREKA [see 4.2.3].
20. The Commission should consider its proposed contract with the ESF concerning COST scientific secretariat urgently and seek to resolve any difficulties as quickly as possible, such that the COST activities will suffer minimal damage from any disruption [see 4.2.3].
21. The Commission should continue to make full use of and further develop INTAS for interaction with NIS [see 4.2.3].
22. The Commission should more actively pursue the identification of mechanisms outside of the FP for opening and integrating European research. These mechanisms need central leadership, financing, political attention and greater transparency [see 4.2.3].

6. ANNEXES

6.1 2002 ERA MONITORING EXPERT GROUP MEMBERSHIP

<p style="text-align: center;"><i>Ms Claire Demain-Paternotte</i> <i>Mr Niels E. Busch</i> <i>Mr Daniel Thomas (Chairman)</i> <i>Mr Brian Wilkinson (Rapporteur)</i></p>
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6.2 FOLLOW-UP TO 2002 ERA EXPERT GROUP RECOMMENDATIONS

2001 Recomm. No	Character of recommendation	Type of response	Quality of response by Commission	Impact of response during 2002	Comments	Recom.2002 No if applicable
1	Clearer strategy goals, milestones timetable	Publication of a communication	satisfactory	satisfactory		
2	Reciprocal opening of national programmes	Establishment of ERA-NET	satisfactory	satisfactory	Reciprocal opening promoted through OMC and CREST	2 3
3	Design and implementation of a European RTD policy info-system	Will be implemented in 2003	satisfactory	satisfactory		
4	Infrastructure policy	Strategic forum on research infrastructure established	satisfactory	satisfactory		7
5	Mobility-nat. circumstances	Series of actions in hand	satisfactory	satisfactory	Career development for researchers is important	11
6	Mobility-legislation/admin	Series of actions in hand	satisfactory	satisfactory	Recognise importance of respecting subsidiarity issues	11
7	Mobility-statistics	Statistical survey in hand	satisfactory	limited	Mobility strategy needs a statistical base	11
8	Regional dimension	Conferences & website	satisfactory	limited		9
9	Technologically less advanced regions	Conferences, ERA-NET	satisfactory	v.limited	More needs to be done to involve Candidate Countries in FP6	3
10	Use of INCO experience	Opening of FP6 to some third countries, mobility scheme	unsatisfactory	limited	Problems with sharing of professional culture	12
11	ERA to develop as coherent unit when viewed from outside	Number of regional agreements will be with ERA that will be presented as one entity	unsatisfactory	unsatisfactory	More progress needed at programme, project, and scientist level	12 13
12	More effective use of bilateral agreements in protection of IPR		unsatisfactory	unsatisfactory	No commitment from Commission left to WTO	5 6

13	Potential of COST, INTAS, EUREKA should be better utilized	Relationships with COST, INTAS are being explored	unsatisfactory	v.limited	Outstanding issues should be resolved with some urgency	19 20 21 22
14	Science & society action lines	Implementation of actions has commenced	satisfactory			14
15	SINAPSE should be provided for	Pilot phase will be implemented in 2003	satisfactory	satisfactory		
16	Young people and science	Wide range of activities including media involvement	satisfactory	v.limited		
17	Mapping of excellence	Pilot exercises in 3 areas	satisfactory	v.limited	Mapping of activity possible but not excellence	4
18	Outsourcing of benchmarking	Discussions with Member States	satisfactory	v.limited	Concern over progress	1
19	Stronger commitment to benchmarking centrally and in Member States	Discussions	satisfactory	v.limited	Concern over progress	1
20	More emphasis on enlargement	The point is made that they are in and “preferential treatment” could be counterproductive	satisfactory	satisfactory	Should fall within the purview of the Science & Framework panels but probably more could be done to assist and consolidate new MS	
21	Encouragement to SMEs and universities to engage in patenting	Wide range of activities including media involvement	satisfactory	satisfactory		10
22	National Contact points	Training sessions, guidelines	satisfactory	satisfactory		
23	Community Patent	Major efforts but difficulties	satisfactory	satisfactory		
24	Cooperation between Commission & EIB	Good progress through working groups, information in FP6 package	satisfactory	limited		10
25	Womens interests & participation in FPs	Gender dimension is explicit in FP6. Measures to increase participation in evaluations	satisfactory	satisfactory		
26	Management attention to shift “agency to ministry”	Change of organization and of orientation	satisfactory	some progress	Personnel with experience in policy making scarce	17

