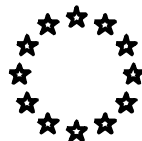


2000

**EXTERNAL MONITORING REPORT
ON THE
SPECIFIC PROGRAMME
FOR
RESEARCH AND TECHNOLOGICAL
DEVELOPMENT**



IN THE FIELD OF

**IMPROVING THE HUMAN RESEARCH
POTENTIAL AND THE SOCIO-
ECONOMIC KNOWLEDGE BASE**

MAY 2001

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. As part of the process of continuous improvement, a new programme monitoring scheme has been introduced in 1995. The new scheme involves independent external monitoring experts and a timely response by the Programme management to the recommendations produced by the experts. The new scheme thereby provides the basis of a quick response mechanism to programme developments and should give advice on key issues.

This report is the second covering the Fifth Framework Programme; the report also highlights progress in relation to ongoing activities under the Fourth Framework Programme. The report should help reinforce establishment of best practices and identify the scope for further improvement in programme implementation.

The report consists of three parts:

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

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

PART A:

Report of the external Monitoring Panel

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EXECUTIVE SUMMARY

MAIN PROGRAMME OBJECTIVES

- i) To contribute to the mobilisation of human research potential across the European Community, including accession nations, and
- ii) To strengthen the socio-economic knowledge base.

STATE OF IMPLEMENTATION AND MAIN ACHIEVEMENTS

Activities in all the programme areas are now underway. The main achievements in 2000 were:

- i) The successful launch of the Research Training Network activity;
- ii) The continuing expansion of the Marie Curie Fellowships;
- iii) Extension of the range of topics included in the Key Action *Improving the Socio-Economic Knowledge Base*; and
- iv) The organisation of three major European conferences.

MAJOR RECOMMENDATIONS

1. Greater use of electronic document transmission, fax and mail to allow evaluators to consider applications in their home country and come together for a relatively brief final decision meeting in Brussels, would use Community resources more efficiently, make participation as an expert more attractive and lead to swifter decisions.
2. Funding of projects be based on rank-order as decided by the evaluation scores given by scientific experts.
3. The Data-base of Experts should be refreshed on a three rather than a five-year cycle, and this should include the updating of information on existing experts.
4. The EC should encourage the participation of Applicant Countries by strengthening links with academic organisations in those countries, monitoring the activities of national contact points, suggesting how these might be made more effective and considering the appointment of a staff member with specific responsibility for the promotion of IHP in those countries.
5. Providing central support with skills in the area of dissemination beyond academic communities (for example writing press releases and communicating with mass-media, organising conferences for non-academics).
6. The CORDIS web pages should be improved by more regular up-dating and better indexing and search facilities.
7. The STRATA and Common Basis of Science, Technology and Innovation Indicators (CBSTII) activities be integrated into the Socio-Economic Research Key Action and application procedures be brought into line.
8. Specific budgets for dissemination be made available to Key Action research, separate from the negotiated research budgets and professional support for communication beyond the scientific community be made available.
9. The strategy of awarding distinctions requires rethinking. It is not practical to establish a prize rivalling Nobel without substantially greater resources and without separating award procedures from those for awarding grants. The Archimedes prize should be based on national level competitions.

10. Networks and possibly Fellowships schemes should finance the inclusion of a limited number of non-European countries and participants.
11. A register of national and European research and academic professional organisations, grant-awarding bodies and non-profit associations active in relation to research should be drawn up and the process of dissemination of opportunities to and consultation conducted via national contact points (typically government officials) be broadened to include them.
12. A timetable for the attainment of targets for the participation of women scientists in EC funded science should be drawn up and progress towards it monitored.
13. The first meeting of the monitoring panel should take place in mid-September so that the final report can be submitted in January.
14. The Core Indicators database be established at the beginning of the year and updated in real time, so that up-to-date statistics can be supplied throughout the monitoring process.

1. INTRODUCTION

PROGRAMME CHARACTERISTICS RELEVANT TO 2000

The general objectives of the programme are to contribute to the mobilisation of human research potential across the European Community, including accession nations, and to strengthen the socio-economic knowledge base. It developed from the former Training and Mobility of Researchers and Targeted Socio-Economic Research programmes and consists of eight components, here listed in order of the value of proposals selected for finance in 2000 according to Table 1 of the Core Indicators document dated 11.01.01: Research Training Networks (57%), Marie Curie Fellowships (35%), High-level Scientific Conferences (3%), Access to Research Infrastructure (2%), Socio-Economic Research and Accompanying Measures (1.2%), Strategic Analysis of Specific Political Issues (1%), Raising Public Awareness (0.5%) and CBSTII (0.07%). Full details of the various aspects of the programme are given in Section C.

Improving Human Potential is now well established after a successful launch in 1999 and activities in all the programme areas are now underway. Details are given in the *Qualitative Overview on Progress* in Section C. The main achievements in 2000 were:

- i) The successful completion of negotiations on all 167 Research Training Network contracts and the formal launch of the activity in June;
- ii) The continuing expansion of the Marie Curie Fellowships activity, with three calls for proposals;
- iii) The extension of the range of topics included in the Key Action Improving the Socio-Economic Knowledge Base to cover European governance, enlargement and the future of social security systems across Europe; and
- iv) The organisation of major European conferences on 'Women in Science' (April), Infrastructure Activities (September) and Marie Curie Fellowships (October)

MONITORING METHODOLOGY

As in previous years, the exercise is based on interviews with dg heads of unit and appropriate scientific officers and review of a considerable quantity of information, including papers from the evaluation panels, reports and statistical material. Core indicators were made available even later than for the 1999 exercise. The late start of the exercise and the availability of data gave rise to problems which appear also to have emerged in 1999. These issues need to be addressed urgently, so that they do not continue to cause problems in future monitoring exercises. They are discussed below.

