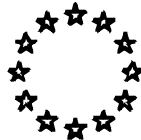


2000

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



IN THE FIELD OF

**NON-NUCLEAR
ENERGY**

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 Commission Services 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, identify and correct weaknesses in programme implementation, and facilitate future multi-annual programme evaluation.

The report consists of three parts:

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

Mrs. Claude BESSIERE (Chairman)

Mr. Cornelis Geeuwke MEIJER

Prof. Nicolas CHRYSOCHOIDES

Ms. Teresa PONCE DE LEAO

Part B: Commission Services' Responses to the 2000 Monitoring Report.

PART A:

Report of the external Monitoring Panel

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY.....	1
2. INTRODUCTION.....	3
2.1 MAIN PROGRAMME EVENTS IN THE YEAR 2000.....	3
2.2 MONITORING EXERCISE.....	4
3. ANALYSIS OF THE PROGRAMME EXECUTION AND PROGRESS.....	5
3.1 IMPLEMENTATION AND PROGRESS, INCLUDING PARTICIPATION OF ACCESSION COUNTRIES..	5
3.1.1 EESD – part B – Energy statistical information for the year 2000:.....	5
3.1.2 Statistics of SME participation in FP5; EESD - Part B: Energy.....	5
3.1.3 Participation of Accession Countries.....	6
3.2 SIGNIFICANT RESULTS, PRELIMINARY EVIDENCE OF IMPACT AND.....	7
EUROPEAN ADDED VALUE.....	7
3.2.1 Impact Assessment of the FP4 Non-Nuclear Projects (Joule).....	7
3.2.2 European Added Value.....	8
3.3 CONTRIBUTION TO THE ISSUES TO THE EUROPEAN RESEARCH AREA.....	8
3.4 FOLLOW-UP OF RECOMMENDATIONS FROM PREVIOUS MONITORING EXERCISES.....	9
4. MAJOR TRENDS, CONCLUSIONS AND RECOMMENDATIONS.....	11
4.1 TRENDS AND CONCLUSIONS.....	11
4.1.1 Reorganisations.....	11
4.1.2 Major trends from analysis of the interviews.....	11
4.1.3 Major trends.....	12
4.1.4 Key recommendations.....	13

1. EXECUTIVE SUMMARY

This report deals with the key-actions 5 and 6 of the Framework Programme5 (FP5), sub-programme ENERGY part B and with the ongoing projects under FP4 and even FP3. The year 2000 saw the merger of DG Transport and DG Energy, to form the new DG TREN, the mid-point revision of the sub-programme with the revised info-pack of October 2000, the signature of contracts issued from the calls of 1999, a third complementary call to reach the budgetary objectives on renewables and the open calls for Accompanying Measures and Thematic Networks.

The mid-point revision of the sub-programme introduces a clear differentiation between short and medium to long term research and a focus in the sub-programme through the introduction of targeted actions and horizontal priorities.

This revision is applied for the 4th call launched the 24th of October. The call, surprisingly, has different deadlines for the 2 types of research (February 9th and March 15th of 2001).

As core indicators were not available for the full scope of the sub-programme during the monitoring exercise, the present report treats mainly the qualitative aspects with a particular focus on the Management Information Systems.

A number of earlier addressed concerns remained major trends and worries, such as:

- the fundamental incoherence between the sub-programme structure (before revision) and its management,
- proposals and projects still strongly technologically driven, rather than problem/market oriented,
- difficulties in the evaluation regarding the interpretation of the socio-economic criteria, lack of user-friendly and interoperable Management Information Systems,
- very heavy workload of the Scientific Officers,
- long time to contract signature .

The recommendations from the previous monitoring exercise concerning an impact assessment of terminated FP4 projects, a clarification of management share and responsibilities, and an improvement of the evaluation process timing were partially fulfilled. Further efforts are still necessary.

Panel key recommendations:

- Calls for tender:
 - clarification through a strong, rigorous simplification of the info-pack,
 - elaboration of a workable approach to European Added Value,
 - reconsideration of anonymity procedures.
- Internal Organisation:
 - need of adequate support to the Scientific Officers,
 - need of a better communication between the various levels of the structure to improve the policy appropriation by the concerned staff,
 - shift of Scientific Officers' role to Project Manager in a first step and to policy maker in a second step.
 - involve Scientific Officers in the preparations and revisions of the Framework Programs

- Management Information Systems:
 - introduction of user-friendly tools, answering to the actual needs of the staff that should be associated to the technical specifications for these tools,
 - flexibility and interoperability of the various tools .
- Impact assessment:
 - procedure to be applied by both DG's, and not only by DG RTD,
 - results for FP4 projects to be known before finalisation of future FP6 preparation,
 - possible use of results as an incentive for the participants, for example in being included in future networks of excellence .
- The monitoring exercise itself:
 - availability of sufficient and correct statistics to judge progress achievements, impact on European Added Value, impact on European Research Area and participation of Accession Countries,
 - better horizontal and vertical synergy in the monitoring process to be in coherence with the FP itself.

2. INTRODUCTION

This monitoring report is focussed on the activities executed in the year 2000, covering the framework of the programme "Energy, Environment and Sustainable Development, part B: Energy". This includes the activities performed in the Fifth Framework Program (FP5) as well as the activities remaining from earlier Framework Programs (FP4 and FP3). The activities under Part B: Energy, are mainly concerning implementation of the Key-actions 5 and 6.

The objective of Key Action 5: "Cleaner Energy Systems, Including Renewable Energies" is to minimise the environmental impact of the cost-effective production and use of energy in Europe. This will help the ecosystem by reducing emissions at local and global levels and by increasing the share of new and renewable energy sources in the energy system. It will also have socio-economic impacts by enhancing the capability of European industry to compete in world markets, helping to secure employment and promoting social cohesion with less favoured regions.

The two driving forces for the development of new technologies, innovation and associated measures are:

- The Kyoto objectives, which imply for the EU a reduction of 8% of the greenhouse gas emissions between 2008 and 2012 compared to the 1990 level.
- The Council Resolution on Renewable Energies of May 1998 (White Paper) which has a target to double the share of renewables of 6% in 2000 to 12% in 2010.

The objective of Key Action 6: "Economic and Efficient Energy for a Competitive Europe" is a reliable, clean, efficient, safe and cost-effective energy supply and services for the benefit of its citizens. This is essential for the good functioning of society, the competitiveness of industry in European and world markets and the quality of local and global environment. Efficient end-use technologies are expected to count for 60% of the greenhouse emission reductions on short term and for 30% on long term.

The focus of the EU strategy is the realisation of the significant economic potential of as much as 18% of the 1995 energy consumption in 2010. This addresses all stages of the energy cycle: production, distribution and final use.