27	Indicators of success, criteria, milestones, etc. for monitoring ERA progress	Suggest use of potential objectives [tableau de bord]	unsatisfactory	v.limited	The operational objectives could be used as a formula but goals against a timescale are needed OMC should help	
28	Development of stronger interaction with Member States	Discussions with HLG; leaving the responsibility with the Member States	unsatisfactory	unsatisfactory	CREST should play a key role OMC, ERA-NET benchmarking are ways forward	1 2 3
29	Linking management, monitoring & evaluation	Reviews undertaken and stronger links established Self-assessment in place	satisfactory	satisfactory		
30	Indicators for evaluation and monitoring	Commission paper on strategies for evaluation and monitoring	satisfactory	satisfactory		

6.3 LIST OF DOCUMENTS PROVIDED BY THE COMMISSION

V : electronic version available

Table of documents distributed to the 2002 ERA Monitoring			
	Doc. N°	Title of Document	Date Sent/given
V	1	Broad Guidelines of the 2002 monitoring exercise	meeting on 7 Nov.
V	2	List of experts involved in the 2002 monitoring exercise	meeting on 7 Nov.
V	3	The 1999 to 2001 monitoring reports of Framework Programme	meeting on 7 Nov.
V	4	The 2001 Monitoring report of ERA	meeting on 7 Nov.
V	5	Communication "More research for Europe - Towards 3% of GDP (11-09-2002) COM(2002) 499 final	meeting on 7 Nov.
V	6	Communication ERA "Providing new momentum" - Strengthening-Reorienting-Opening up new perspectives	meeting on 7 Nov.
V	7	The Sixth Framework Programme (Decision of the European Parliament and of the council of 27 June 2002)	meeting on 7 Nov.
V	8	Council Decision of 30 September 2002 - "Integrating and strengthening the ERA" (2002-2006)	meeting on 7 Nov.
V		Council Decision of 30 September 2002 - "Structuring the ERA"	meeting on 7 Nov.
V		Council Decision of 30 September 2002 - "adopting a specific programme of research, technological development and demonstration to be carried out by means of direct actions by the Joint Research Centre"	meeting on 7 Nov.
V		Council Decision of 30 September 2002 - "adopting a specific programme (Euratom) for research and training on nuclear energy"	meeting on 7 Nov.
V		Council Decision of 30 September 2002 - "adopting a specific programme for research and training to be carried out by the Joint Research Centre by means of direct actions for the European Atomic Energy Community"	meeting on 7 Nov.
V	9	The Rules for Participation of the Sixth Framework Programme (adopted in 5.11.2002)	meeting on 7 Nov.
V	10	Organigramme on DG Research	8-Nov
V	11	Support to the participation of SMEs in the 6 FP	8-Nov+ sent by e-mail on 13 Nov.
	12	Science and Society - an action plan (<i>leaflet only available in paper copy</i>)	
V	13	Science and Society - an action plan	8-Nov
V	14	Slides presentation made by C. Bernard : "The ERA : Providing new momentum"	8-Nov
	15	IHP project report - "Optical Infrared Coordination Network for Astronomy"	22- Nov
	16	IHP project report - "European Natural history specimen information network"	22- Nov
	17	IHP - "Research infrastructures 2002-volume A"	22- Nov
	18	IHP - "Research infrastructures 2002-volume B"	22- Nov
	19	Updated list of CREST members as of 08.10.2002	22- Nov

	20	CREST 1205/02 - "Draft summary conclusions of the 284 the meeting of the scientific and technical research committee (CREST) held in Brussels on 5 July 2002"	22- Nov
	21	CREST 1207/02 - "Draft summary conclusions of the 285th meeting of the scientific and technical research committee (CREST) held in Aalborg, Denmark, on 12 and 13 September 2002"	22- Nov
	22	The Regional Dimension of the European Research Area	22- Nov
	23	Leaflet - "Interested in mobility and career development opportunities for researchers ? Marie Curie Website : http://europa.eu.int/mariecurie-actions	22- Nov
	24	Slides presentation: "Involving regions in the European Research Area"	22- Nov
	25	IHP - "Conditions of entry for researchers undertaking international mobility"	22- Nov
	26	Benchmarking national R&D policies - STRATA-ETAN expert working group "Human Resources in RTD" (final report 28 June 2002)	22- Nov
	27	IHP - "An enlarged Europe for researchers" "Une Europe élargie pour les chercheurs" - Brussels, 27-28/06/2001	22- Nov
	28	2001 European Research Area Monitoring Expert Group Recommendations Commission services' response	22- Nov
	29	Monitoring - Self -assessment of ERA Implementation 2002- List of "fiches"	22- Nov
V	30	2451st meeting of the Council of the European Union (Competitiveness) (Internal Market, Industry and Research) held in Brussels on 30 September 2002	20-Dec + 21/01/03 by mail
V	31	Towards a European Research Area for Infrastructures	20-Dec
V	32	Support for Policy-Making on research Infrastructures in the European Research Area	20-Dec
	33	Expert group concerning the support for policy-making on research infrastructures in the European Research Area	20-Dec
	34	Expert Group on research Infrastructures (List of Participants)	20-Dec
	35	National structures providing policy-relevant advice on Research Infrastructures issues	20-Dec
	36	2467th Council meeting COMPETITIVENESS (Internal Market, Industry, Research)	20-Dec
	37	European Research, Advisory Bord, Advice 2001-2002	20-Dec
	38	Reflections on the role of Research Infrastructures in the European Research Area	20-Dec
	39	International Scientific Co-operation Policy	20-Dec
	40	The International Dimension of the European Research Area - Communication from the Commission - COM (2001) 346 final	20-Dec