2. ANALYSIS OF PROGRAMME EXECUTION AND PROGRESS

2.1 IMPLEMENTATION AND PROGRESS, INCLUDING PARTICIPATION OF ACCESSION COUNTRIES

Evaluation of Applications

(These points apply particularly to Networks, Marie Curie Fellowships, High-Level Scientific Conferences and the Socio-Economic Key Action.)

Despite simplification and moves towards greater transparency, which are certainly welcomed, application processes still tend to be slow. This creates problems for researchers, who incur costs in maintaining the resources to be able to carry out an activity should the grant be approved. Slow procedures can also damage trust in the credibility of the EC as a source of funding, especially among the leading research groups who may then turn to alternative sources of finance.

Two-stage application procedures may damage the confidence of the research community when decisions on funding in the second stage are not made on transparently scientific criteria.

The Data-base of Experts appears to be constructed primarily through registration rather than selection. More attention to selection would improve the quality of decision-making. The database needs to be refreshed more frequently in order to provide more immediate expertise.

Recommendations

1. Greater use of electronic document transmission, to allow evaluators to consider applications in their home country and come together for a relatively brief final decision meeting in Brussels, would use community resources more efficiently, make participation as an expert more attractive, particularly for women with domestic responsibilities, and lead to swifter decisions. Greater use of Protocol for proposal submissions would facilitate this process.
2. Funding of projects should be based on rank-order as decided by the evaluation scores given by scientific experts.
3. The Data-base of Experts should be refreshed on a three rather than a five-year cycle, and this should include updating information on existing experts.

Applicant Countries

As in previous years (see 1999 Report A.3.2) there is an obvious skew in awards: 109 contracts were awarded to participants in applicant countries as against 2,488 in EU member countries. This is partly a matter of historical circumstances and traditions.

Recommendation

4. The EC should encourage the participation of Applicant Countries by strengthening links with academic organisations in those countries, monitoring the activities of national contact points, suggesting how these might be made more effective and considering the appointment of a staff member with specific responsibility for the promotion of IHP in those countries.

Dissemination

The Commission has taken steps to address issues of dissemination through a greater emphasis on researcher responsibilities in this area and through the Raising Public Awareness programme. These measures could be reinforced by:

Recommendation

5. Providing central support with skills in the area of dissemination beyond academic communities (for example writing press releases and communicating with mass-media, organising conferences for non-academics).

Dissemination to both scientific and non-scientific communities through the CORDIS web-pages is hampered by difficulties in finding information on them.

Recommendation

6. Improve the CORDIS web pages by more regular updating and better indexing and search facilities.

2.2 SIGNIFICANT RESULTS, PRELIMINARY EVIDENCE OF IMPACT AND EUROPEAN ADDED VALUE

Major research results were not covered in our monitoring. Most activities included in IHP have had a major impact on relevant scientific communities as demonstrated by the numbers of high quality applications received, which exceeded the number selected for finance by a factor of about 2.5 overall and by a considerably greater proportion in Socio-Economic Research and Raising Public Awareness (see Section C, Indicators, Table 1). The weak application record in relation to STRATA and CBSTII implies a need for a new approach in these areas.

In relation to impact on the broader European public, IHP has had a more limited influence, as shown by the limited response to European Science Week and to dissemination activities for Key Action Findings. The EC prizes have been more successful at the Young Scientist than at the Archimedes or Descartes level.

Recommendations

4. The STRATA and CBSTII Activities be integrated into the Socio-Economic Research Key Action and application procedures be brought into line.
5. Specific budgets for dissemination be made available to Key Action research, separate from the negotiated research budgets, and professional support for communication beyond the scientific community be made available.
6. It may be helpful to rethink the strategy of awarding distinctions. It may not be practical to offer a prize which will rival Nobel without substantially greater resources and without separating award procedures from those for awarding grants. The Archimedes prize should be based on national level competitions.

European Added Value

The most successful and best resourced parts of the Programme are the networks and the Marie Curie Fellowships. These make a strong and wholly beneficial contribution to European Added Value by ensuring that researchers develop links across the EC. HLSC provides the largest single funding source for scientific events in Europe, promoting scholarly discussion and research collaboration. The Infrastructure programme allows European researchers access to the best facilities on the continent and the Key Action also promotes collaborative scientific work. IHP is to be congratulated on its signal success in relation to this aspect of the programme.

2.3 CONTRIBUTION TO THE ISSUES OF THE EUROPEAN RESEARCH AREA

Inclusion of Non-Europeans in the European Research Area

IHP contains a number of programmes that make a strong contribution to the development of the European Research Area. The systems of cross-national fellowships, networks, scientific conferences and collaborative key action research all involve the collaboration and cross-fertilisation of research across the community and the applicant states. One issue that arises is whether the ERA is to be understood as primarily a research area *for Europeans* or as a research area *in which Europeans draw on and contribute at the leading edge of scientific research*. If the latter objective is to be pursued (which we would endorse), there is a strong case for broadening some activities, particularly Networks and, to a carefully monitored extent, Fellowships, to support participation from and opportunities to visit, non-European countries.

Recommendation

7. Networks and possibly Fellowships should support participation from non-European countries.

Involvement of Non-Governmental Scientific Organisations

The response of relevant scientific communities to the opportunities in the programmes demonstrates their conviction that the co-ordination of research effort confers real benefits. However it is important that this is not carried out in a way that stifles research initiatives at the national level or at the level of the individual researcher. The move to an explicit ERA approach must continue to carry with it the support of national and international research communities.

