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Final Review of COST in the Sixth Framework Programme

PANEL REPORT
31 May 2007



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Final Review of COST in the Sixth Framework Programme

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31 May 2007

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Executive summary

This report is the outcome of the Final Review of European Cooperation in the Field of Scientific and Technical Research (COST) in the Sixth Framework Programme (FP6) by a panel of independent and high level experts, which took place in the Spring of 2007. The COST Final Review Panel has come to the conclusion that the transition from the scientific and administrative secretariat run by the European Commission to the ESF run COST Office has been very successful also due to the good interaction between the Commission and ESF. At this occasion a series of requested reforms have led to a **number of improvements** such as:

- A simplification of application procedures and a speeding up of decision and payment schedules;
- An improvement of the transparency of COST by introducing the Open Call for proposals and external reviewing of those proposals;
- An improved financial management using the synergies between the ESF organisation and the COST Office;
- A simplification of scientific management by reducing the twelve Technical Committees to nine Domain Committees.

This improved management has contributed to a very **high customer satisfaction** of the current users of COST. The panel wishes to encourage the COST Office to maintain these high quality levels in the future and particularly in the context of an increase of the COST budget in FP7. The introduction of a new tool for the financial management of COST Grant Scheme needs to be monitored carefully.

Of great concern to the Panel is that despite several improvements, the governance structure of COST remains extremely complicated. The review panel's main concern is that there is **little clarity on the roles and decision-making powers** of each of the different actors, in the overall governance picture and for the final responsibilities for COST activities in particular. The current governance arrangement does not provide sufficient impetus particularly concerning the strategy formulation and positioning of COST.

Particularly today where the European Member States have agreed to the Lisbon agenda; a European research policy has taken shape within the European Research Area concept; many (new) trans-national networking initiatives are in operation; and other trans-national stakeholders (EUREKA, ERC and ESF itself) are reconsidering their respective unique position; COST cannot stay behind in **taking a strategic view** to:

- Rethink its value added in European Research Area (today and in the future);
- Decide on its target groups and the wider communities it wants to involve;
- Decide on the geographical scope and the 'core-business' of COST.

Therefore, despite a very successful number of improvements, the lack of strategic positioning combined with confused governance structures, asks for actions at the highest levels.

Thus, the Final Review Panel's **recommendations** are addressed to:

Firstly to the **COST Member States**:

- 1 At the Ministerial level we invite the Ministers to define the position and the role of COST in ERA given the changed context since 1971. Redrafting of the present inter-governmental regulations and mandates set down for COST would be appropriate, particularly to discuss the governance structure and responsibilities.
- 2 A clear choice should be made to determine the final responsibility for the governance of COST, including both managerial and strategic aspects. In this context special attention should be given to the role of all stakeholders involved. The Panel sees two alternative options:
 - The COST programme should create an independent legal entity
 - ESF should take over the full operation of COST including the strategy formulation and the linkages with Member States
- 3 In the context of the possible revision of the governance of COST, the Ministers from the COST Member States are suggested to reconsider the role and the composition of the CSO.

Secondly to the **European Commission**, as the funder of COST and **to the EU Council**:

- 4 As mentioned in the Green Paper on ERA, and on the basis of the results of the consultation and debate, the Commission intends to propose initiatives in 2008. In this context the Commission could make a recommendation to the Council on the COST position, strategy and role in ERA. Consequently, COST should be discussed at one of the forthcoming Competitiveness Councils, where ERA is on the agenda.
- 5 The Commission services responsible for COST should do more to increase the synergy between COST and the Framework Programme activities through involving DG Research and other DGs of the research family more closely in the partnership between COST and the Commission.
- 6 The Commission should ensure the continuity of the COST management by providing, under FP7, follow-up contracts to the ESF for the support of the COST Office well in time to avoid discontinuities, which would ensue in distrust from the research community.

The Final Review Panel's **recommendations** are also addressed to the other stakeholders involved in **COST (CSO, COST Office, ESF)**

- 7 The CSO should focus on the ESF/COST policies and procedures and act as a Member State based high-level advisory body. In this context the CSO should not be involved in the decisions related to individual Actions.

- 8 Adapt procedures and processes in such a way as to maximise the possibility of supporting new areas and new comers, which are not supported by other programmes and initiatives, consequently using the bottom-up principle.
- 9 Transparency should be improved by reasonable rotation of the domain committee members.
- 10 Reconsider the nine domain committees and find a structure which maximises the opportunities for multidisciplinary and 'out-of-the-box' research networks.
- 11 Refocus the – future regular – user survey to not mainly include the current customers and their views on the COST processes but also to have a better insight in the views on COST from the wider scientific community (and thus the non-users and potential users).
- 12 Launch a comprehensive impact study on the basis of finalised COST Actions including scientific, socio-economic and societal impacts. In order to do this, COST should today prepare a methodological approach, define indicators and collect relevant data to be well prepared to launch such a study for the mid-term evaluation.
- 13 In the present situation of the increased budget, devolution of management responsibilities and changes in governance, the good standards of science and financial management must be maintained, in particular with the introduction of the Annual Grant Scheme.
- 14 ESF should consider how it will take on board the future constellation of COST and consider how/whether it fits with its core-mission within the realisation of ERA.
- 15 The synergy regarding the scientific management and scientific expertise between COST and ESF should be reinforced.