	41	The International Dimension of the European Research Area (A regional approach) Conference European Research 2002 11 to 13/11/02	20-Dec
	42	<i>1 page information leaflet:</i>	20-Dec
		- FP 2002-2006 (International Cooperation)	
		- ACP REGION	
		- New Independent States	
		- EU's bi-regional S&T Cooperation with Latin America and Caribbean (ALCUE)	
		- International scientific cooperation to help save lives and livelihoods in developing countries	
		- Session Mediterranean Countries	
		- Regional S&T co-operation with the West Balkan Countries	
		- New Independent States / Russia - part II	
		- ASEM Scientific & technological Co-operation	
		- Specialised workshop "Asia" 12th November 2002	
		- International S&T Co-operation in a Global Context	
		- The vital role of Candidate Countries in the development of the European Research Area	
	43	Web-addresses	20-Dec
	44	The international dimension of the European Research Area (leaflet)	20-Dec
	45	Forum for European-Australian Science and Technology cooperation	20-Dec
	46	Expert Group report on Role and Strategic Use of IPR in International Research Collaborations	20-Dec
	47	Involving Regions in the European Research Area (Volume I, II, III)	20-Dec
V	48	Research infrastructures: the Commission launches a European Strategy Forum	20-Dec
V	49	European Strategy Forum on research Infrastructures - Activity Report - (April-October 2002)	20-Dec
	50	Evaluating European research	13/01/03
	51	Science and Technology Committee, House of Commons, UK Parliament	13/01/03
	52	A Rough Guide to the Marie Curie Actions	13/01/03
	53	Presentation of Mario CAMPOLARGO - GEANT - a major building block for an European Research e-Infrastructure	13/01/03
	54	An assessment of COST (Ministerial Conference 4 and 5 Sept.02 Copenhagen (<i>report with recommendations N. Bush</i>))	14/01/03
V	55	Report to the Spring European Council 21 March 2003 on the Lisbon strategy of economic, social & environment renewal- COM (2003), 5 <i>final-Spring report (German, English & French)</i>	sent by email on 17/01/03

V	56	ERA Self assessment Fiche 7 bis (specifically on GEANT and Grids)	sent by email on 21/01/03
V	57	2001 Annual Activity report (in French)	sent by email on 21/01/03
V	58	EPUB study (see folder 1.10.00.03)	sent by email on 21/01/03 + mail
V	59	ASIF study (see folder 1.10.00.03)	sent by email on 21/01/03 + mail
	60	ERA NET work programme for 2003 + leaflet	sent by mail on 21/01/03
V	61	Questions discussed with CREST member	24/01/03 email from C.Demain
V	62	Provisional press release - Competitiveness Council 03/03	sent by email on 04/03/03
V	63	Commission staff working paper - First Implementation Report on "A Mobility Strategy for the European Research Area"	06/03/03 + email
V	64	Contribution of the Competitiveness Council to the Spring European Council 2003 - 7031/3	06/03/03 + email