A number of issues raised in relation to specific programmes point to the desirability of greater involvement of national and international scientific and professional organisations. These concern: enlisting the active support of researchers for concept of the European research area; the stimulation of applications (especially in relation to the strata and CBSTII activities) the attraction of more applications from accession countries (all programmes), dissemination of research findings and the stimulation of support for awards and prizes. Use of these organisations might contribute to easing the administrative burden on the EC. These bodies are often more closely in touch with the communities they serve than are the current national contact points.

RECOMMENDATION

11. A register of national and European research and academic professional organisations, grant-awarding bodies and non-profit associations active in relation to research should be drawn up and the process of dissemination of opportunities to and consultation conducted via national contact points (typically government officials) be broadened to include them.

2.4 FOLLOW-UP OF RECOMMENDATIONS FROM PREVIOUS MONITORING EXERCISE

Note: Recommendations 2, 5 and 8, 7 and 10 above and 12 and 13 below repeat substantially the same points as were made in the 1999 Exercise under *Executive Summary* (1999 Report) 4, 9, 10 and 8 and Section 1.3 respectively.

Timing and Documentation

The 1999 Panel commented that (A.1.3) 'it started its work much later than in previous exercises' (on 21 October) and that 'core indicators were made available extremely late (14 December)'. Although prospective panel members were contacted initially in June and July 2000, the first meeting of the 2000 Panel did not take place until mid-November. Key documents were not available until late in the process – a version of the Core Indicators document which still lacked section 3.v (breakdown of FPV research personnel by gender) was not supplied until 11.1.01 and the draft Working Document on Research Infrastructures towards the end of January. The monitoring report will not be available until the end of April 2001, one third of the way through the next year of the research programme, which it is intended to inform. The reports conclusions will also not be available in time to contribute to debates about Framework VI, on which the European Parliament is due to decide on 28.2.01. The 1999 Monitoring Report (section A.3.3) also drew attention to problems of timing and late supply of documentation.

Recommendations

12. The first meeting of the monitoring panel takes place in mid-September so that the final report can be submitted in January. The feasibility of this recommendation depends on recommendation 13:
13. The Core Indicators database be established at the beginning of the year and updated in real time, so that up-to-date statistics can be supplied throughout the monitoring process.

3. WE WISH ALSO TO COMMENT ON SOME SPECIFIC ISSUES:

3.1 WOMEN AND SCIENCE

A number of actions have been undertaken during the year to monitor women's involvement in all aspects of FP5 and to study different aspects of female participation in science, including the publication of the ETAN Expert Working Group report on Women and Science, which contains a detailed statistical analysis of participation in research at national and European levels by gender and the "Women and Science: making change happen" conference in Brussels. The dissemination of indicators is to be welcomed. Despite these efforts, the participation of women in science at EU level is still much below the target of 40 per cent set by the Commission in 1999 (COM(99)76 final). In fact, the proportion of women members of IHP evaluation panels actually fell from 24 to 20 per cent between the first and second halves of 1999. This reflects the low proportion of women in the evaluators' database (16 per cent).

The statistics gathered may misrepresent the work of women researchers if the categorisation of grants is by the gender of the administrator rather than the researcher. The statistical count needs to take this into account. A gender box for the scientific researcher or conference organiser as well as the administrator needs to be added to any forms on which it is not currently available and to be used in the preparation of statistics. This appears to be a problem in a number of areas, and applies particularly to EURESCO High-Level Scientific Conferences, where categorisation is by the ESF administrator rather than by the relevant scientific organiser.

Monitoring appears to focus principally on women as researchers. This area includes research for and about women as well as research by women. It is desirable to develop additional monitoring on these topics.

Recommendation

14. Action needs to be taken to raise women's participation in all areas of IHP closer to 40 per cent. As a first step, members of the associations of Women in Sciences, Engineering and Technologies listed in the ETAN Report could be invited to apply for inclusion in the evaluators' database.
15. A gender box for the scientist responsible should be added to any proposal and contract forms which do not currently include one. Indicators should be cross-tabulated by nationality and gender, using information on scientists rather than administrators, in order to examine the question of whether women in some countries are more successful at gaining access to research than in others.
16. It is important to know whether there is any discrepancy between the proportion of women researchers whose work passes quality thresholds and the proportion who secure funding, since this would provide a prima facie indicator of discrimination that would require further investigation.

3.2 COMMON BASIS OF SCIENCE, TECHNOLOGY AND INNOVATION INDICATORS AND STRATA

These activities cover important themes: the provision of scientific, technical and innovation indicators to support rtd strategies in Europe and the provision of information to support EC policy-making. This distinction is sometimes not understood and should be made clear to the scientific community. There has been strong demand for the cbstii key figures booklets and reports. However, the track record in relation to applications is weak and interaction between the research community and EC in this area could be improved. For example, out of 28 cbstii study titles for which tenders were called on 16 June 1999, 5 were not placed because no tenders were received and 8 because tenders were of insufficient quality. In relation to strata, one call was made although it was impossible to fund any bids at the time, since no resources were available. These events are unfortunate and damage the credibility of the EC as a research funder in the eyes of the relevant research community.

A change of approach is needed to secure the involvement of research communities. We welcome the bringing together of CBSTII, STRATA and the Key Action within one directorate, as recommended in the 1999 Monitoring panel report (A 2.1.2E), and the harmonisation of procedures and calls through a common administrative interface.

Recommendations

17. This work should be integrated much more closely with Key Action research activities.
18. The topics for STRATA should be broadened in order to attract applications from the leading experts in the field

3.3 HIGH-LEVEL SCIENTIFIC CONFERENCES

Multiple event applications, in which several activities are combined (scientific conference, network meetings, workshops) are attractive both to applicants and administrators and can result in more efficient use of resources in the promotion of research. However, it is important that such applications are restricted to a relatively small proportion of the available funding since otherwise they could produce distortions in the allocation of resources by discipline and country.