2.1 MAIN PROGRAMME EVENTS IN THE YEAR 2000

In the year 2000 a great number of activities have been continued from earlier years and a number of new activities have started. The main activities are:

- 1st and 2nd calls. Starting and continuation of projects of:
 - 1st call, deadline 15 June 1999, over 230 projects selected for finance
 - 2nd call, deadline 4 Oct 1999, approximately 90 proposals accepted for negotiation
- 3rd complementary call (deadline 31 May 2000):
 - Approximately 450 proposals evaluated in July / August 2000
 - Approximately 150 proposals recommended for funding
 - Contract negotiations and first signed contracts in second half of 2000
- Mid-point revision of the sub-programme Energy according to EAG recommendations:
 - Clear differentiation between Short & Long term Research
 - Need for increased focussing and concentration within the Work Programme
 - Introducing of "Targeted Actions" (60% of the budget)
 - Proposal of topics which could be chosen as future targeted actions
 - Horizontal priorities within the general part of the Work Programme
 - Selection criteria for the evaluation of projects

- 4th call launched 24th of October 2000 based on the mid-point revision of the Work Programme
- Open calls for Accompanying Measures and Thematic Networks with cut-off dates 15 Feb 2000 and 1 Sep 2000.
 - Approximately 100 eligible proposals evaluated, 30 proposals recommended for funding
- Large numbers of ongoing FP4 projects and even of ongoing FP3 projects
 - More than 1400 FP4 contracts inherited from earlier years.
- Conceptual analysis for identifying the constituent elements of the European Added Value. Study performed by Yellow Window Management Consultants, report dated November 2000.
- An investigation to the Socio-Economic Impact of Energy Research by a panel of experts, reporting in January 2001.
- Customers Satisfaction Workshop on the proposal preparation process. Brussels, June 29 2000
- Reorganisation of DG Research

2.2 MONITORING EXERCISE

The content of the 2000 monitoring exercise is based on the issues to be addressed by the monitoring panel as instructed by the Commission as per Annex A.

The 2000 external monitoring panel had 5 meetings in Brussels:

- 1st meeting: 13 Dec. 2000, Kick-off
- 2nd meeting: 22-23 Jan. 2001, Interviews Scientific Officers (13)
- 3rd meeting: 6-7 Feb. 2001, Interviews Head of Units (7) , Informatics (6), Scientific Officer (1), Contract Management (2)
- 4th meeting: 22-23 Feb. 2001, Interviews Directors (5)
- 5th meeting: 2 March 2001, Interviews Director (1), Head of Unit (1)

The detailed list of interviewed officials is given in Annex B. The documents and publications requested, supplied and examined are listed in Annex C.

3. ANALYSIS OF THE PROGRAMME EXECUTION AND PROGRESS

3.1 IMPLEMENTATION AND PROGRESS, INCLUDING PARTICIPATION OF ACCESSION COUNTRIES

Since the final figures of the year 2000 were not yet finalised at the moment of monitoring, the analysis of programme execution and progress was a limited qualitative analysis, rather than a quantitative analysis.

3.1.1 EESD – part B – Energy statistical information for the year 2000:

Some highlights, extracted from the available information:

- The number of proposals selected for finance in 2000 is 103, representing a financial contribution of Mio €125
- The number of projects funded in 2000 is almost 200
- The total number of ongoing contracts under FP5 at 31/12/2000 is 354, representing a total financial contribution of over Mio €288.
- Time taken from closing call to contract signature is between 5 and 15 months. For more than half of the contracts it takes 10 months or longer
- more than half of the projects have a value of over €1 million

A large number of FP4 and FP3 projects is still going on at 1/1/2000:

- 879 from FP4
- 167 Thematic from FP3
- 487 Thematic Networks and Accompanying Measures

It was not possible to judge the status of the FP4 and FP3 projects per 31/12/2000

3.1.2 Statistics of SME participation in FP5; EESD - Part B: Energy

	3 rd call FP5	2 nd call FP5	1 st call FP5	FP4	FP3
Nr. Of Eligible Proposals from SME's	22,8%	13,4%	27,8%		
Nr. Of Proposals worth funding from SME's	22,6%	10,0%	25,9%	32%	28%
Funding requested for eligible proposals from SME's	17,9%	13,6%	18,5%		
Budget for Proposals worth funding from SME's	15,3%	9,3%	15,0%	21%	19%

The statistic information in the table indicates that the degree of SME-participation in the years 1999 and 2000 in FP5 is less than in FP3 and FP4. The reason(s) for this decrease is not known, but the future approach will not easily change the trend from a decreasing to an increasing participation.

Still the SME participation is considerably higher than the 10% indicated as SME budget in FP5.

In the future , SME's participation could be influenced by the two following major trends :

- Split between short term and medium / long term projects instead of splitting between research and demonstration. SME's generally have limited or no interest in medium or long term projects. In most cases this time frame is beyond their strategic horizon.
- In the Work programme of October 2000, there is a shift towards bigger projects with more participants of different nature (large / small / R&D / industry)Large projects mean large financial impact for the enterprise and increased risk. This could restrict mostly the SME's in the range of less than 100 employees. In the FP4 programme, these companies represented 80% of the SME contracts .

3.1.3 Participation of Accession Countries

A major interest of the Commission is the quick integration of new countries applying for membership of the European Union. Applicants from the so called Accession Countries have the possibility to participate in consortia that are applying for funding of research proposals. This participation is strongly recommended and encouraged in the calls for tender.

It results in the following statistics of participants from Accession Countries in consortia in FP5:

Participants from	1 st call		2 nd call		3 rd call		Acc. Measures		Them. Networks	
	Eligible	Worth funding	Eligible	Worth funding	Eligible	Recom. For funding	Eligible	Rec. for neg.	Eligible	Rec. for neg.
Bulgaria	10	0	2	1	16	2	4	1	0	0
Czech republic	29	16	8	0	22	8	1	0	0	0
Estonia	15	9	1	0	14	3	1	0	0	0
Cyprus	7	2	1	0	7	1	3	1	0	0
Latvia	9	5	0	0	0	0	1	0	0	0
Lithuania	9	4	1	0	10	0	2	0	0	0
Hungary	34	12	8	0	18	3	2	0	1	0
Poland	45	23	19	1	28	8	4	2	1	1
Rumania	19	6	5	1	20	1	8	1	0	0
Slovakia	10	5	2	0	3	0	2	0	0	0
Slovenia	23	21	6	3	11	1	1	0	1	1
Total	210	103	53	6	149	27	29	5	3	2
% of total participants	5,4	5,9	4,7	1,3	5,7	2,9	10,1	6,2	7,1	8,7

The number of participants is relatively low (average 5%). In the 2nd and 3rd call the number of participants in funded proposals dropped even further to 1,3% and 2,9%. The figures support the remarks and trends from the interviews. General statements were that participation is far too low and that more funding-money has to go to the Accession Countries. One interesting statement was the observation that in the majority of the Accession Countries fundamental research and basic knowledge is available on a very high level. "They just don't have the money for the proper infrastructure to perform high level research".