6.4 ABBREVIATIONS

ALCUE	Amérique Latine Caraïbbes Union Européenne
ASEM	Asia-Europe Meeting
AS	Associated States
ACP	Countries in Africa, the Caribbean and the Pacific
CERN	European Center for Nuclear Research
CORDIS	Community Research and Development Information System
COST	European Co-operation in the Field of Scientific and Technical Research
CRAFT	Co-operative Research Action for Technology Stimulation Measures for SMEs
CREST	Scientific and Technical Research Committee
DG	Directorate General
EC	European Commission
ECMWF	European Centre for Medium Range Weather Forecasting
EDCTP	European and Developing Countries Trial Clinical Programmes
EIB	European Investment Bank
EIF	European Investment Fund
ENO	European Northern Observatory
ERA	European Research Area
ERA-NET	ERA-NET (coordination of national research programmes)
ERC	European Regional Council
ESA	European Space Agency
ESAF	East and Southern Africa
ESO	European Organisation for Astronomical Research
ETAN	European Technology Assessment Network
EU	European Union
EURAB	EU Research Advisory Board
EUREKA	Co-operation between European firms and research institutes in the field of advanced technologies (1985-....)
EUROCORES	European Cooperation for Research (coordination of nation research programmes supported by national research agencies)
FP	Framework Programme
FP5	Fifth Framework Programme
FP6	Sixth Framework Programme
HLG	High Level Groupe
HoU	Head of Unit
ICT	Information and Communications Technologies
ILL	Max von Laue-Paul Langevin Institute
INCO	The International Role of Community Research Programme
INTAS	International Association for Promotion of Co-operation with Scientists from the Independent States of the former Soviet Union
IPR	Intellectual Property Right
IRC	Innovation Relay Centre
IT	Information Technology
JET	Joint European Thorus
JRC	Joint Research Centre
MS	Member States

NAS	New Accession States
NCP	National Contact Point
NEST	New and Emerging Science & Technology
NIS	Newly Independent States
NSF	National Science Foundation (US)
OMC/WTO	World Trade Organization
PC	Programme Committee
PO	Project Officer
PRO	Public Research Organisations
PRO-TON	Pan-European Network of Technology Transfer Offices linked to PROs
R&D	Research and Development
RTD	Research and Technological Development
RTDI	Research Technology Development and Innovation
SME	Small and Medium Sized Enterprises
S&T	Science and Technology
SINAPSE	Scientific Information for Policy Support in Europe
SO	Scientific Officer
SP	Specific Programme
TIP	Technological Implementation Plan
TTO	Technology Transfer Office
WP	Work Programme

PART B:

**Responses of the Programme Management to the
external Monitoring Report**

RESPONSES BY COMMISSION SERVICES TO THE 2002 EUROPEAN RESEARCH AREA MONITORING REPORT

Experts Recommendations	Commission Services' Responses	Services' Commitments (if any)	Deadline
<p>1. The unit centrally responsible for benchmarking in DG Research should develop a higher profile and the role of benchmarking in advancing the ERA should be more clearly defined and communicated. Funding should be made available from FP6 or other sources to develop interest and competency in the MS and AS. Such funding could be used as 'seed corn' to encourage new, or to complement existing activities.</p>	<p>Benchmarking has been chosen as an appropriate tool to support the implementation of the open method of co-ordination (OMC) in research policy. In future, benchmarking will therefore be driven by the five topics highlighted by the Council for an OMC: working towards 3% aim; optimising human resources and researchers mobility; improving the dialogue between science and society; networking and mutual opening of national RTD programmes; voluntary co-operation in RTD infrastructures of European interest. The management of these benchmarking activities will be organised and financed in a decentralised way, and the unit centrally responsible in DG Research will ensure the consistency amongst these exercises. Apart from the commitment to link benchmarking to the successful application of the OMC, the services will launch stand-alone activities, outside the OMC, if there is an immediate policy need and if the active involvement of Member States and Associated States is ensured.</p> <p>As concerns the communication aspects, the first cycle ended with the Athens Conference in January 2003 and a booklet has been published and diffused.</p>	<p>In future, benchmarking will be driven by the five topics highlighted by Council for an OMC</p> <ul style="list-style-type: none"> - towards 3% - optimising human resources - science and society - mutual opening - infrastructures of European interest 	<p>Starting 2003</p>
<p>2. As a principal interface with Member States, CREST should play a much stronger role in the opening of national research programmes. This CREST can only do through a deliberate process that leads to better focus and more efficient working methods.</p>	<p>Since Spring 2002, CREST has been active in opening of national programmes, with five fields selected as pilot. CREST was explicitly entrusted with this task by a Council Resolution of November 2002, where it is recognised that CREST is the appropriate forum in this respect. Its mandate and rules of procedure provide sufficient room to allow CREST being effective in this field.</p> <p>The Commission will present to CREST for discussion a working paper on how to organise and pursue CREST work in the field of open method of coordination (OMC) and opening of national programmes.</p>	<p>Commission working paper on CREST work in the field of OMC and opening of national programmes</p>	<p>Sept. 2003</p>
<p>3. The ERA-NET scheme should be even more effectively promoted, given a higher profile and stronger central support by the Commission. The possibility of a review of the Treaty should be examined so as to free Article 169 from unnecessary political and bureaucratic constraints.</p>	<p>The ERA-NET scheme has been widely promoted throughout Europe and the Associated Countries during 2002 and 2003. In addition, a system of pre-proposal checks was offered and proved popular with potential participants. The 72 proposals received indicate the keen interest in the scientific community for this new instrument. Furthermore, it is envisaged to use the ERA-NET scheme in the future as a possible means for preparing future article 169 proposals. On the basis of the experience acquired in setting up the pilot action on the 'European Clinical Trials Partnership' the application modalities of Article 169 could be re-examined accordingly.</p>		