The use of intermediaries, as in the ESF EURESCO scheme, may also lead to greater efficiency. However there is a real risk of inequity and loss of transparency in a two-stage procedure, if the intermediary uses different criteria in deciding whether to pursue an application from those operated by the EC on individual applications. It is important that any intermediary bodies are relevant scientific organisations, and that the scientific community understands that EURESCO is not the sole official channel for conference applications. The use of an intermediary also seems on a number of occasions to have led to delays in the administration of grants and in reporting on them, since both applications and reports have to travel through both stages. These problems would be mitigated by decentralising the administration to the host body, as in the case of the infrastructure scheme for access to large-scale facilities

The EUROTRON electronic conferences are an excellent initiative in terms of cost saving and the involvement of a range of participants. Effective on-line participation is restricted to those with relevant training, but it is likely that this group will expand over time.

Recommendations

19. Attention is paid to monitoring of successful applications by discipline and country.
20. The two-stage application procedure in the case of intermediary bodies is simplified to a one-stage decentralised procedure, but opportunities for individual applications outside the decentralised procedure remain and are publicised.

3.4 RAISING PUBLIC AWARENESS AND DISTINCTIONS

Euro-Science Week (instituted in 1993-4 and to be repeated in 2001) is a useful exercise. The connection now being established with national science weeks is highly desirable and will help to establish links between the scientific work sponsored by the EC and journalists, museum staff and others involved in communication.

The whole system of prizes and distinctions is of variable success and requires rethinking. The EU Contest for Young Scientists, which is based on national competitions, appears to work well. However there are clearly problems with the Descartes Prize and Archimedes prize.

It is not realistic to expect the Descartes Prize to rival the Nobel Awards when the amounts of money involved are relatively small (maximum 50,000 Euro each). Publicity is unsatisfactory. The procedure of awarding prizes through invited research applications is unsatisfactory.

The Archimedes prize attracts too few applications (18 in 2000, none of them receiving an award). The plan to move to preliminary national level competitions is to be welcomed. There are issues in providing a clear definition of undergraduate that ensures comparability between levels of achievement in different member states.

Recommendations

21. Raising Public Awareness activities need to be linked closely to national science promotion activities and to include dissemination from research projects as appropriate for the general public.
22. Distinctions should be based on preliminary national-level schemes.
23. The question of whether it is desirable to pursue the objective of a science award at the most prestigious international level, and whether the goal justifies the resources necessary, should be given consideration.

3.5 *MARIE CURIE FELLOWSHIPS*

The Fellowships are a substantial component within IHP and are one of the best-known activities among research communities. They are clearly very well regarded by those who participate in them. However, there are relatively few applications from some countries and there are issues about application and decision procedures. Delays in the process between application and decision of some six months may result in the loss of promising candidates. Selection procedures carried out by host institutions produce advantages in the swift processing of applications but do not appear to be fully transparent. There is also the risk that industrial fellowships may in some cases simply provide extra workers and fulfil firms' own training objectives. General guidelines for selection should be provided and more active monitoring implemented for the various forms of fellowship that involve host organisations.

If the goal of the scheme is to enhance European scientific capacity, it is not necessary for all Fellows to move between countries. A number (we suggest up to one-third) of fellowships could be made available to young researchers moving within countries.

The distinction between post-doctoral and pre-doctoral researchers needs to be addressed since this may differ in different countries and disciplines. The problem of salary differentials between countries needs to be addressed, so that it is easier for researchers to move between more expensive and less expensive countries.

The Marie Curie Fellowships Association could provide a useful source of information for monitoring exercises, particularly in relation to the future careers of fellows.

Recommendation

24. Reduce processing time for applications by greater use of electronic document transmission, fax and mail to evaluators and speed up the production of contracts.
25. Improve monitoring of organisations which host fellowships.

3.6 *RESEARCH TRAINING NETWORKS*

The upgrading of network fellowships to Marie Curie status and salaries (as proposed in the 1999 Monitoring Report) would make these more attractive.

The distribution of awards appears skewed between member states and towards natural sciences. Promotional activities, particularly in newly-associated states, are desirable, to ensure wider participation in the scheme. National and professional associations might help with this.

Financial guidelines need to be simplified and clarified. The definition of 'industrial participation' also requires clarification. Applicants who misinterpret this as a simple 'expression of interest' from industry rather than a worked-out 'training programme' lost marks in the evaluation procedure.

Recommendation

26. Ensure that information is distributed via academic organisations as well as national contact points.

3.7 INFRASTRUCTURE

The research community in a position to apply for this programme is limited and well-defined. In all 21 applications for Infrastructure Co-operation Networks were received in 2000 of which 12 were supported. The large-scale facilities have extensive experience of assessing applications from visiting scholars and moves to decentralise the scheme are to be welcomed. Staffing levels for the administration of new and existing contracts at six seem high compared to staffing for other IHP activities.

More flexibility in the provision of infrastructure could achieve greater efficiency in its use. One possibility would be to combine co-operative networks/ access and RTD in one grant as a 'package'. These ideas are an important element in the concept of a European Research Area and would enhance the involvement of the research community.

Recommendation

27. Decentralise administration to the large-scale facilities but retain the monitoring function and review staffing.

3.8 KEY ACTION: SOCIO-ECONOMIC RESEARCH

Transparency of the Selection Procedure: although the EC goes to considerable lengths to ensure that the process of application and of selection follow transparent procedures, two aspects are still unclear: a) the procedure by which scores are allocated in the various categories, and b) the extent to which factors other than ranking by score may affect final selection. Acceptance of the transparency of selection procedures would benefit if more feedback was given to unsuccessful applicants, and this would help to build the confidence of the research community in the EC.