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

It is too early for significant results of the FP5 projects, as they only started in 2000.

3.2.1 Impact Assessment of the FP4 Non-Nuclear Projects (Joule)

A sample of some 90, already completed FP4 Research-projects, were analyzed in a pilot effort. This covers 15% of the total projects funded in this area. The remainder will soon be assessed in follow-up reports, in order to have the overall picture of the impact of the FP4.

The objective of the work was to provide the European Union with rapid, timely feedback on the Socio-Economic impacts of Community funded N.N.E. research, which will permit it to undertake effective adjustment of on-going Research Policy and Programs. The outcome will also be used as primary input to the activities for the European Research Area (ERA) initiative. An impact interview and analysis of each project was performed and an extensive written questionnaire was discussed with each project coordinator. The results of this exercise are currently being published in two separate reports, which will be widely distributed:

- a. Report on the achievements of each project.
- b. The social and economic impact of the projects.

In addition, a conclusion and recommendation report was submitted to the Commission.

The main findings of the NNE research projects, examined this far, indicate that:

- In general the social and economic impact was limited. It should be noted that the social and economic impact issue was not amongst the main selection criteria of FP4.
- The vast majority - some 89% - of the projects have developed some kind of new technical advances.
- The commercial leverage of funded research projects was positive.
- The major non- commercial impact of the projects is on the improvement of the environment and particularly on CO₂ emissions.
- The direct impact on employment levels is not likely to be high, at least in the short term, unless the tangible product is massively produced and commercialized.
- Better understanding of the European Added Value principles would strengthen the Socio-Economic impact of the Non- Nuclear Energy Research Program.

These conclusions support the earlier conclusions:

- the R&D impact mechanisms must be strengthened
- coherent and systematic project monitoring and impact tools should be put in place immediately
- necessity to ensure systematic collection of accurate qualitative and quantitative project data and create a systematic and structured assessment of impact
- necessity to develop a support structure for Technological Implementation Plans to include internal training, resources redeployment and, when appropriate, use of external expertise.

3.2.2 European Added Value¹

It must be concluded after the interviews, that the attention to the EAV of the Programme Directors has not been brought to the desired higher level. Especially explicit statements to the organisation, why particular areas of research should be operated at European level are not made and the expected value of that approach is not made clear.

In general terms it is noted that:

- The European Added Value is seen as a very serious, difficult problem.
- It is the will of the Commission to act as a catalyst and maximise the European Added Value by the European Research Area initiative. This means:
 - Increasing co-operation, exchange of good practises and professional contacts
 - Reducing unnecessary redundancy
 - Improving efficiency and integrating national efforts
 - Discouraging duplication
 - Encouraging efficient common management
- This will is not fully understood by the applicants, (evaluators, moderators and proposers) and is not well explained in the info-pack.
- This results in difficulties, during evaluation procedures and marking of the proposals, for the present evaluation population.
- In the majority of the projects assessed under 3.2.1, the contribution to the EAV is simply reflected by assembling multi-national teams.
- The commission has commissioned Yellow Window Management Consultants to review the concept of EAV, its implementation in the RTD programme and to suggest improvements in the way EAV can be captured in the future. The report "Identifying the constituent elements of the European Added Value (EAV) of the EU RTD programmes: conceptual analysis based on practical experience" was available only in November, so it is practically impossible to evaluate its impact.

3.3 CONTRIBUTION TO THE ISSUES TO THE EUROPEAN RESEARCH AREA

The issue of the contribution to the European Research Area and the practical fulfilling of the policy is seen as a difficult task. FP5 accounts for only 5.4% of the public research effort in the EU. Still the Framework programme is believed to have its contribution to the extension of R&D in the European Union. It is necessary though to make sure that the funding used for R&D in the FP5 is not followed by a decrease of funding by National Governments or industry. This way the FP5 funding would only substitute earlier funds instead of increasing the total volume of R&D funding in Europe.

In the resolution of June 2000 the Commission is called upon to develop indicators and a methodology for the benchmarking of national research policies.

It is necessary to increase the awareness that public European funding must be utilised to increase European industrial competitiveness towards USA and Japan. To be more successful in this field, it is believed that a strong focus to a limited number of specific areas is necessary. Some clear examples were mentioned during the interviews:

¹ European Added Value = "The value resulting from EU support for RTD activities which is additional to the value that would have resulted from RTD funded at regional and national level by both public authorities and the private sector"

Nuclear focus with EFDA (Steering network) and JET (Common large laboratory), CERN with LHC, ESA (European Space Agency) and Airbus

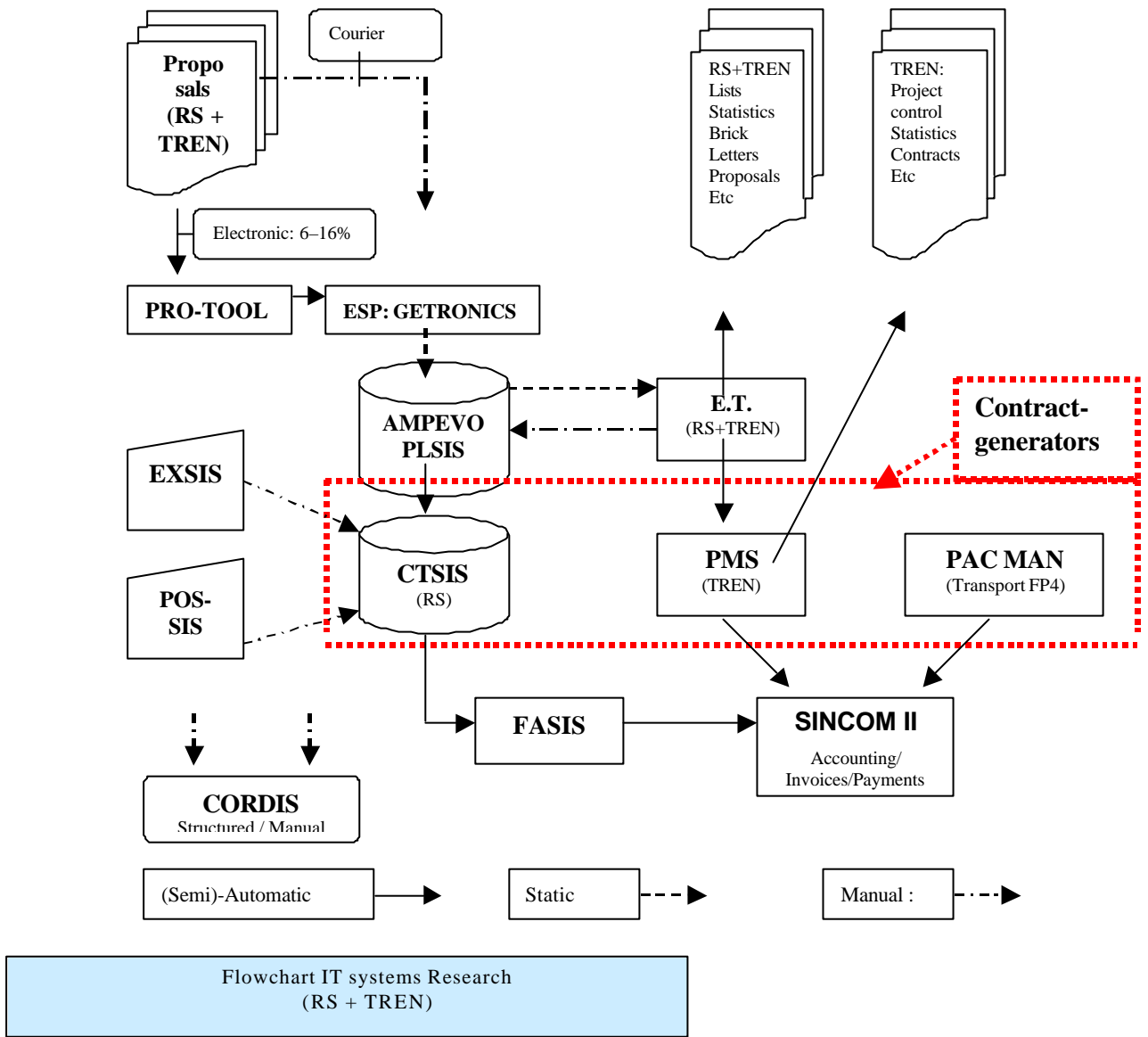
Some ways and conditions necessary to be able to develop an ERA and to invigorate research in Europe:

- make sure a clear and understandable common European policy is defined
- create European "Brains" networks that use national Centres of Excellence
- develop large common installations and infrastructure
- decompartmentalisation and better integration of Europe's scientific and technological area
- increase coherence between research at national and European level.

In the Work programme of October 2000, five priorities of strategic importance (40% of the budget) are defined. The policy priorities with respect to the ERA are covered in the fourth strategic priority: International co-operation, co-ordination with Member State research programmes and EU-wide research networks.

3.4 FOLLOW-UP OF RECOMMENDATIONS FROM PREVIOUS MONITORING EXERCISES

- The recommendations of the previous' year monitoring panel for an impact assessment of the results of the FP4 NNE projects was partly fulfilled by analysing some 90 completed RTD (Joule) projects out of a total of 465 Research projects in a pilot effort.
- Since April 2000 a clarification of management share and responsibilities between the General Directors of DG Research and DG TREN has been jointly reached with the signature of an agreement dealing with several operational issues.
- To bring the signature rights as much as possible near or with the staff in charge, the technical and financial management of specific programmes are now under the responsibility of one single director.
- Logistic problems have been solved. These have resulted in an actual improvement of the evaluation process. The evaluation period is reduced to 3-4 weeks.
- Recommendations made by the panels with regard to a possible modification of the monitoring process in accordance with the FP5 structure with transversal activities have not been followed to a large extent. The possibility is examined for future monitoring exercises to increase interaction between Specific Programmes and Framework Programmes.
- In an attempt to put a user-friendly Information Management System in place, a number of actions have been taken. Still the systems of TREN (a.o. PMS) and RTD (a.o. AMPERE) are not compatible. Proper management information of the FP5 program cannot be retrieved from one common information system. Program indicators are not available for monitoring purposes and consolidated figures are not available as management-tool. The large number of tools and the connections or lack of connections are illustrated in the flowchart at the end of this section, with further explanation in Annex D.
It is certain that a large number of valuable hours are lost every day due to this situation.
- The problems that came out from the present monitoring exercise clearly showed the disconnection between the different modules of IT. This deficient transmission of information conducts to long time consuming processes. This is stated by the long time between the approval of a proposal and the final contract. Concerning this point, periods up to 9 months were mentioned by people interviewed from the contracts.



4. MAJOR TRENDS, CONCLUSIONS AND RECOMMENDATIONS

4.1 TRENDS AND CONCLUSIONS

4.1.1 Reorganisations

After the transition year 1999, the year 2000 was another transition year due to the reorganisation of DG TREN. The year 2001 will turn out to be a transition year again with the implementation of the new organisation of DG Research, the first year of implementation of the revised Work Programme and the preparations for the 6th Framework Program. The complete reorganisation of the Commission will also inevitably cause temporary inefficiency.

4.1.2 Major trends from analysis of the interviews

The panel interviewed a large number of officials from the Commission. These interviews have been analysed and in the tables below, the most relevant remarks and the main trends are summarised.

Panel questions	Directors	
	TREN	RTD
New approach of short and medium-long term	Good measure. It favours the clarification and division of projects between both DG's.	Good solution to split tasks between both DG's.
EU dimension (EAV and ERA)	There is a need of creation of networks of excellence. National spheres of technology should have incentive to fully associate	The EU money should be a catalyst to improve efficiency of national efforts and redundancies should be eliminated The bottom up approach must be accepted but one should prevent duplication. Learn from existing EU success stories
Accession countries	There are few incentives for accession countries to participate. Creation of a legal framework by benchmarking will be needed.	Accession countries participate in many networks, but involvement is not enough. Money spent in the accession countries is insufficient to solve their problems.
Internal organisation and Informatics tools	Commission is under-staffed and the Informatics system is time consuming. There is a need for externalisation in the follow-up of projects so that time is left to scientific officers to develop strategic issues Many directorates are involved with Energy PMS not reliable for the time being	The internal time for answers is huge. The EU citizens are entitled to know the decision on their projects on time. System of proposal approval by batches unacceptable. The administrative process "lacks good sense". The specifications of any Informatics tool should be adapted to the dynamics of FP. Use money presently spent on External Service Provider to purchase a proper IT system. SINCOM II "highly user unfriendly".
Impact of the results of the programme	In favour of impact assessment.	A database including the performance of the applicants would be of great usefulness. Specialists should make the evaluation "a posteriori". Impact assessment very useful and should continued
Monitoring impact	-	Monitoring should be re-organised in a matricial way. Horizontal panel is not giving enough support to the programs conclusions and recommendations.