RESPONSES BY COMMISSION SERVICES TO THE 2002 EUROPEAN RESEARCH AREA MONITORING REPORT

Experts Recommendations	Commission Services' Responses	Services' Commitments (if any)	Deadline
<p>4. Mapping of excellence should be discontinued. The Commission should instead focus on mapping activity in a few areas of strategically important science.</p>	<p>A user-driven evaluation has been undertaken and the decision whether and how to continue the mapping exercise will be taken in the light of the evaluation results.</p>	<p>Commission services document with conclusions of the pilot exercise</p>	<p>End 2003</p>
<p>5. The Commission should with some urgency develop guidelines on industry-PRO collaborations in relation to IPR. An equitable treatment for the inventors, the body providing the funding and the user must be proposed. Such contractual arrangements must be well balanced such that there are advantages to all concerned parties.</p>	<p>Several ongoing activities, including the set up of an expert group, aim at the identification of good practices and recommendations regarding IPR issues relevant to publicly funded research, in particular in the context of university-industry relations. Moreover, one of the actions proposed in the '3% action plan' recently adopted by the Commission (Commission Communication 'Investing in research: an action plan for Europe' COM(2003) 226) corresponds to this objective 'Develop European guidelines for the management and exploitation of intellectual property rights in public research institutions and public-private partnerships'. These guidelines will help public research institutions to develop and enforce, on a voluntary basis, charters setting out the main principles to be applied regarding e.g. the ownership and licensing of research results, the sharing of revenues, etc. Based on the ongoing work and in close cooperation with all interested parties, the Commission will foster the establishment of such guidelines.</p>	<p>European guidelines for the management and exploitation of intellectual property rights</p>	<p>Second semester 2004</p>

RESPONSES BY COMMISSION SERVICES TO THE 2002 EUROPEAN RESEARCH AREA MONITORING REPORT

Experts Recommendations	Commission Services' Responses	Services' Commitments (if any)	Deadline
<p>6. The Commission and Ms should continue efforts towards the introduction of a Community Patent as soon as feasible [see 4.2.1.4] and seek to obtain an agreed length of time for the 'Grace Period ' within the European Union, so as to be able to speak with one voice with the WIPO.</p>	<ul style="list-style-type: none"> - Following the political agreement reached in March 2003, the implementation of the Community patent system will proceed. The Commission will do its utmost to that effect. However, it should be noted that a number of important steps still need to take place, including not only the formal adoption of the proposed Regulation, but also the adaptation of the European Patent Convention (requiring a diplomatic conference and the ratification of its conclusions by the 27 contracting States of the European Patent Organisation), and the proposal and adoption of a Council decision relating to the new jurisdictional system. Accordingly, the Community patent system may not be operational before a few years. - In 2002, the Commission services consulted the stakeholders on possible features of a grace period model which would address in a balanced way their needs and concerns. The resulting report constitutes important input in current discussions in the Council and in the European Patent Office, aiming at a common European position on the grace period issue in the international harmonisation work currently taking place at WIPO level (Substantive Patent Law Treaty - SPLT). More specifically, a statement of the Council is being prepared. 		

RESPONSES BY COMMISSION SERVICES TO THE 2002 EUROPEAN RESEARCH AREA MONITORING REPORT

Experts Recommendations	Commission Services' Responses	Services' Commitments (if any)	Deadline
<p>7. The Commission should develop a proposal that will ensure that infrastructure over a range of scales and from different funding sources is considered in a strategic and integrated manner. The European Strategic Forum on Research Infrastructure, even though not linked directly to FP6 or any formal funding source, should play a role in fostering a European approach.</p>	<p>The European Strategy Forum for Research Infrastructures has now shown its ability to elaborate strategic roadmaps in various fields. A conference on Research Infrastructures has been organised in November 2003 under the Italian presidency as a follow-up of the successful Strasbourg conference in 2000.</p>	<p>Report on the activities of the forum</p>	<p>End of 2003</p>
<p>8. The Commission should raise the profile of GEANT and promote more widely the opportunities that are, and will soon, become available to researchers and industry through the pan - European electronic research networks to use these impressive data transfer and distributed computing facilities.</p>	<p>As part of the global strategy to raise awareness and ensure the widest possible use of e-Infrastructures (of the type GEANT and Grids infrastructures), a large survey with 3500 end users and with 40 demanding communities was carried out in the first six months of 2003 by the GEANT consortium.</p> <p>Some special actions took place vis-à-vis key user communities, for example the radio-astronomers community, to ensure that their requirements were fully addressed by GEANT. The traffic of GEANT has been steadily evolving to reach now in the order of 1,3 Peta¹ per month. GEANT has been also Internet Protocol version 6 (IPv6) enabled and as such visibly present in the IPv6 Forum in Madrid.</p> <p>A video of GEANT containing interviews with representatives of user communities has been prepared to be widely used in conferences and public events.</p> <p>A publication on work already done in progress or planned and user benefits from it is under preparation 'GEANT and Grids Infrastructures for Research Users'</p> <p>In the context of the European Strategy Forum for Research Infrastructures, more visibility has been given to GEANT and Grids Infrastructures with a special working group created in April 2003 devoted to 'High Performance computing and Networking'.</p>	<p>Various GEANT promotion activities</p>	<p>2003</p>