Obtaining the highest quality proposals: it may be helpful for the EC to pursue more proactive tactics to promote the research opportunities, including contacting national and European professional associations and email lists and working with bodies such as the European Science Foundation

Dissemination: much dissemination is carried out by the researchers. The quality of dissemination, particularly to non-academic communities, could be improved by ensuring that greater professional support was available, for example in relation to writing press-releases, writing for a non-academic audience and organising workshops. This will require investment, but there may be real economies of scale in pursuing this centrally. The Cordis web pages contain valuable scientific reports, but these are insufficiently widely read among relevant research communities.

The success of dissemination to policy communities is not currently examined effectively; indicators that can be used in this area need to be developed. Invitations to discuss research with policy-

makers and mentions of the work in policy-makers' journals, official reports and 'grey literature' as well as in academic publications might be a suitable measure.

It is also desirable to involve non-academic end-users interactively, so that they contribute to the work at an early stage, for example, by posing the questions to which they wish to see answers in a given research field.

The concept of 'European Added Value' still seems to be giving rise to confusion among applicants despite the further clarification given in this year's documentation. Further clarification needs to be given and it might be possible to do this efficiently by involving national research agencies more in the process.

Two staff members produce the Annual Report on the Socio-Economic Dimension of Europe. Greater investment of staff time in this area would seem justified.

Recommendation

28. If there is to be two-stage ranking procedure, academic evaluation must be central at both stages.

4. CONCLUSIONS AND RECOMMENDATIONS

MAJOR RECOMMENDATIONS

1. Greater use of electronic document transmission, fax and mail to allow evaluators to consider applications in their home country and come together for a relatively brief final decision meeting in Brussels, would use Community resources more efficiently, make participation as an expert more attractive and lead to swifter decisions.
2. Funding of projects be based on rank-order as decided by the evaluation scores given by scientific experts.
3. The Data-base of Experts should be refreshed on a three rather than a five-year cycle, and this should include the updating of information on existing experts.
4. The EC should encourage the participation of Applicant Countries by strengthening links with academic organisations in those countries, monitoring the activities of national contact points, suggesting how these might be made more effective and considering the appointment of a staff member with specific responsibility for the promotion of IHP in those countries.
5. Providing central support with skills in the area of dissemination beyond academic communities (for example writing press releases and communicating with mass-media, organising conferences for non-academics).
6. Improve the CORDIS web pages by more regular updating and better indexing and search facilities.
7. The STRATA and CBSTII activities be integrated into the Socio-Economic Research Key Action and application procedures be brought into line.
8. Specific budgets for dissemination be made available to Key Action research, separate from the negotiated research budgets and professional support for communication beyond the scientific community be made available.
9. The strategy of awarding distinctions requires rethinking. It is not practical to establish a prize rivalling Nobel without substantially greater resources and without separating award procedures from those for awarding grants. The Archimedes prize should be based on national level competitions.
10. Networks and possibly Fellowships schemes should finance the inclusion of a limited number of non-European countries and participants.
11. A register of national and European research and academic professional organisations, grant-awarding bodies and non-profit associations active in relation to research should be drawn up and the process of dissemination of opportunities to and consultation conducted via national contact points (typically government officials) be broadened to include them.
12. A timetable for the attainment of the target of participation of women scientists in EC funded science should be drawn up and progress towards it monitored.

RECOMMENDATIONS CONCERNING MONITORING METHODOLOGY

13. The first meeting of the monitoring panel should take place in mid-September so that the final report can be submitted in January.
14. The Core Indicators database be established at the beginning of the year and updated in real time, so that up-to-date statistics can be supplied throughout the monitoring process.

PART B:

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

Responses of the Programme Management to the recommendations of the Monitoring Panel

The Commission services would like to thank all members of the 2000 Monitoring Panels for their dedicated work and the efforts invested in this complex task. Some of the recommendations included in the monitoring reports address issues of relevance to all Specific programmes. Such issues are discussed from the Framework Programme viewpoint in the responses to the recommendations of the Framework Programme.

The following comments represent the responses of the relevant Directorates General to the recommendations regarding the specific programme *Improving human research potential and the socio-economic knowledge base*.

No	Recommendation	Response	Target date for implementation / progress
1	Greater use of electronic document transmission, fax and mail to allow evaluators to consider applications in their home country and come together for a relatively brief final decision meeting in Brussels, would use community resources more efficiently, make participation as an expert more attractive and lead to swifter decisions.	<p>The Commission is aware of the importance of electronics. Nevertheless, in order to have an efficient electronic system, we need to have two elements. The first one implies that proposals will be sent electronically by applicants. Given the nature of our activities, the experience shows that few applicants use this way of transmitting their proposals.</p> <p>The second one means that the system of network transmissions will assure the confidentiality of transmitted data, which is an obligation for the Commission. On this point, progress has to be made for the security of national/international data transmission networks. The use of eventual encryption /decryption systems would make each operation heavier for the Commission and for users.</p> <p>The Research Training Networks use a pre-evaluation by “home experts”. The experience shows us that the evaluation period is becoming longer with delays for the approbation of projects. Anyway, a significant period of work between experts and all evaluators is necessary in order to have discussions between them, which can lead to a real consensus of each proposal.</p>	No further implementation foreseen
2	Funding of projects be based on rank-order as decided by the evaluation scores given by scientific experts.	It is the Commission services responsibilities to draw up ranked lists of proposals among those that pass the required threshold. In drawing the final ranked lists, the Commission takes into account the recommendation of the panel <u>and</u> the programme priorities. When the ranked list does not strictly follow the notation results, the reasons fully justified in writing by the services concerned at the time of the final ranking.	No further implementation foreseen
3	The Database of Experts should be refreshed on a three rather than a five-year cycle, and this should include updating information on existing experts.	The expert database is an open one and experts can register themselves at any moment. They can also modify and/or update their curriculum vitae at any time.	Done