Recommendations for the FP7 mid-term evaluation

- 16 The Commission should make its further support beyond €210 M, dependent on the progress of the further reforms that have been suggested by the Final Review panel in all its recommendations. This should be the main subject of the FP7 mid-term evaluation.
- 17 The FP7 mid-term evaluation should make a specific review of the use of the new COST Action annual Grant Agreements and their impacts on quality monitoring, the speed of payments, the administrative burden to the user community and the overall acceptance of COST.
- 18 An aspect of the review should be to consider the COST Office staff levels in view of the changes in the COST activities.
- 19 The mid-term evaluation should be able to rely on a solid and comprehensive impact study in order to appreciate the COST effects.

1. Introduction

This report is the outcome of the Final Review of European Cooperation in the Field of Scientific and Technical Research (COST) in the Sixth Framework Programme (FP6). The Review was carried out by a panel of independent experts in the period April to May 2007.

COST¹ was established by a Conference of European Research Ministers in 1971² as an inter-governmental framework for the co-ordination at European level of nationally funded research, and has developed into one of the largest frameworks for research co-operation covering basic and pre-competitive research. The 34 member countries include the 27 EU Member States, Croatia, Iceland, Norway, Serbia and Montenegro, FYR of Macedonia, Switzerland and Turkey. Israel is a co-operating country. Non-COST partners may also join individual Actions where there is mutual benefit. Thus up to FP7 the geographical coverage of COST was somewhat wider than the participation in the Framework Programmes.

COST is financed through the European Commission's Sixth Framework Programme (FP6) particularly the Specific Programme 'Integrating and Strengthening the European Research Area'.³ In 2002 COST⁴ designated ESF as its implementing agent i.e. the legal entity with which the grant contract with the Commission was to be concluded for the support of COST. Today COST scientific cooperation activities are managed by the European Science Foundation (ESF) and has its offices in Brussels, following a proposal from ESF in 2003 which was enforced in August 2003. As the mid-term Review⁵ was positive about the reforms that COST had initiated, it was given the maximum financial allocation of EUR 80 million provided for in the Specific Programme.

The mission of COST is *"to strengthen Europe in scientific and technical research through the support of European cooperation and interaction between European researchers. It aims to maximise European synergy and added value in non-competitive and pre-normative research"*⁶

The Final Review Panel was requested to address a set of questions raised by a high level panel, which evaluated the original ESF proposal for the COST Office, and meant for the foreseen mid-term Review (2005). The Final Review panel is asked to provide an appreciation on the provision of the administrative, scientific and technical secretariat for COST through the COST Office, on the overall outcome and impact of COST and COST Actions and on the success of the reforms of COST. The Final Review panel was also tasked to see how the recommendations of the mid-term Review panel (2005) have been followed up.

¹ COST is the French acronym for "European Cooperation in the Field of Scientific and Technical Research"

² The formal basis for the COST Co-operation was constituted by two letters sent by the President of the Council of the European Communities (on 4 November 1969 and 24 July 1970 respectively) to the Ministers for Foreign Affairs of the States invited to take part in this venture, and the written replies from each of those States. This exchange of letters was supplemented by a general resolution adopted by the European Ministers for Research attending the Ministerial Conference in Brussels on 22 and 23 November 1971. Subsequent COST Ministerial Conferences in Vienna on November 1991 and in Prague on May 1997 extended membership of COST to new countries.

³ OJ L232, 29.08.2002, European Commission, Brussels. In addition, a small amount (approximately €100,000) is provided by the COST Member States through the COST Fund for the CSO meetings etc.

⁴ Through the Danish Presidency of the European Union.

⁵ COST Mid-term Review, Final Panel Report, 23 June 2005.

⁶ Brochure 'About COST', 2007

The issues addressed by the panel can be categorised in three broad themes that structure the remainder of this report:

- The implementation of the COST programme by the new COST Office under ESF responsibility;
- The governance of COST;
- The strategy of COST.

Chapter 2 will give an overview of some key developments in COST since the mid-term Review. Chapter 3 will address how the recommendations of previous reviews have been implemented. Chapter 4 discusses the strategy of COST and its positioning in the future. The conclusions and recommendations will be presented in Chapter 5.

2. Development of COST in the Sixth Framework Programme

After a difficult period for COST in the period 2002-2003, new developments since 2004 have been instrumental for the revival of COST. In January 2004 the COST Office made a transition from the scientific and administrative secretariat run by the European Commission to the ESF run COST Office, on the basis of a contract between the EC and ESF. This has set in motion a number of revisions in the operations, management and governance of COST, which will be elaborated further in Chapter 3. Together they have allowed an upsurge of COST activities and an increased interest from the science community.

Today COST manages around 200 Actions with 20.000 researchers involved, which is estimated to be around 2-3% of the EU researchers.

An overview of started and completed Actions for the period 2004-2007 is provided in Exhibit 1.