¹ 1 Peta = 10¹⁵ bytes = 1 Mio. Mega-bytes

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<p>9. The Commission should:</p> <ul style="list-style-type: none"> - encourage the MS and regions to collect and collate statistics on the use of structural funds for RTDI; - take every opportunity to involve the regions in FP6 while ensuring that project excellence and foresight are retained. - explore the means to establish a forum of government experts to focus specifically on RTDI in a regional context. 	<ul style="list-style-type: none"> - The Commission services deploy effort to improving data collection and the construction of relevant statistics supporting their policies. Thus, during 2002, DG Research worked on the production on the Third European Report on Science and Technology Indicators which contains a section on regionalised S&T indicators, in particular comparing EU regions on their overall spending on R&D activities (GERD) as well as on the execution of R&D expenditures by the business sector. DG Regio is financing Eurostat activities aiming at better collection of economic data, including the regionalisation of R&D data. In the specific case of the Structural Funds, it has to be underlined that the Commission does not intervene at project level, since this is a competence of the Member States ². - In the context of their information campaign on the Regional Dimension of the European Research Area Commission staff regularly refer to the opportunities offered to the Regions in the context of the Sixth Framework Programme. In addition a new Web page has been created on CORDIS (http://www.cordis.lu/era/regions.htm) which explains the overall context of regions in the European Research Area process. The site contains relevant links to the Sixth Framework Programme and to Regional Policy and Enterprise Policy activities. Furthermore, an internal Regional Aspects Steering Group has been set up to better coordinate policy and the Sixth Framework Programme activities of relevance to regions. - The Commission will consider the issue and reflect on the best possible approach for this recommendation. However one would have to consider also the difficulties associated with the 'governance' part of this exercise. 	<p>Regionalisation of R&D data of Eurostat</p> <p>Creation of an information site</p> <p>Set up of a Regional Aspects Steering Group</p> <p>Explore the means to establish a forum of government experts focused on RTDI aspects</p>	<p>2004</p> <p>Summer 2003</p> <p>Summer 2003</p> <p>End 2003</p>

² While the main priorities of a development programme are defined in co-operation with the Commission, the choice of projects and their management are exclusively the responsibility of national and regional authorities. This decentralisation is considered to be one of the main innovation elements in the current programming period (2000-2006)

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<p>10. The Commission should:</p> <ul style="list-style-type: none"> - Monitor closely the involvement of SMEs in FP6 and adjust policy as necessary if the 15% target is not being met. - Publicise widely the loan opportunities available from EIB/EIF to FP6 participants. - Collect examples of good practice in the field of fiscal incentives and make recommendations to Member States. 	<ul style="list-style-type: none"> - The Commission agrees that it is important to monitor SME participation in the Sixth Framework Programme and to adjust policy as appropriate in order to ensure that the 15% target is achieved. An Interservices Task Force on SMEs was established in December 2002 to monitor SME participation in the Sixth Framework Programme, to define targets of SME participation per priority thematic area and to develop new measures to facilitate SME participation wherever appropriate. - Support from EIB/EIF and fiscal incentives are two of the many measures that can facilitate involvement of SMEs in research. The Network of National Contact Points was informed in April 2003 of the opportunities available from EIB/EIF. The next version of the Commission services documents 'support to the participation of SME's in the Sixth Framework Programme' will mention the opportunities available. - In May 2003 the Commission adopted a Communication entitled 'Investing in research and action plan for Europe' to ensure sustained and coherent progress towards the 3% objective. Some of the actions proposed aim at encouraging the Member States to improve fiscal incentives for research. The Communication proposes support to guarantee mechanisms for research and innovation in SMEs and to risk capital in research-intensive SMEs. It calls the Member States to consider disclosing data on the budgetary cost of fiscal measures. 	<p>Follow up of SME Task Force activities</p> <p>Next version of the Commission services documents 'support to the participation of SMEs in the Sixth Framework Programme'</p> <p>Follow-up of relevant part of action plan</p>	<p>2003</p> <p>2003</p> <p>2003</p>