No	Recommendation	Response	Target date for implementation / progress
4	<p>The EC should encourage the participation of Applicant Countries by strengthening links with academic organisations in those countries, monitoring the activities of national contact points, suggesting how these might be made more effective and considering the appointment of a staff member with specific responsibility for the promotion of IHP in those countries.</p>	<p>It is already the case. Indeed, promotional activities, including some newly associated states have already taken place to ensure their wider participation in the programme. For instance, during the year 2000, there was the preparation of the conference “IHP Information days for accession countries” that took place on the 26th and 27th February 2001 in Prague. The aim of the Conference was bringing together the representatives of the newly associated states of the IHP Programme Committee, the national contact points and the main representatives of research centres and universities with the Commission services, and it was open to all public, to provide keys of success. This was done by giving details on how IHP proposals should be presented and facilitating the contact with the Commission services.-Furthermore, individual users from applicant countries can <u>already</u> join successful user groups in the ARI action.</p>	<p>February 2001 Ongoing</p>
5	<p>Providing central support with skills in the area of dissemination beyond academic communities (for example writing press releases and communicating with mass-media, organising conferences for non-academics).</p>	<p>The Commission takes good note of the remark and will try to implement such actions.</p> <p>The key action socio-economic research has launched a series of mechanisms bringing the results of its projects to policy and broader decision-making communities. A series of Dialogue Workshops on specific issues and more high profile Presidency Conferences organised with each presidency States bring together policy makers and experts and make the programme's work more visible and better exploited. Ad hoc events have also supplemented our publication series. The key-action's web page, which has become an important resource for Europe's social scientists, is being continuously revamped using professional help.</p>	<p>Ongoing</p>

No	Recommendation	Response	Target date for implementation / progress
6	<p>Improve the CORDIS web pages by more regular updating and better indexing and search facilities.</p>	<p>This recommendation is already one of the priorities of the Commission and it updated regularly and makes constant efforts to improve the Cordis web pages. For example, the Research Training Network webpages are regularly updated through the maintenance and development system of Cordis. The Marie Curie Fellowships has created new pages with diagrams and user friendly information in constant update with evaluation results immediately available after negotiation, most frequently asked questions in constant update, and it is under study the possibility of having electronic submission of the contract reporting. In addition strong effort is being made by the Commission to have the vacancy research tool for the Marie Curie Hosts Fellowships and for the Research Training Networks more known by the general public and more user friendly</p> <p>In 2001 two new web sites were developed with a view to improving the accessibility and userfriendliness of information available to the research community and public in general : http://www.cordis.lu/scienceweek/ and http://www.cordis.lu/descartes/ Both sites include media packs for the press and the Science Week site in particular links to National Science Weeks and Science Museums in the Member and Associated States.</p> <p>Information on the Archimedes Prize is kept regularly up to date.</p>	<p>Already in process</p> <p>Already started</p>
7	<p>The STRATA and CBSTII Activities be integrated into the Socio-Economic Research Key Action and application procedures be brought into line.</p>	<p>Such recommendation have been implemented, whereby the two first activities and the key action are now in a single Directorate, instead of three, and are starting harmonising their procedures and synchronising their calls through a common administrative interface – as acknowledged in the second paragraph of heading 3.2 of the report.</p>	<p>Done.</p>
8	<p>Specific budgets for dissemination be made available to Key Action research, separate from the negotiated research budgets, and professional support for communication beyond the scientific community be made available.</p>	<p>The key actions has continued to develop its clustering activities, making funds available to researchers to disseminate results of numerous projects in a synthetic way. In parallel there has been a policy to allow projects greater budgets for dissemination, as well as increasing the demands of the programme for such activities</p>	

No	Recommendation	Response	Target date for implementation / progress
9	<p>It may be helpful to rethink the strategy of awarding distinctions. It may not be practical to offer a prize which will rival Nobel without substantially greater resources and without separating award procedures from those for awarding grants. The Archimedes prize should be based on national level competitions.</p>	<p>The Descartes Prize is not intended to rival the Nobel Prize as the two prizes are very different in character. The Nobel prize recognises outstanding individuals, whilst the Descartes is aimed at teams involved in transnational collaborative research. Regarding the question of the amount of the prize/resources attributed to the prize (1M€), Feedback from researchers interested in applying for the Descartes Prize 2001 has indicated that the key motivation for applying is the associated prestige, rather than the possibility of financial gain. The procedures for awarding the Descartes Prize are not linked to those for awarding grants.</p> <p>Competitions like the Archimedes Prize do not exist in most of the Member States, therefore this European prize cannot be based on national level competitions.</p>	<p>Next Archimedes deadline is 15 March 2002</p>
10	<p>Networks and possibly Fellowships should support participation from non-European countries.</p>	<p>The Commission is aware of the importance of opening possibilities for the non-Europeans. Concerning Research Training Networks, the 2nd call's Guide for Proposers specifically encourages the participation of Third countries and of International Organisations as engagement in such international co-operation activities is considered to contribute to the successful implementation of the Human Potential programme. Such participation is normally on a self-financing, project-by-project basis and in all cases the participation must be shown to be in conformity with the interests of the Community. In exceptional cases, financing for a third country participant, up to €0.03million, and for international organisations, to a greater extent, may be provided by the programme if it is essential for achieving the objectives of the project. Moreover, individual users from applicant countries can <u>already</u> join successful user groups in the ARI action. The Marie Curie Fellowships have also been opened to non European during the Fifth Framework Programme: anyone who has been residing at least five years in the last ten years in Europe is assimilated as a national of a Member State or associated state.</p> <p>Further to these actions, an increase of the participation of those states is expected for the incoming deadlines.</p> <p>Moreover in the Commission's proposal for the next Framework Programme, the participation of candidate countries is foreseen to have the same rules than the Member States for all activities of the programme.</p>	<p>Ongoing</p>