Panel questions	Heads of Unit	
	TREN	RTD
New approach of short and medium-long term	Confusion. What about purely short-term research projects? In principle good.	No problem in general

Revised program and Info – pack	The info - pack is too complicated and should be drastically simplified. The revision was not good at all as the info pack was directed to go closer to the market and the results were the opposite. Heads of Units and SO's must participate actively in the objectives of the programme and the preparations of the info-pack to be aware of politics and direct their job accordingly.	Too confusing. Difficult for applicants
EU dimension (ERA and EAV)	Difficult to attain objectives. Big companies fear to join together	The ERA is important to avoid ? national protection. Benchmarking and mapping of excellence of national products are needed
Accession countries	The accession countries should have a transitory treatment as an incentive to participate. Till now the result is a low number in the participation.	Some big projects are on going but some efforts should be made to encourage a more representative participation
Internal organisation and Informatics tools	The negotiation of contracts is hypothetical because at the end the proposals will be submitted to the approval of the Commission. The organisation of info – days, to teach the candidates of each SP is of great importance. Shortage of staff, particularly for horizontal tasks. Energy activities spread in many Directorates making collaboration difficult and inefficient	There is no serious planning or management. DG research has passed through too many restructuring. The good point is that there is good personnel relation. Info tools are too heavy and non-flexible
Preparation of FP6, impact assessment	Low involvement. I.A. should cover demonstration programme as well	Feel involved
Time to contract	Improving	-
External help	There is a need to make audits on site.	-

Panel questions	Scientific Officers	
	TREN	RTD
Short-term Long-medium term	There is much confusion about the definition of short term and long term actions	Some confusion can happen as this point is not precisely defined in the info - pack
Info-pack	Unhappy with result: Too much, too complicated	Still not good
Work load	Too much administrative work and consequent difficulties in concentrating in the scientific updating. An approximate rate of 60 (upto 80) projects per S.O. (80% FP4)	High administrative workload and lack of time to stay scientific up to date. An approximate rate of 20 projects per S.O. (50% FP4)
External support	Strong need of external support	External support would be helpful to generate time to stay up to date.
New procedures	The new procedures are too complicated and time consuming	In progress
Delegation of competence's	All decisions have to go up for approval. Lack of delegation of competencies	Too many decisions to be taken at upper level
Time to contract	Too long	Too long
Experts database	Very little excellence in the choice of external experts	Difficult to approach and quire the database
Internal organisation and Informatics tools	Too much restructuring and very inefficient Informatics support. S. O. weren't asked to collaborate in the I. T. specifications. I.T. tools are "pathetic".	Too much restructuring and very inefficient Informatics support
Project management	Too many projects. Only time for limited administrative follow-up	S.O is more project member than project manager.

4.1.3 Major trends

A number of earlier addressed concerns remained major trends, and worries, during the year 2000. Consequently they are re-appearing in this chapter as trends that still require a lot of attention:

- The fundamental incoherence between the external presentation of the specific programme and its internal management;

- The concern about the quality of proposals and eventual projects, particularly in still being strongly technologically driven rather than problem / market oriented;
- The concern that the guidelines to evaluators were not sufficiently explanatory, particularly in interpreting the Work Programme, such that evaluators became, to some extent, creators of research policy.
- The concern that many employees are still overloaded due to a shortage of staff. Typical, the S.O.'s in DG Research are in charge of upto 20 projects and in DG TREN of upto 80 projects!

The mid-point revision of the work programme should change the situation and answers to the recommendation of a radical, external action.

The effect can be assessed only as soon as the results of the 4th call are known. Further delegation of decisions for approval of funding, and immediate information of negative decisions to proposers through Cordis will show their effects in shortening the time needed between evaluation and contract signature.

Overloading of staff will be reduced after assignment of a number of PTA's (Project Technical Assistants), for which a call for applicants has been launched.

4.1.4 Key recommendations

A. Recommendations referring to the Calls for Tender

- Reduce the size of the info-pack. It is the wish of all parties involved, proposers, evaluators and Scientific Officers to simplify the info pack. Make sure that the info-pack is really restructured, and prevent that only additional layers are added .
- Make crystal-clear translations of the strategic choices in the revised info-pack .
- Develop clear and practical guidelines that lead to the elaboration of a workable approach to European Added Value. This will be of great value not only for proposers and evaluators but also for the employees of the Commission.
- Reconsider the anonymity procedures during evaluation. The panel realises this will create a discussion with many aspects. Still anonymity will always be a weak point in the evaluation procedures that requires permanent safeguarding against misuse and possible corruption.
- Make sure the closing dates of the calls for short, medium and long term proposals are on the same date. It will create extra effort due to concentrated activity, but it gives the Commission the possibility to shift proposals from one call to the other without getting time constraints.

B. Recommendations referring to the Internal Organisation

- The structure of the energy research organisation is not very clear if one is not familiar with the actual way of operation of the DG's. Still the last reorganisation made the structure more "business like" and task orientated. However, the internal communication between various levels must be improved in order to translate policy from top management to proper execution by Commission staff. This translation is found to be inconsistent and weak especially in DG TREN.
- Develop strategic management communication concerning policy co-ordination. This structured communication is needed to facilitate that all people involved in a FP are fully aware of strategy and policy of the EU.
- Scientific Officers must get more time and facilities to be operational in areas that require technical excellence and expertise, such as impact assessment. It is recommended to

relieve their administrative tasks by re-introducing external administrative support. It is the panel's understanding that a call for PTA's (Project Technical Assistants) has been launched for both concerned DG's together.

- It is the wish of the DG's management to shift the focus of the Scientific Officers from Scientific Work to Project Management and to policy preparation and implementation. Schooling and training will be necessary for most Scientific Officers to realise this shift fast and effectively.

C. Recommendations referring to the Management Information Systems

- Introduce user friendly information systems, answering to the needs and wishes of users. As a matter of urgency, it is a necessity to facilitate the users to participate in the preparations. This will increase effectiveness, both in application design as in later use of the tools.
- Buy standard tools from the market with enough flexibility to follow the requirements of consecutive Framework Programs. Make sure the tools are compatible for the connected DG's and that they are interoperable.

The panel is not recruited from IT specialists. The interviews with specialists however gave a clear view of a possible approach. It is recommended to buy a "standard" system based on a central database, with flexible, relatively small applications that are fed by this central database. This way consistent data are used to feed management information systems, to consolidate figures from different calls, to produce trends, etc. It also gives enough flexibility for differences in requirements between DG's and differences in requirements between different programs.

D. Recommendations referring to the Impact Assessment

- Short term impact assessment: Set up a structure based on a qualitative and quantitative analysis to assess the full scope of the Joule and Thermie projects. The experience gained from the pilot exercise already performed for a number of Joule projects of the FP4 is very useful. It is strongly recommended that this exercise is soon completed by DG Research and also extended to DG TREN. This is necessary to get a proper insight in the effects of the 4th Framework Program and to gain experience for structured impact assessment for FP5 and FP6.
- Long term impact assessment: Set up a structure that supports the 6th Framework Program and will be used to know and prove the impact of FP6 in a structured way. Make sure this requirement is clear when the terms of reference for the new Management Info System are defined.
- Incentive for participants. The incentive could be the admission to European Networks of Excellence, thus rewarding the participants of successful projects with much impact and also improving the strength of European Research and support the ERA by adding active, successful participants to the Networks of Excellence.

E. Recommendations addressing the monitoring methodology

- The monitoring panels should be provided with sufficient statistics that are crucial for a rigorous analysis and for following the monitoring exercise guidelines. The lack of statistics is the negative result of the present, inefficient Information Tools.
- Adapt the monitoring process to the Commissions structure and improve vertical and horizontal synergy in giving to the monitoring exercise a matricial structure as the FP5 programme .