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Experts Recommendations	Commission Services' Responses	Services' Commitments (if any)	Deadline
<p>11. The Commission should:</p> <ul style="list-style-type: none"> - Collect comprehensive mobility statistics. - Seek to improve the level of compatibility between national systems for the research mobility Web Portal. - Provide guidelines to assist MS and AS to establish comparable arrangements for their European Network of Mobility centres. - Examine means of giving recognition to researchers career time spent in industry or outside Europe. - Draw the attention of evaluators for FP6 Integrated Projects to the importance of mobility within proposals. 	<ul style="list-style-type: none"> - The Commission is aware that there is an urgent need to collect statistics on mobility. Therefore, the Commission services are planning to launch a preparatory study on mobility flows. - The Commission has already launched the first step towards compatibility with the development of the European portal; however, progress on this will only be possible if all the countries are accepting to use the same protocols which is being discussed in the Steering Group for Mobility³. <p>Guidelines and a Guide for Proposers have been sent to all countries participating in the mobility centre project in order to help them establish their working programmes and benefit thereby from the Commission's financial support during the first phases of the network. The Guidelines provide comprehensive information on the missions and structure of the network, which should enable to guarantee a comparable structure in each participating country.</p> <p>The Commission has adopted on 18 July 2003 a Communication on the career of researchers 'The researchers in the European Research Area: one profession, multiple careers' COM(2003)436. Amongst others, these issues are addressed.</p> <ul style="list-style-type: none"> - The <u>Integrated project</u> is an instrument to support objective-driven research where the primary deliverable is knowledge. As mobility is not necessarily a pre-requisite to achieve this goal, the evaluation criteria do not include this aspect. <p>Mobility is however encouraged in the framework of <u>Networks of excellence</u> because this instrument aims at scientific excellence by integrating resources. Therefore staff mobility and staff exchanges figure among the indicators for integration.</p>	<p>Launch of a preparatory study</p> <p>Progress towards an improved compatibility of national systems for the research mobility Web portal</p> <p>Diffusion of guidelines on the missions and structures of networks</p> <p>Communication on researchers career COM(2003)436 of 18.07.2003</p>	<p>End of 2003</p> <p>End of 2003</p> <p>Achieved</p> <p>Achieved</p>

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<p>12. Doubts about the Commission's intentions and policies in relation to multi- and bi-lateral international co-operation in FP6 should be removed together with managerial uncertainties and inadequacies. The apparent staff shortage in Unit 5 should be examined so that international obligations can be met adequately.</p>	<p>The Commission's intention and policies regarding International co-operation are set out in the Sixth Framework Programme, the Specific programme 'Integrating and Strengthening the European Research Area', the corresponding work programmes, in particular the update of 4.3.2003, and the Communication on 'The International dimension of the European Research Area' (COM(2001) 346). The allocation of staff to all DG Research service is subject to regular review.</p>		
<p>13. The experience of Unit 6 should be drawn upon to achieve the cultural change in the Thematic Directorates that will allow them to meet the international challenges associated with third countries' participation in FP6 and doubts over managerial uncertainties should be removed.</p>	<p>The International Cooperation Steering Group (ICSG) addresses these issues in a systematic way at directors' level or their formally nominated representatives. In addition, one of the most effective ways to bring about, in the services, increased 'cultural' awareness of the challenges and opportunities offered by the general internationalisation which is intended in the Sixth Framework Programme is to interact in a targeted way around issues central to their respective thematic content. Realistically, it must be assumed that this will take some time. The recent SARS (Severe Acute Respiratory Syndrome) outbreak is a successful example of integrating the international dimension in the policy section of 'priority 8'. International co-operation was explicitly incorporated and requested in a specific call launched to address policy issues associated with SARS (€ million, launch date 3 July 2003).</p>	<p>Follow-up of the steering group work</p>	<p>2003</p>
<p>14. A detailed assessment of the Science and Society sector should be undertaken by a future monitoring group.</p>	<p>The Commission services generally agree with this recommendation. Indeed a scheme on how to best monitor the Science & Society objectives across the Framework Programme is currently under consideration, with intense involvement of the Science & Society Advisory group.</p>	<p>Consideration of best way to monitor Science & Society issues</p>	<p>2003</p>
<p>15. The Commission should consider a restructuring of the DG RTD management so as to give the Deputy Directors General a more prominent role .</p>	<p>The recent reorganisation of the Directorate General implemented in the perspective of the realisation of the European Research Area and of the launch of the Sixth Framework Programme has not generated any particular difficulty. No need for new arrangement seems therefore to have occurred.</p>		