No	Recommendation	Response	Target date for implementation / progress
11	A register of national and European research and academic professional organisations, grant-awarding bodies and non-profit associations active in relation to research should be drawn up and the process of dissemination of opportunities to and consultation conducted via national contact points (typically government officials) be broadened to include them.	<p>The Commission is planning to establish such a list.</p> <p>Concerning the dissemination of opportunities, the Commission has, on the basis of experts recommendation of the High Level Group on Mobility, included the amelioration of information on EU programmes and on employment opportunities as one of its priorities in the framework of the communication on mobility. The Commission will create a web site portal which would have strong links with community and national sites relative to these matters.</p>	<p>Autumn 2001</p> <p>End of 2002</p>
12	The first meeting of the monitoring panel takes place in mid-September so that the final report can be submitted in January. The feasibility of this recommendation depends on recommendation 13:	<p>Given the delays to produce core indicators, the planning of meetings, set out in correspondence with the yearly, policy cycle is maintained for 2001 as scheduled; first meeting will be end of November and the report end of March 2002.</p> <p>Depending of the progress realised, the possibility of reviewing the planning will be checked for the exercise 2002.</p>	Follow-up of depends an outcome of 2001 Monitoring pilot
13	The Core Indicators database be established at the beginning of the year and updated in real time, so that up-to-date statistics can be supplied throughout the monitoring process.	A database is actually being created in order to provide statistics easily.	September 2001

No	Recommendation	Response	Target date for implementation / progress
14	<p>Action needs to be taken to raise women's participation in all areas of IHP closer to 40 per cent. As a first step, members of the associations of Women in Sciences, Engineering and Technologies listed in the ETAN Report could be invited to apply for inclusion in the evaluators' database.</p>	<p>Women's participation in IHP evaluation panels is close to 40 %, and is one of the programmes with the highest proportion of women in the different committees and panels (European Advisory Group: 45 %, Monitoring panel 2000: 50 %, programme committee: 35 %, 5-year assessment: 50 %, evaluation panels: between 28% (ARI) and 37% (MC Individual Fellowships)). We must take into account however that there is a relatively limited number of women experts in the database (16%). The Commission is sending out a newsletter on Women and Science three times a year and recalls each time to all its correspondents (1700 entries), the need to apply to be an evaluator. In each meeting this invitation is also done. The Commission will check that the associations of Women in Sciences, Engineering and Technologies listed in the ETAN report are included in the mailing list.</p> <p>The objective of 40% of women's participation, referring to individual Marie Curie Fellowships, was reached so far with 39.5% of female applicants in 1999-2000. Concerning Marie Curie Host Fellowships the percentage of fellows female selected has been even higher than 40 %.</p> <p>In each one of the calls published in the Official Journal concerning any programme of the Fifth Framework Programme and each one of the Guides for Proposers there is the sentence: "The European Community pursues an equal opportunities policy and, in this context, women are particularly encouraged to either submit proposals or to be involved in their submission" aiming at raising this participation.</p> <p>About 20% of users in the ARI action are women. Their distribution by country of origin mirrors similar statistics for female participation in Europe.</p>	Ongoing
15	<p>A gender box for the scientist responsible should be added to any proposal and contract forms which do not currently include one. Indicators should be cross-tabulated by nationality and gender, using information on scientists rather than administrators, in order to examine the question of whether women in some countries are more successful at gaining access to research than in others.</p>	<p>Gender boxes are included in most Framework Programme 5 forms. The Commission will review all the forms to check the inclusion of the gender box for all scientists involved. The Commission will investigate the feasibility of the cross-tabulation by nationality and gender. As far as available resources allow it, the Commission will follow this recommendation.</p> <p>On the basis of the results of these statistics, the Commission will be able to better determine the state of play and suggest measures for the future.</p>	Ongoing

No	Recommendation	Response	Target date for implementation / progress
16	It is important to know whether there is any discrepancy between the proportion of women researchers whose work passes quality thresholds and the proportion who secure funding, since this would provide a prima facie indicator of discrimination that would require further investigation.	The production of the statistics would be very interesting. This has also been suggested in the study done by Louise Ackers from University of Lancaster and published by the Commission on the Women Participation in the TMR Marie Curie Fellowships. We will consider how to follow-up in the next FP.	Under consideration
17	This work should be integrated much more closely with Key Action research activities.	The working group “women and science” will take care of the integration of this work.	
18	The topics for STRATA should be broadened in order to attract applications from the leading experts in the field	There is no doubt that many leading experts in the field are involved in STRATA already. However, the expected impact of this activity is based on the intensity of the interaction between researchers and policy-makers. The number of strategic issues that can be addressed in this way is obviously limited. Moreover, effective European added value can only be ensured through significant Commission involvement in each action and the gradual constitution of a coherent portfolio, allowing synergies to develop between the various projects. This pleads rather for increasing selectivity. In any case, the Commission will continue its efforts to raise awareness among the target communities concerned.	Awareness-raising activities implemented for the last major call closed on 1 June 2001.