Exhibit 1 Overview of terminations and new Actions 2004-2007

	2004	2005	2006	2007
Started Actions	52	35	57	40
Completed Actions	34	42	46	34

Since the previous Mid Term Review in the spring of 2005 the COST programme has conducted a range of new activities. In 2005 COST still functioned according to the model of twelve Technical Committees, which were the main vehicle to assess new Actions, which came from the scientific community. During 2005 213 Actions were running and 35 new Actions approved.

In April 2006 COST for the first time launched the Open Calls for proposals. There is no formal deadline for submission, instead at a number of 'collection dates' per year proposals are assessed. At the first and only collection date in 2006, 824 short proposals were received. Of these 824 proposals 706 eligible were fully assessed. Of these short proposals 79 were selected to submit a full proposal. This has led to the approval of 39 new Actions. From the total number of eligible long list of proposals this is a success rate of 5.5%. From the short list of proposals this is a success rate of 49%.

A new initiative called 'Near Neighbours' was approved by the CSO in 2004 with the intention to stimulate participation of researchers from Non-COST Balkan countries, Mediterranean countries and from European NIS. In 2006 and 2007 an annual sum of €100.000 was set aside for this initiative.

In 2006 the COST Office commissioned a customer survey to assess customer satisfaction. Following the recommendations of the mid-term Review panel this customer survey was conducted by a professional market research company under supervision of a panel of experts.

3. Implementation of the recommendations of previous reviews

3.1 Introduction

The Review panel is tasked to give an assessment of the implementation of the recommendations of the previous reviews and particularly the mid-term Review. The transition from the COST secretariat from the EC to ESF came with the conditions that COST and particularly the ESF/COST Office would implement a number of reforms. The mid-term Review was satisfied that the new COST Office had set reforms in motion: *“The panel agreed that the transition to the new system had been successfully achieved and that a good basis for further development had been provided”*⁷

Nevertheless, the mid-term Review panel also recommended that these reforms should be continued. The Final Review panel has looked whether the recommendations of this mid-term panel were implemented in the two years since the previous review. This included the recommendation to conduct a full customer satisfaction survey, which has indeed been conducted on behalf of the COST Office.

3.2 The progress on the financial and administrative implementation

3.2.1 The transition of administration to ESF-COST, the introduction of IT tools and financial management

The Final Review panel was pleased to see that the ESF-COST Office has made considerable progress with the financial and administrative management within the COST programme:

- Rules, procedures and on-line forms have been simplified;
- IT tools have been developed for registrations and payments;
- With the pay-as-you-go arrangements reimbursement times have been reduced to 14 working days despite the fact that over 10,000 financial transactions have to be made on an annual basis;
- Three audits - from the EC/DG RTD, the Court of Auditors and one internal ESF audit - showed that the financial management of the ESF operated COST Office is very well organised;
- Effort has been made to ensure a non-duplication of functions between ESF Strasbourg and ESF- COST in Brussels and operations run smoothly between the two offices;

⁷ COST Mid-term Review, Final Panel Report, 2005.

- The new selection procedures (see below) have resulted in the submission of a large batch of new Action proposals for the approval by the CSO in one meeting, where the CSO has efficiently and rapidly taken the decision;
- The COST Office has introduced annual monitoring meetings where several Actions present their progress and activities;
- The COST Office is piloting a new financial arrangement to provide support to individual COST Actions: the COST Grant Scheme, which gives a larger responsibility for the financial management to the Management Committees (MCs) of each Action. This scheme is foreseen to become the general arrangement starting from 2007 and finally to be used in all Actions in 2008.

The Panel noted that the transition of staff and know-how from the Commission services as well as a good interaction and synergy with the ESF administrative and financial organisation have been key success factors.

There are however some concerns that the Panel wishes to stress:

- With the major expansion of the COST Budget in FP7 the COST Grant Scheme seems an inevitable new tool to devolve administrative responsibility to the research networks. The panel is concerned that the implications of the introduction of the Annual Grant Scheme on financial management and cash flows as well as on the ability of the user community to use this have not yet been fully analysed;
- The European Commission contract with ESF to manage the COST programme under FP6 was amended several times to provide supplementary financing and to extend the duration. Under FP7, due to the available credits, it is foreseen to have recourse to annual contracts, at least for the first years. In FP6 any possibly arising liquidity problems were solved beforehand through close interaction between ESF and the Commission. The Panel voices concern that the annual contracting in FP7 might lead to disruption of the Office's operations and therefore result in the decrease in trust by the research community in the sustainability of the COST programme; The Panel has noted that the Commission has secured the financial commitment as the Framework Programme and the Specific Programme provide the legal basis.

3.2.2 Using new practices and procedures (e.g. experts for selection, peer review, quality control, open calls)

An important component in the overall organisation of COST are the scientific committees that advise the Committee of Senior Officials (CSO) on new and ongoing Actions. Previous reviews have pointed out that these committees should become more transparent and open-up their procedures in order to give COST a genuine bottom-up character. A major reform has been the introduction of Open Calls for proposals for new Actions with no fixed deadlines. The Open Calls are open to proposals from all domains and subjects, also those that do not fit into one of the predefined domains (exploratoria or trans-domain proposals) and have transparent selection procedures.

A major improvement is that proposals are reviewed by external peer reviewers and not only by the experts in the Domain Committees. This increases the quality

assurance and opens up the programme for new ideas. The panel applauds the introduction of these new procedures.