ANNEX A : Terms of Reference

Background

The Article 4(a) of the Council Decision 1999/170/C of 12.3.1999 on the Specific Programme for research, technological development and demonstration on "Energy Environment and Sustainable Development" stipulates:

"In the light of the criteria referred to in Article 3, and the scientific and technological objectives and priorities set out in Annex II, the Commission: (a) shall monitor, with appropriate assistance from independent external experts, the implementation of the specific programme and, where appropriate, submit proposals to Council for adapting it, in accordance with Article 5(1) of the fifth framework programme;..."

Issues to be addressed by the panel

This 2000 exercise covers the FP5 implementation as well as the remaining ongoing FP4 activities.

Overall this year's monitoring should focus on the following main issues:

- implementation and progress including participation of Accession Countries;
- significant results, preliminary evidence of impact and European Added Value;
- contribution to the issues of the European Research Area; and
- follow-up of recommendations from the previous monitoring exercise(s) and recommendations for 2001.

In the context of the main points stated above, the following specific issues should be, at the Specific Programme level, focused on:

- progress towards programme objectives and achieving annual targets, and appropriateness of resources in relation to objectives and priorities;
- programme management and co-ordination, including co-ordination with other programmes, highlighting improvement and examples of good practice;
- participation of Accession Countries;
- preliminary evidence of impact and European Added Value;
- contribution to the issues of the European Research Area;
- contribution to other EU policies; and
- follow-up of recommendations from the previous monitoring exercise(s) and recommendations for 2001.

The programme management might draw the panel's attention to specific issues of direct relevance for this year's monitoring exercise. The panels might complement these issues with others they consider important.

The monitoring exercise will be based on the objectives of the programme, factual information given by the Programme management, and interviews of the Programme management and member(s) of the Programme Committee and Advisory Groups. The small number of experts and the limited time devoted to the exercise will dictate a broad analysis at the general level on the status of programme implementation (rather than in-depth project- by-project investigation). In particular, the exercise should be considered as a light and quick response mechanism to programme development and give advice on key issues thus help to reinforce the establishment of best practices and identify and correct weaknesses.

The experts are invited to recommend additional performance indicators and methodological improvements, which could be useful for future monitoring of the programme.

ANNEX B : List of interviewed officials

<u>Directors</u>	
Mr. H. Bruhns, acting Director	DG RTD
Mr. U. Finzi	DG RTD Directorate
Mr. J.F. Marchipont	DG RTD
Mr. Gonzalez Finat	DG TREN Directorate B
Mr. Hanreich	DG TREN Directorate
Mr. P. De Sampaio Nunes	DG TREN Directorate

<u>Head of Unit</u>	
Mrs. P.L. Koskimaki	DG TREN Unit A.5
Mr. C. Burgos	DG TREN Unit C.2
Mr. E. Millich	DG TREN Unit D.3
Mr. G. Molina	DG TREN Unit D.4
Mr. M. Poireau	DG RTD Unit D0.3
Mr. A. Perez Sainz	DG RTD Unit DII.1
Mr. P. Zegers	DG RTD Unit DII.2

<u>Scientific Officers</u>	
Mr. Paul Doyle	DG RTD unit DII.1
Mr. Jürgen Greif	DG RTD unit DII.1
Mrs. Garbiñe Guiu	DG RTD unit DII.1
Mr. Pekka Jarvilheto	DG RTD unit DII.2
Mr. Stefano Puppini	DG RTD unit DII.2
Mr. Barry Robertson	DG RTD unit DII.2
Mr. Pedro Ballesteros	DG TREN unit A.5
Mr. Ioannis Samouilidis	DG TREN unit C.2
Mr. Luque Cabal Vincente	DG TREN unit C.3
Mr. Vassilios Kougionas	DG TREN unit C.3
Mr. Alexandros Kotronaros	DG TREN unit D.2
Mr. Henry Pauwels	DG TREN unit D.2
Mr. Jan Erik Hanssen	DG TREN unit D.3
Mr. Antonio Paparella	DG TREN unit D.3
Mr. Sylvain De Royer	DG TREN unit D.4

Contract Service	Mrs. F. Guillermet	DG RTD
Financial Cell	Mrs. M. Varho	DG TREN Unit D
Informatics	Mr. Almeida Didier De	DG RTD Unit DII.2
	Mr. De Backer	DG RTD
	Mr. D. Gould	DG RTD
	Mrs Rita Bultynck	DG RTD
informatics (PMS)	Mr. T. Fernandes	DG TREN/01
	Mr. Mambourg	DG TREN/01

ANNEX C : Documents supplied and examined (1)

Official Journals:

- Decision No 182/1999/EC of the European Parliament and of the Council, 22 December 1998, concerning the fifth framework programme of the European Community for research, technological development and demonstration activities (1998 to 2002).
- Council decision of 25 January 1999 adopting a specific programme for research, technological development and demonstration on energy, environment and sustainable development (1998 to 2002)
- Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the regions

Monitoring reports:

- External Monitoring report on the specific programme Non-Nuclear Energy (JOULE-THERMIE) 1995
- idem 1996
- idem 1997
- idem 1998
- External Monitoring report on the specific programme for research and technological development including demonstration in the field of Non-Nuclear Energy 1999
- External Monitoring report of the framework programmes and specific programmes - Broad Guidelines 2000

Reports

- Report on the Customer Satisfaction Workshop on the proposal preparation process, June 29, 2000.
- Identifying the constituent elements of the European Added Value (EAV) of the EU RTD programmes: conceptual analysis based on practical experience, Final Report, contract no. EVA5-CT1999-0006.
- Calls for proposals of the EESD-Programme, Energy sub-programme, Independent Observer Report, Ir. C.G. Meijer.
- EESD-Programme, Energy sub-programme, Independent Observer Report, Mrs. Teresa Ponce de Leao.
- Internal Service Guide - Directorate RTD - DII, version 3/12/99.
- Implementation Status of Monitoring 1999 recommendations. EESD: Part B- Non-Nuclear Energy 22.2.01
- Opinion of the External Advisory Group (EAG) for Non-Nuclear Energy Research in the ENERGIE Programme on the Mid-Point Revision of the Work Programme, 5 June 2000
- Programme Management system PMS, 06/02/01
- Framework Programme IV, SME participation 1994-1998 Draft, 7 October 1998
- SME Participation in the 4th EU Framework Programme for Research and Technological Development, 23 June 1998
- Towards an ERA, Key Figures 2000, EUR 19396
- 1999 Annual monitoring report on the RTD activities conducted under the EC and Euratom framework programmes, EUR 19374
- The assessment of the Socio-Economic Impact of the Framework programme, Tender Specifications
- Manuel de Procedures de gestion financiere et contractuelle de la DG TREN, 01.9.2000
- Result of the evaluation of the 3rd call for Concerted Actions and Thematic Networks, deadline 1 September 2000 and the Open call for Accompanying Measures and Fellowships, Cut-off date 1 September 2000
- Result of the evaluation of the open call for Generic Activities and Accompanying Measures, Cut-off date 15 February 2000
- Result of the evaluation of the 3rd call, deadline 31 May 2000 and the Open Call for Generic Activities and Accompanying measures, cut-off date 31 May 2000
- Result of the evaluation of the 2nd call, deadline 4th October 1999
- Result of the evaluation of the 1st call, deadline 15th June 1999