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16. DG Research should find a means to give greater transparency as to where its specific research responsibilities are located within the Directorate.	As the Expert Group indicates, responsibilities for some thematic priorities of the Sixth Framework Programme may lie in more than one Directorate. The publication of the organisation chart of the services on Europa seems to reply adequately to this need of information http://europa.eu.int/comm/dgs/research/organisation_fr.html).		
17. DG RTD should explore short-term secondment arrangements from MS and AS to attract high quality staff to the research policy sector.	DG Research has at its disposal an allocation of 100 Seconded National Experts (SNEs), COST excluded, and encourages its services to have recourse to them. The expertise they can bring during their secondment (4 years maximum) is valuable to the research policy sector. In addition, DG Research has created an electronic application system ELSA (External Staff On-Line Submission Application) which offers the services a permanent source of diversified and qualified experts, thus allowing for recruitment of non permanent personnel corresponding to specific needs.		
18. The Commission should examine and adjust as necessary the balance of staff resources in relation to the changes taking place within DG RTD in its move to be in the vanguard of European research policy and innovation.	In July 2002, to rebalance the human resources between the services according to the new priorities of the Sixth Framework Programme and to the objectives of the European Research Area, a huge 'screening exercise' was launched in DG Research. It led to new allocations for the Directorates and mobility of around 50 persons. In addition, 50 supplementary temporary posts of a temporary nature have been granted to DG Research by the Budgetary Authority and have been filled in 2003. These posts have been allocated to the services according to the conclusions of the screening exercise. The rebalancing of human resources has thus been fulfilled.	Recruitment of temporary staff	End 2003

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<p>19. The Commission should make best use of its membership of EUREKA to further the interaction between FP6 and EUREKA.</p>	<p>The Commission is actively pursuing synergies with EUREKA. Certain areas of the Framework Programme (IST, Intelligent manufacturing) are co-ordinating part of their respective activities with EUREKA large 'cluster' projects and co-ordinating 'umbrellas'. Discussions on possible joint activities in the area of health and biotechnology are underway. Distribution of information between the EUREKA network and the Commission Innovation Relay Centres has been further developed. EUREKA has been requested to suggest experts for joint technical groups, in the Sixth Framework Programme thematic areas, to avoid duplications and to explore ways of enhanced cooperation. In addition, EUREKA provided about one hundred names of potential evaluators with a good knowledge of innovation, for the Sixth Framework Programme.</p>	<p>Coordination of framework programmes /Eureka projects</p> <p>Memorandum of understanding between Eureka and the Innovation Relay Centers (IRCs)</p>	<p>Summer 2003</p> <p>Summer 2003</p>
<p>20. The Commission should consider its proposed contract with the ESF concerning COST scientific secretariat urgently and seek to resolve any difficulties as quickly as possible, such that the COST activities will suffer minimal damage from any disruption.</p>	<p>European Science Foundation has submitted on 15 May 2003 its proposal for the future COST office under the form of a Specific Support Action, as foreseen by the work programme. The evaluation phase of this proposal took place on 19 and 21 May 2003 and was positive. Contract negotiations were launched shortly after and the actual contract has been signed in summer 2003. This has then allowed the new COST office to be operational in Autumn 2003. In the meantime, the Commission has provided additional financial support to COST in order to ensure a smooth transition to the new COST office.</p>		
<p>21. The Commission should continue to make full use of and further develop INTAS for interaction with NIS.</p>	<p>For the period of the Sixth Framework Programme, a grant of 70 million € has been allocated to INTAS which will allow for continued operation of this Instrument dedicated to New Independent States (NIS). At the request of the Commission, and in addition to its regular work programme, the INTAS General Assembly approved the implementation of a NIS Information Network to increase the awareness about opportunities open to the NIS for participation in framework programmes and to support the NIS scientific communities in their attempts to become partners in European project consortia. The INTAS General Assembly also adapted the statutes of the Association in order to clarify the role of the Commission's officials.</p>	<p>Set up of a NIS Information Network</p>	<p>2003</p>

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<p>22. The Commission should more actively pursue the identification of mechanisms outside of the FP for opening and integrating European research. These mechanisms need central leadership, financing, political attention and greater transparency</p>	<p>The Commission services agree that the realisation of the European Research Area needs a variety of instruments, including the Framework Programme. They are ready to engage in any debate on such instruments. They are already actively involved in the discussions on a potential European Research Council.</p>		