Nevertheless, the customer satisfaction survey shows that the evaluation procedure is still not perceived as transparent and particularly the clarity of evaluation criteria is an element of dissatisfaction. Poor feedback to the applicants was another point of criticism that was expressed in the customer survey. The Final Review Panel has heard that a COST working group has been put in place to review the evaluation criteria and procedures and have made improvements for the 2007 Open Calls.

The Review panel is pleased with these reforms but wants to put forward an important consideration:

- Although COST is aimed at stimulating innovative research in potential new areas there is a concern that despite the new procedures, there is still a tendency for many 'repeat-proposers' to get awarded, leading to a continuation of networks that have been participating in COST for many years. Although the Panel has not seen hard empirical evidence for this, we do stress that COST should adapt its selection procedures and regularly renew its committee members - while maintaining high quality- in such a way as to encourage 'new comers' that have a potential impact on the renewal of science (young researchers, emerging scientific areas, research that does not fit with more top-down research programmes such as FP7).

3.2.3 Customer survey

The results of the customer satisfaction survey conducted by Ipsos in 2006 and the subsequent study from the high level panel chaired by Dr Georges Wanet are very satisfactory and confirm the panel's findings that the administrative transition and the simplification of procedures has been very successful. Those that use COST show a high appreciation of the programme and particularly its low levels of bureaucracy and administrative burdens. Almost all aspects of COST Action meetings were given an average satisfaction of greater than 8 out of 10 and more than 8 applicants out of ten would recommend COST network funding to a colleague.

The customer survey highlighted that the evaluation procedure and particularly the selection criteria still need to become more transparent and clear. In addition support from the National Coordinator was regarded as limited.

The panel noted that the customer survey as conducted in 2006 was very valuable to distil the views from the actual users of COST on the procedures and processes. However, the COST community is only 2-3% of the research community in Europe. To answer the question how the research community perceives and values COST, a customer survey is not sufficient.

The Panel suggests that to obtain a wider view these surveys should contain a larger proportion of respondents from the science community who are currently not using COST and who belong to the COST target group. In the future such a survey should also consult research institutions and societies to assess the visibility and position of COST. Rather than a customer survey this should be a wider strategic assessment of COST with its potential target groups.

3.2.4 Progress in conducting reviews across COST

The Panel was tasked to also assess the outcome and impact of COST Actions so far. The key documentation on which the panel can base its judgements are the scientific reviews conducted by peer review and facilitated by external parties. The customer survey also addressed the question what outcomes the participants have achieved through COST. The following outcomes were the most important ones stated by COST users:

- Two thirds of COST users achieved an international conference of high standard;
- Almost 60% said that this raised the international profile of COST;
- 57.4% of respondents said that it raised the international profile of their own research;
- Another 50.7% said it raised the profile of their own organisation.

Three external peer reviews have been assessed by the Final Review panel covering 10 COST domains and nine Technical Committees.

The 2005 Transport and Urban Civil Engineering Domain Review⁸ found that in the domains considered, COST plays a useful role in networking researchers and policy makers and that the potential of COST to support the relevant research and policy communities is not yet fully exploited. The Transport and Urban Civil Engineering domains are very applied. COST Actions in these areas are not Science but provide important types of support to the research community. Accordingly, COST Actions in Transport and Urban Civil Engineering have little impact on basic research; nor should they be expected to do so. Since they are problem orientated, the Actions tend to be interdisciplinary. They are generally policy relevant and have some influence on the setting of norms and standards but their impacts would be greater given better dissemination of results.

A 2005 review of the COST Domains in Agriculture, Biotechnology, Food Sciences, Forests and Forestry Products, Environment and Meteorology also comes to the conclusion that the impacts of COST work in these areas have been positive. The quality of the actions reviewed by the panel varied from fair to high. Knowledge transfer and integration across Europe has been good. Credit should be given for COST's support for interdisciplinarity and capacity building. The Actions have been open, with many forming stable networks leading to successful Framework Programme projects.

The 2004 review of the COST Domains in Physics, Fluid Dynamics, Chemistry and Materials came to very positive key conclusions. The quality of the science is generally very high and the networks normally engage some of the best researchers in their respective fields. The networking dimension of COST adds considerable value over and above existing relationships, and helps account for an important body of collaborative outputs. COST collaborations have often resulted in joint applications for Framework Programme projects. The review argued that it is COST's bottom-up nature that is most valued by its participants.

Critical remarks of these reviews related to the dissemination opportunities, which

⁸ Review of the COST Domains in Transport and Urban Civil Engineering, Technopolis, 2005.

were seen to be underexploited, the involvement of new groups and young researchers and the involvement of wider user communities. Many of the findings on the COST processes date from before the introduction of domain committees and open calls.

3.2.5 Communication and Dissemination

Regarding the communication of COST to the wider community mainly made use of scientific conferences organised by partner organisations such as:

- IST 2004 and 2006;
- Euroscience Open Forum (ESOF) 2004 and 2006;
- EARMA Annual Conference;
- The COST and European Commission organised conference on cultural heritage;
- European Transport Conferences;
- The European Nanoscience Forum co-organised by the COST Office in 2006;
- COST Days at the European Parliament;
- Events organised by COST National Coordinators.