ANNEX C : Documents supplied and examined (2)

Documents for information:

- 1998 Annual monitoring report on the fourth framework programme and the Euratom framework programme
- 1999 Annual monitoring report on the RTD activities conducted under the EC and Euratom framework programmes
- Wind energy production in cold climates (WECO), EUR 19398
- WEGA 11 Large wind turbine scientific evaluation project EUR 19399
- European Fuel Cell Projects 1995-2000, EUR 19368
- La Pile à Combustible un moteur pour notre avenir, Une solution durable pour l'Union Européenne, EUR 19367
- Environment, Energy, Europe, An investment for now and the future
- Towards a European research area
- RTD Info nr. 26, towards a European research area
- Infopack ENERGIE
- Biomass, An Energy Resource for the European Union, EUR 19424

ANNEX D : Management Information Systems

Informatics systems in the Non-Nuclear Energy program.

Proposals are submitted by the proposers, either electronic (through Pro-Tool, available in CORDIS) or on paper or diskette.

This information is fed to the central database PLSIS by the Electronic Service Provider (ESP) Getronics. This requires encoding of proposals, data entry, scanning, etc. and takes two weeks to be completed.

Now the information is available in the database, and is processed by the application Ampere Evolution (AMPEVO). This software tool produces lists and data. Data are as good as the input is from the ESP. In many cases data require manual correction by scientific officers.

Using AMPEVO

One of the problems with AMPEVO is the design of the application. It was designed to handle the evaluation process in great detail and to cope with just 5 to 6 different types of proposal and contacts this is not the case as , at least 16 different models exist.

This approach resulted in a non-flexible, user unfriendly tool. It also resulted in non-existence of direct connections between the database and the workstations / PC's of the scientific officers since AMPEVO was supposed to do all the work. Often the input needs correction, but at the same time it cannot be approached by the scientific officers.

The end-effect is non-availability of reliable statistic or operational data for scientific officers and other employees. Since people will always find other ways to control and track their work, they are now using many individual, tailor-made applications to track and control the proposals and produce statistic information but this is time consuming.

The Evaluation Tool

To make sure the critical evaluation process is controlled and managed in a proper way, the evaluation tool ET is developed. This is the local system for both RTD and TREN as far as evaluation of the proposals is concerned. In ET all evaluation information up to and including the final funding recommendation is stored and processed. Statistics are produced and total overviews of the recommendations are produced.

The next steps in project management differs between RTD and TREN.

Contract management

The corrected proposal-information of the RTD projects is entered into manually to PLSIS. However, the contract negotiations that follow are not tracked or controlled through AMPEVO but by small individual applications of many employees. This contract-information is manually or semi-automatic introduced to CTSIS. This tool produces the contracts based on this info and the required data from PLSIS. In total the period between the end of evaluation and the beginning of preparation of contracts lasts about 12-16 weeks. Then after negotiation there is a period of 3-4 weeks to have committee decision.

The corrected proposal information of the TREN projects is downloaded to the Project Management System (PMS) after the evaluation is finished. PMS is designed to track and control the proposals through contract negotiations, contract preparation and follow-up the project until completion.

The FP4 projects from DG Transport are handled by the tool PacMan. This tool also generates contracts and tracks the negotiation process.

This means three different systems generate contracts in the same program.

In the end, the contractual and financial data are all offered to the central accounting system SINCOM II, to be able to handle invoices and perform financial transactions.

Statistic information

There is no feed back of negotiation results to PLSIS / AMPEVO from CTSIS or from PMS. This means there is no complete and updated database of the data required for statistic- and

management information because it is not possible to make amendments to the contracts. This results in the non-availability of reliable and complete figures to produce statistics of RTD and TREN.

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 *Energy, Environment and Sustainable Development* – sub-programme: *Energy*.

	Recommendation	Commission Services' Response	Target date for implementation / progress
A.	<p><u>Recommendations referring to the Calls for Tender</u></p> <ul style="list-style-type: none"> ▪ Reduce the size of the info-pack. It is the wish of all parties involved, proposers, evaluators and Scientific Officers to simplify the info pack. Make sure that the info-pack is really restructured, and prevent that only additional layers are added . ▪ Make crystal-clear translations of the strategic choices in the revised info-pack . ▪ Develop clear and practical guidelines that lead to the elaboration of a workable approach to European Added Value. This will be of great value not only for proposers and evaluators but also for the employees of the Commission. 	<ul style="list-style-type: none"> ▪ As a result of the recommendations of the Panel of 1999, the Commission Services endeavoured to simplify the info-pack. At the present stage of the implementation of the 5th FP, it is important to ensure necessary continuity in the carrying out of the activities and to avoid creating any confusion to the users. A summarised version of the calls for proposals will therefore be diffused on CORDIS but the format of the current info-pack will be restructured, on the basis of the accumulated experience and of the comments of the Panel, only for the next Framework programme. ▪ The Commission Services already introduced the taking into account of the concept of European Added Value in the evaluation exercises. Moreover, a more precise definition of this concept and of its application will be diffused to the users. The Commission Services will rest, for that purpose, on the results of the study carried out on this dimension, following the recommendations of the Panel of the previous year. 	<p>Next Framework Programme preparation second half 2001-2002</p> <p>October 2001</p>

	Recommendation	Commission Services' Response	Target date for implementation / progress
	<ul style="list-style-type: none"> ▪ Reconsider the anonymity procedures during evaluation. The panel realises this will create a discussion with many aspects. Still anonymity will always be a weak point in the evaluation procedures that requires permanent safeguarding against misuse and possible corruption. ▪ Make sure the closing dates of the calls for short, medium and long term proposals are on the same date. It will create extra effort due to concentrated activity, but it gives the Commission the possibility to shift proposals from one call to the other without getting time constraints 	<ul style="list-style-type: none"> ▪ The Commission Services are aware of the risks, which could arise from the absence of anonymity in the evaluation procedure, in particular at the time of the evaluation of the proposals. Internal consultation will therefore be undertaken to measure the impact of these risks and the viability of a change, to be carried out in the next Framework programme, in the procedures and forms of the proposals for projects in the energy sector. Moreover, EURAB established a Working Group dedicated to the evaluation of the projects and its opinion will be taken into account for the procedures of the next framework programme. ▪ The harmonisation of the periods of handing-over of the proposals for the actions involving the 5th FP will be carried out as far as possible. 	<p>September 2001</p> <p>Spring 2002</p> <p>Ongoing</p>
B.	<p><u>Recommendations referring to the Internal Organisation</u></p> <ul style="list-style-type: none"> ▪ The structure of the energy research organisation is not very clear if one is not familiar with the actual way of operation of the DG's. Still the last reorganisation made the structure more "business like" and task orientated. However, the internal communication between various levels must be improved in order to translate policy from top management to proper execution by Commission staff. This translation is found to be inconsistent and weak especially in DG TREN. 	<p>The work of the members of the Panel was completed in parallel with the recent reorganisation of the Services of the Directorate-General for Research. It was therefore difficult to draw, at this stage, conclusions, on the impact of these changes on monitoring. The improvement of the internal communication in particular on the strategic aspects was one of the objectives of this restructuring and resulted, in particular, in the creation of political Units within the thematic Directorates. In addition, the Commission Services will take care to increase transparency in the execution of the operations and the development of policies, as well as information and training sessions for the personnel.</p>	<p>Done</p>