No	Recommendation	Response	Target date for implementation / progress
19	Attention is paid to monitoring of successful applications by discipline and country.	This Recommendation, which concerns explicitly the Euroconferences activity, aims at avoiding any distortion in the allocation of resources by discipline and country, stemming from “package applications”. The Work Programme for the activity has been revised in 2000 in order to allow the submission of proposals combining different types of conferences (EuroConferences, Euro Summer Schools, EuroWorkshops...). But these should not be regarded as “package applications” as they combine events, which are all in the same scientific topic, and provide the opportunity to optimise the training and dissemination of results in specific focussed scientific areas. Multiple event projects were already possible in the previous version of the Work Programme but only for events of the same type. These proposals are treated with the same care and with the same evaluation criteria as single event projects. Thus the concerns expressed are without foundation.	-No further implementation foreseen
20	The two-stage application procedure in the case of intermediary bodies is simplified to a one-stage decentralised procedure, but opportunities for individual applications outside the decentralised procedure remain and are publicised.	A formal "Host Scheme" for the Euroconference activity is not foreseen in the present Work Programme, but is indeed under study for the New Framework Programme. Particular attention will be taken in the definition of this scheme to maintain an equal treatment of the proposals.	New Framework Programme preparation second half 2001-2002

No	Recommendation	Response	Target date for implementation / progress
21	<p>Raising Public Awareness activities need to be linked closely to national science promotion activities and to include dissemination from research projects as appropriate for the general public.</p>	<p>The call for Raising Public Awareness, published in April 2001, as well as the next call to be published at the beginning of 2002 included the possibility of projects linking between national science week activities and to the EU Science Week. However, in some cases national science week organisers share promotional materials, which reduces the usefulness of aligning the dates of national science weeks. (This call includes the 2002 Science Week.)</p> <p>For Science Week 2001 a new web portal was developed which included links to national science weeks and science museums in the Member and Associated States. The site offers a media pack which facilitated the interest of the press and among others the BBC World Service and Euronews.</p> <p>The possibility of association to the European Science Week was also promoted in 2001. The JRC took part in the Science Week and contacts were made with the Spanish Authorities leading to the Spanish Science Week being established at the same time at the European Science Week. The Portuguese and Irish Science Weeks are also close to the time of the European one.</p> <p>The promotion of the week was increased with leaflets and posters produced in all 11 Community languages, which were widely distributed. In addition promotional lapel pins were produced bearing the new EU Science Week logo which was specifically re-designed for the 2001 Week and will be used for future weeks.</p>	<p>The Science Week 2002 focuses on this issue</p>
22	<p>Distinctions should be based on preliminary national-level schemes.</p>	<p>Unlike the Young Scientists' Contest, the Descartes Prize is awarded for collaborative European/international research, involving at least two Member States, or a Member State and an Associated State. The collaborative nature of the award provides the logical argument for the need for this prize to be awarded/organised at the European level.</p> <p>In contrast to the EU Young Scientists' Contest, the Archimedes-type prizes do not exist at a national level.</p>	

No	Recommendation	Response	Target date for implementation / progress
23	The question of whether it is desirable to pursue the objective of a science award at the most prestigious international level, and whether the goal justifies the resources necessary, should be given consideration.	It is important to recognise that some of the most outstanding research results from transnational collaborations involving European teams. This prize not only recognises this collective work, but also aims to stimulate the furtherance of the research awarded, given that winning projects are required to use the award to continue extend the impact and development of their results. This is in keeping with the need to raise public awareness of European science and technology.	Ongoing
24	Reduce processing time for applications by greater use of electronic document transmission, fax and mail to evaluators and speed up the production of contracts.	Cf recommendation 1	
25	Improve monitoring of organisations, which host fellowships.	In order to assure the necessary quality of the Marie Curie Fellows, there are general guidelines given in the contract between the Commission and Host for the selection of the fellows. However in the monitoring of the fellowships, a checking of the selection procedures will be included.	Done
26	Ensure that information is distributed via academic organisation as well as national contact points.	<p>Actions have been taken in order to publicise further the opportunities within Research Training Networks, including for the newly associated states.</p> <p>725 copies of the 2nd call's Guide for Proposers was sent to all National Contact Points, to national funding agencies, universities and multipliers across Europe. The recipients were also asked if they wished any assistance in organising an information day for the activity such ad-hoc information meetings took place during the launching period. In addition, a meeting was held in Prague on 26/27 February 2001 in order to present, to representatives from the newly Associated States, the Human Potential programme, including Research Training Networks.</p> <p>For the High-level Distinctions and Raising Public Awareness mailing lists of universities, science museums, national science weeks and other such organisations were used to distribute information across the EU Member and Associated States.</p>	Ongoing

No	Recommendation	Response	Target date for implementation / progress
27	Decentralise administration to the large-scale facilities but retain the monitoring function and review staffing.	<p>1. The proposals of the Commission services for new funding instruments for research infrastructures in the next Framework Programme, as outlined in the Working Document on Research Infrastructures¹, confirm the tendency towards administrative decentralisation that the Panel recommends, notably through the establishment of "Integrated Initiatives".</p> <p>2. It is also the intention of the Commission services to maintain and strengthen the system of "technical review" of the action, in line also with the recommendations resulting from the Conference on Research Infrastructures (Strasbourg, September 2000).</p> <p>3. Concerning the staffing levels for the administration of contracts, it is worth pointing out that the total staff of the Unit responsible for "Research Infrastructures" in 2000 consisted of 5 people at A level (including the Head of Unit), 1 B, 1 C and 1 National Expert. Of these, the staff directly responsible for the technical administration of contracts (166 in total) consisted of 3 A and 1 B, i.e. in line with, if not somewhat below, the normal standards of DG Research. The remaining staff (including the Head of Unit) was involved with the organisation of the Strasbourg Conference and with other routine tasks (e.g. co-ordination with related activities in the Thematic Programmes and in other Community actions, Communication and Publications, relations with the Court of Auditors).</p>	<p>1. Proposals for funding "Integrated Initiatives" in the sixth Framework Programme will be discussed with stakeholders in 2001.</p> <p>2. The next "technical review" of the ARI action is to be launched in late 2001.</p> <p>3. Staffing has been reviewed in early 2001.</p>
28	If there is to be two-stage ranking procedure, academic evaluation must be central at both stages.	Academic evaluation has traditionally been the cornerstone of Community R&D evaluation procedures. This continues to be the case.	Ongoing

¹ SEC (2001) 356.