These were mostly focused on making COST more visible to the research community. The panel noted that the level of communication to the research community has improved during the course of FP6.

As important for dissemination purposes to specific user communities are the various communications events initiated at the level of Actions, for instance involving Ministries from several policy domains to discuss progress and results of the research network.

4. Restructuring the governance of COST and progress on devolution

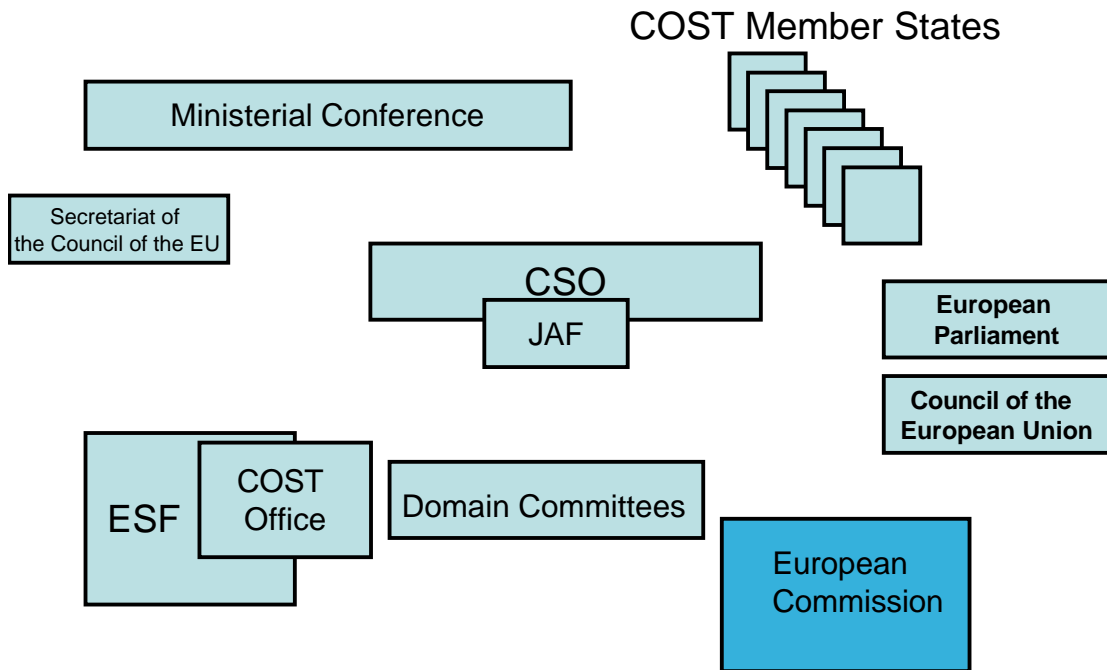
4.1 The present model of governance

COST is unique in Europe due to a number of governance features, which are illustrated in Exhibit 2 on the next page.

COST is an intergovernmental body, whose main responsibility lies with a dedicated Ministerial Conference that is foreseen to take place approximately every five years. The panel has learned that this level of governance has not been activated since 2002. The panel has also learned that representation at these conferences has been delegated to lower levels.

- The Committee of Senior Officials (CSO), appointed by the Member States, has the mandate to make decisions on COST such as the launch of new Actions;
- The COST Member States are responsible for the appointment of members of Domain and Action level Management Committees;
- In order to increase its effectiveness the CSO have appointed a smaller working group of CSO members to form the JAF group. This group prepares the CSO meetings and can make recommendations to the CSO. The CSO may also delegate decision-making power to the JAF group;
- The General Secretariat of the Council of the European Union has a role providing the secretariat for the CSO and the JAF as well as in the arrangements with the Memoranda of Understanding of the COST Actions;
- The Council decides on Commission proposals for the COST budget through the specific programmes of the Framework Programme;
- The funding for COST comes almost entirely from the Framework Programme through the European Commission. In addition, a small amount (approximately €100,000/year) is provided by the COST Member States through the COST Fund for the CSO meetings etc.;
- The management of the COST programme is done by ESF through its COST Office. The latter does not have a formal legal entity, but this is provided by ESF;
- Domain Committees (DC) are responsible for a particular research domain and are formed by representatives of the COST countries and report to the CSO. They evaluate the proposals for new Actions, monitor the Actions in progress and evaluate the results obtained by completed Actions. When necessary, they act as a catalyst to promote proposals for new Actions in particular areas;
- For each Action a Management Committee (MC), formed by national experts of the signatory countries, is responsible for the activities of the Action. They are coordinated by the relevant Domain Committee and prepare annual progress reports and a final report.

Exhibit 2 The actors in the governance of COST



All these different bodies and stakeholders make the governance of COST complicated and non-transparent. The Review panel's main concern is that there is **little clarity on the roles and decision-making powers** of each of these different actors, in the overall governance picture and for the final responsibilities for COST activities in particular.