	Recommendation	Commission Services' Response	Target date for implementation / progress
	<ul style="list-style-type: none"> ▪ Develop strategic management communication concerning policy co-ordination. This structured communication is needed to facilitate that all people involved in a Framework Programme are fully aware of strategy and policy of the EU. ▪ Scientific Officers must get more time and facilities to be operational in areas that require technical excellence and expertise, such as impact assessment. It is recommended to relieve their administrative tasks by re-introducing external administrative support. It is the panel's understanding that a call for PTA's (Project Technical Assistants) has been launched for both concerned DG's together. ▪ It is the wish of the DG's management to shift the focus of the Scientific Officers from Scientific Work to Project Management and to policy preparation and implementation. Schooling and training will be necessary for most Scientific Officers to realise this shift fast and effectively. 	<p>The Commission Services are aware of the heaviness of the workload of the scientific officers and envisaged to solve the situation by the implementation of the reorganisation of its Services, allowing a better allocation of the tasks inside the Commission and by the development of projects of greater size, giving priority to quality.</p> <p>The development of the tasks of the Directorate personnel, scientific work and aspects linked to project management towards a more programmatic orientation of the monitoring of the projects and the preparation and implementation of the policies is a reality, which was made necessary gradually. In order to accompany this development and to provide the necessary tools to the personnel to assume this transition, a further training will be ensured.</p>	<p>Done</p> <p>2001/2002</p>
C.	<p><u>Recommendations referring to the Management Information Systems</u></p> <ul style="list-style-type: none"> ▪ Introduce user friendly information systems, answering to the needs and wishes of users. As a matter of urgency, it is a necessity to facilitate the users to participate in the preparations. This will increase effectiveness, 	<p>The Commission Services attach a priority to the improvement of the information management systems. These systems, which result from the work completed permanently on this matter, still present deficiencies. In order to remedy to the problem, computer suitable "user friendly tools" which are flexible, adaptable and easy to use will be developed as soon as possible. Within this framework, a</p>	<p>December 2001</p>

	Recommendation	Commission Services' Response	Target date for implementation / progress
	<p>both in application design as in later use of the tools.</p> <ul style="list-style-type: none"> ▪ Buy standard tools from the market with enough flexibility to follow the requirements of consecutive Framework Programs. Make sure the tools are compatible for the connected DG's and that they are interoperable. <p>The panel is not recruited from IT specialists. The interviews with specialists however gave a clear view of a possible approach. It is recommended to buy a "standard" system based on a central database, with flexible, relatively small applications that are fed by this central database. This way consistent data are used to feed management information systems, to consolidate figures from different calls, to produce trends, etc. It also gives enough flexibility for differences in requirements between DG's and differences in requirements between different programs.</p>	<p>common Task Force (Research and TREN) was instructed to study the existing problems and to propose solutions encouraging compatibility and the interoperability of the systems including practical improvements in the existing system.</p>	
D.	<p><u>Recommendations referring to the Impact Assessment</u></p> <ul style="list-style-type: none"> ▪ Short term impact assessment: Set up a structure based on a qualitative and quantitative analysis to assess the full scope of the Joule and Thermie projects. The experience gained from the pilot exercise already performed for a number of Joule projects of the Framework Programme 4 is very useful. It is strongly recommended that 	<p>The Commission Services will carry out, to the current of 2001, a new exercise of evaluation of the impact of the projects implemented under the 4th FP which will contribute to the one carried out in 2000 on a sample of 90 projects and will take into account, not only the socio-economic but also technological aspects of the projects. This exercise will be reproduced systematically in the context of the next Framework programme.</p>	January 2002

	Recommendation	Commission Services' Response	Target date for implementation / progress
	<p>this exercise is soon completed by DG Research and also extended to DG TREN. This is necessary to get a proper insight in the effects of the 4th Framework Program and to gain experience for structured impact assessment for the fifth Framework Programme and the sixth Framework Programme.</p> <ul style="list-style-type: none"> ▪ Long term impact assessment: Set up a structure that supports the 6th Framework Program and will be used to know and prove the impact of the sixth Framework Programme in a structured way. Make sure this requirement is clear when the terms of reference for the new Management Info System are defined. ▪ Incentive for participants. The incentive could be the admission to European Networks of Excellence, thus rewarding the participants of successful projects with much impact and also improving the strength of European Research and support the ERA by adding active, successful participants to the Networks of Excellence. 		

	Recommendation	Commission Services' Response	Target date for implementation / progress
E.	<p><u>Recommendations addressing the monitoring methodology</u></p> <ul style="list-style-type: none"> ▪ The monitoring panels should be provided with sufficient statistics that are crucial for a rigorous analysis and for following the monitoring exercise guidelines. The lack of statistics is the negative result of the present, inefficient Information Tools. ▪ Adapt the monitoring process to the Commissions structure and improve vertical and horizontal synergy in giving to the monitoring exercise a matricial structure as the fifth Framework Programme. 	<p>The Commission Services commit themselves to improve the availability of the factual data for the next monitoring exercises, in particular by the improvement of the information and management tools. In addition, the Commission Services consider that the Members of the Monitoring Panel should give more priority to the qualitative impact analysis of the projects (socio-economic, scientific, technical and industrial aspects, role of the RTD in general, link with citizen concerns and the ad-hoc policies, structural improvements of the actions and intervention mechanisms) in relation to the quantitative and statistical aspects.</p> <p>In order to improve the synergies between the various programmes and to adapt to the current issues, the Commission Services revised the monitoring system. This reform is characterised by the setting up of a synergy between Monitoring Panel levels (FP and Specific Programme), the development of "self-evaluation" exercises, the setting up of timetable and of follow-up measures of the monitoring panel recommendations and the extension of the fields of activity of Monitoring.</p>	<p>December 2001</p> <p>Done Pilot for Monitoring 2001</p>