Previous reviews such as the Busch Report⁹ and the mid-term Review commented on the governance structure of COST and their main concerns were:

- The CSO should devolve day-to-day management tasks to the COST Office and focus more on strategic tasks. Overall the absence of authority and strategic management in the CSO was considered to be an obstacle for COST to position itself more clearly;
- According to the Busch panel the relationship with the European Commission is too much limited to the Units that are responsible for COST but weakly developed with other parts and directorates of the Commission dealing with research. Although the Commission has launched initiatives, more progress could be made.
- The previous reviews were also in favour of a devolution of management tasks to the level of the Technical Committees (now the Domain Committees) and the Management of Actions.

Even if some progress have been made in setting-up the JAF group, in structuring in a better way the meeting of the CSO (2 or 3 instead of even 6 per year) and in reinforcing the partnership between Commission and COST, the Final Review Panel

⁹ An Assessment of COST, Report by Independent Expert Panel chaired by Niels E. Busch

finds that particularly on the issue of an increased focus on strategic tasks little has been done.

The unclear defined roles of the various actors – e.g. the position of ESF as the prime contractor to manage COST – makes it difficult who should and could take the initiative in this strategic process, what body takes decisions and who is responsible for implementing those decisions.

4.2 The tasks and management at the level of the Actions and the introduction of the Annual Grant Scheme

One of the recommendations from the Busch report and the mid-term Review was to devolve project management and financial control from the COST Office and/or the Domain Committees to the Actions themselves. The simplification of the procedures and the flexibility of the IT tools have in practice shortened the communication lines and relieve the Action Management from a huge financial and administrative burden. In this model the COST Office has direct control on the financial flows for each project, which is centralised in the ESF IT system.

The newly introduced annual Grant Scheme which is piloted in 2007 is meant to evolve the responsibility for the administrative and financial management to the coordinators of an Action. In the light of the increase of the budget in FP7 by some 50% some changes in the management of COST seem inevitable.

The key change is that Action coordinators receive their annual budget for all their networking activities, while they can decide how to spend this budget.

The customer survey showed that up to 2006 the user community does not understand this new tool very well. The COST Office is providing training modules to the users to learn how to use this in the future. From 2008 this scheme will be introduced for all contractors.

When introducing this tool across all Actions the COST Office should consider carefully:

- How this effects the cash flow situation of the Actions as well as the COST Office;
- How to avoid that this new scheme damages one of the key success factors of COST: its low level of bureaucracy and swift payment procedures;
- How to inform and train the user community in time for its full roll out;
- How it could affect the good financial monitoring and accountability which the COST Office has managed to implement today.

Smooth and quick reimbursement of costs connected with COST activities, are crucial factors for overall customer satisfaction. In this context it should be guaranteed that the transition to the annual Grant Scheme will retain the present high quality of financial management, including efficient solutions of potential cash-flow problems and re-payment of expenses within 14 working days. The ability of future grant holders (universities, research institutions) to follow these high standards of financial management must be monitored through stepwise widening of present pilot projects of annual Grant Scheme.

4.3 From Technical Committees to Domain Committees

A major reform that has been implemented by the COST Office in 2005-2006 is the reduction from twelve Technical Committees (TCs) to nine Domain Committees (DCs). This is the first time in the existence of COST that such a reform has taken place in the scientific management of the COST programme. The reform has taken place under the guidance of the CEO of ESF (prof Bertil Andersson *ad personam*) involving all TC Chairs. The Final Review Panel was told this was quite a difficult process to let go of a scientific management structure that had been in place since 1971. Together with the Open Calls discussed in the previous chapter this has in principle opened up the programme for a wider audience.

Although the transition from twelve committees to nine committees is an improvement, the Final Review panel finds that further reforms could still be implemented in order to create domains of larger critical mass. This would encourage more multidisciplinary proposals, improve efficiency, bring the COST domains more in line with the five ESF Standing Committees and reduce the potential danger to allocate Actions in every single domain regardless the quality. The panel finds the clustering of Action proposals in three main clusters in the final ranking procedures an improvement, which decreases the danger of 'territorial' allocations.

The panel wishes to stress that ESF and the COST Office should strive for maximum synergy, when making use of the scientific expertise and networks of both organisations.

4.4 The role of the COST Office

The good administrative and financial management of the COST Office and the role that both the ESF and the European Commission have played in making this work in a very short time has been an important reason for the resurgence of COST after the difficult period in 2002-2003. The COST Office has - through mobility of staff - made good use of the experience which was built up by the European Commission in the years that it managed the programme. Financial, IT and administrative management resources present in ESF have enabled the swift transition. The panel has learned that through a flexible approach of both the Commission and ESF potential bottlenecks – e.g. finding a bank guarantee for the COST budget - were solved swiftly and pragmatically. The fact that ESF is not bound by the heavy financial regulations of the Commission, it is much more flexible to adapt (financial) management tools. The Final Review panel was not able to make an analysis of the staffing levels at the COST Office. It is recommended that the next FP7 mid-term Evaluation assesses the staffing of COST Office. This would require a special analysis of this issue to be prepared beforehand by COST.

The Final Review panel applauds the COST Office for getting the programme on the right tracks in such a short time and making improvements to its management. In addition the COST Office has been proactive in suggesting improvements for the governance of COST and improving the science management.

A problematic issue for the COST Office is that it has a triple supervision and has to report to three different organisations: to ESF, to the CSO and to the European

Commission. This is an important weakness in the COST governance model and should be addressed by the Member States.

4.5 The role of CSO and JAF group and the strategic tasks

The activities of the CSO have been made more efficient faced with the new situation, where a large batch of new Action proposals following the Open Call are submitted for the approval by the CSO in one meeting. Also the CSO has benefited from the enhanced preparatory work and decision making by the JAF group.

Based on the information which was retrieved in the hearings and from the document analysis the Panel makes the observation that overall the Committee of Senior Officials is not well embedded in the research policy strategy process in their member States nor in wider EU research policies. The strategic development of COST remains relatively isolated from research policy in their Member States, which hampers the visibility and leverage effect of COST. It has been observed in previous reviews that the decision powers of individual CSO members is often not at a high enough policy level to link COST decisions to wider strategic debates on trans-national research. Therefore the foreseen strategic role of the CSO has not yet sufficiently evolved. While the improvements of the COST selection procedures, the introduction of Open Calls with external evaluations and the reinforcement of the JAF group, have all enabled the CSO to free up time for these types of strategic roles, the involvement with micro-management issues seems to persist.

5. The strategy and the positioning of COST today and in the future

5.1 Added value of COST in present context

When COST was established in 1971 the idea of supporting the networking between scientists across European countries was new and unique. COST filled a gap that did not yet exist in the European science community and enabled new networking between previously nationally operating research communities. As such it created a leverage of national research funding and a cross-fertilisation of ideas. There was no European research policy at this time and initiatives were put forward by a collection of Member States through Ministerial Conferences.

It was in the same period that Commissioner Spinelli envisaged the creation of the European Science Foundation (ESF). Subsequently a Council resolution of 14 January 1974 endorsed the planning of ESF. Thus the early 1970s was a period in which the Member States and the Council were heavily committed in finding new ways of developing trans-national networks in research. Today these initiatives operate in a European and global context that has changed considerably.¹⁰

Particularly today where the European Member States have agreed to the Lisbon agenda; a European research policy has taken shape through the concept of the European Research Area ; other trans-national stakeholders (EUREKA, ERC and ESF itself) are reconsidering their unique position, COST cannot stay behind in taking a strategic view to:

- Rethink its value added in European Research Area (today and in the future);
- Decide on its target groups and the wider communities it wants to involve;
- Decide on the geographical scope and the 'core-business' of COST.

Today in the seventh year after the launch of the European Research Area, at the start of the Seventh Framework Programme (FP7) and in the context of many (new) policy initiatives (e.g. EUREKA, ERA-NETS, Technology Platforms and many bilateral and multi-lateral collaboration), which support trans-national collaboration, the networking aspects of COST are not unique any longer. Each of these initiatives has its specific characteristics: EUREKA focuses on near market activities and specific industries; the Technology Platforms are bottom-up initiatives driven by diverse consortia; ERA- and INNO-NETS focus on national research funders aiming to open up national programmes, while COST focuses more on networking between researchers. Thus, there is still a place for each of these initiatives, nevertheless their potential overlaps and synergies have changed.

Given this change in the context, COST should clearly define and communicate what its niche is in the wider ERA context. The recent Green Paper on the New

¹⁰ ESF was founded in the early 1970's, when Europe was seeking for better coordination of its research. Top- down approaches (Spinelli) and bottom-up concepts (Dahrendorf) were point of debate in many ministerial and other meetings, including the point of the level of Government concern. The December 1972 meeting of research councils in London, hosted by the Royal Society, considered that the ESF should be non-governmental, but that this should not prevent the development of occasional links with the EEC. One of the four Council resolutions on research of 14 January 1974 said:" the Council notes with interest the creation of a European Science Foundation the Council hereby records a favourable attitude to the establishment of links between the Foundation and the European Communities...The Council acting on a proposal from Commission, will decide on the nature, and the form of such links ".

Perspectives of ERA¹¹ invites the European stakeholders to develop a vision on how ERA can be taken a step further. On the basis of the results of the consultation, the Commission intends to propose initiatives in 2008.¹²

Nevertheless, COST does have some features that provide it with a unique position that it should exploit even better:

- Its bottom-up nature with no pre-defined thematic focus;
- Its openness to potentially successful new and multidisciplinary scientific areas because of the non-thematic approach. These emerging areas are often at higher risk and therefore have more difficulties in securing trans-national funding;
- Its easy accessibility to new players (e.g. new Member States, young researchers and new comers in the European networks) because of its flexibility;
- The relatively small administrative burden to its users.

The CSO should with these features in mind and in comparing COST with other existing trans-national collaboration framework re-think and adjust the 'core-business' of the COST programme.

The panel endorses the conclusions of the customer survey that, where appropriate, industrial participation should be stimulated in some domains.

5.2 Synergy with FP7 and contribution to ERA

With strong support from the Member States, the budget for COST in FP7 has been increased by 50% to a budget of €30 million per year. The future perspectives of COST have changed with this renewed political support but this has to be translated into a clear added value of COST in the bigger ERA picture. As the remainder of FP7 is earmarked to specific scientific, industrial and societal themes COST has an even better opportunity to cater to the scientists who are working on the frontiers of new research, on thematic areas that have not been identified and labelled as mainstream or strategic, or to support subjects that due to their trans-disciplinary character do not fit the 'boxes' which are assigned to national and EC programmes. As it is important in a researcher's career to create and foster networks early on in their development the special focus on networks involving young researchers is one area where COST can have added value. Involving new teams that have not been well integrated into the European networks allows for wider cross-fertilization of ideas. In this sense COST functions as an incubator for new networks.

The customer survey illustrates that COST is a very good platform for preparing Framework Programme consortia and proposals. A third of the COST users had achieved the submission of a FP6 proposal on the basis of their COST project and 50% of the COST facilitators find that COST is helpful in this sense.

¹¹ European Commission Green Paper: The European Research Area, New Perspectives, 4.4.2007, COM(2007) 161 final, Brussels.

¹² COM(2007)161 final, page 22.

5.3 The future position and governance of COST

From the available information the Panel received signals that the linkages with national policies through CSO is not effective. The linkage depends heavily on the position of individual CSO members, rather than being institutionalised in national research policy.

We realise that the present governance scheme and the share of responsibilities is in the long term not feasible. A clear choice should be made to determine the final responsibility for COST governance, including both managerial and strategic aspects.

Therefore we see a need for changes.

The Panel sees two options:

- The COST programme should create an independent legal entity;
- Secondly, ESF should take over the full operation of COST including the strategy formulation and the linkages with member States.

The visibility of COST in the wider scientific community needs to be reinforced and particularly towards the specific target groups the initiative is aimed at. This would however imply that COST develops a better strategic view what their targets groups should be.

6. Conclusions and recommendations

6.1 Conclusions on progress

The Final COST review panel has come to the conclusion that the transition from the COST Office from the European Commission to ESF has been very successful and has led to a number of improvements such as:

- A simplification of application procedures and a speeding up of decision and payment schedules;
- An improvement of the transparency of COST by introducing the Open Call for proposals and external reviewing of those proposals;
- An improved financial management using the synergies between the ESF organisation and the COST Office.

COST and the COST Office are aware of the new challenges it faces in terms of the increase in budgets it receives in FP7. It will introduce a new financial tool to manage the annual Grant Scheme, to cope with the increase of management tasks and to further the devolution of responsibilities to the Actions.

The panel stresses that when introducing this tool across all Actions the COST Office should consider carefully:

- How this effects the cash flow situation of the Actions as well as the COST Office;
- How to avoid that this new scheme damages one of the key success factors of COST: its low level of bureaucracy and swift payment procedures;
- How to inform and train the user community in time for its full roll out;
- How it could affect the good financial monitoring and accountability that the COST Office has managed to implement today.

The panel is also pleased with the progress of devolution and the progress that has been made in the reforms of COST particularly the restructuring of the scientific management and its domains, and the possibilities this gives to reduction of micro-management at the level of CSO.

However the Panel wishes to express two particular concerns:

- Firstly the process of reform of the scientific management should not be considered as completed, and more could be done to decrease the number of domains and make the evaluation procedures more transparent. The structure and procedures should be organised in such a manner as to give the best opportunities to supporting new research and researchers with a large potential scientific or societal impact and thus also at higher risk;
- More importantly, the freeing up of the CSO's time by these reforms has not yet led to a formulation of their strategy, which today is more needed than before given the changes in the context of COST and the realisation of ERA in particular.

The Final Review panel finds particularly that more progress should have been made and should be made in the future to increase the strategic role of the COST member States, through the CSO or through other channels particularly the Council

of the European Union. The Council is responsible not only for the budget of COST, but also has the political responsibility for ERA.

Particularly today while the European Research Area is taking shape (including the launch of ERA instruments), and where other trans-national stakeholders (EUREKA, ERC and ESF itself) are reconsidering their unique position, COST cannot stay behind in taking a strategic view:

- To rethink its value added in European Research Area (today and in the future);
- To decide on its target groups and the wider communities it wants to involve;
- To decide on the geographical scope and the 'core-business' of COST.

With the increase of budget in FP7, decisions need to be made whether COST should restrict itself to the current instruments, whether new geographical areas should be included and whether specific target groups (e.g. young researchers) should be addressed more explicit.

The unclear defined roles of the various actors gives rise to unclear defined responsibilities. For example at present ESF is the prime contractor to manage the scientific activities of COST and thus holding de jure responsibilities. At the same time CSO is involved in the decision making process. This makes it difficult to understand who should take the initiative in formulating the COST strategy. In addition it is unclear what body takes decisions and who is responsible for implementing those decisions.

6.2 Recommendations to different stakeholders

Thus, the Final Review Panel's **recommendations** are addressed to:

Firstly to the **COST Member States**:

- 1 At the Ministerial level we invite the Ministers to define the position and the role of COST in ERA given the changed context since 1971. Redrafting of the present inter-governmental regulations and mandates set down for COST would be appropriate, particularly to discuss the governance structure and responsibilities.
- 2 A clear choice should be made to determine the final responsibility for the governance of COST, including both managerial and strategic aspects. In this context special attention should be given to the role of all stakeholders involved. The Panel sees two alternative options:
 - The COST programme should create an independent legal entity
 - ESF should take over the full operation of COST including the strategy formulation and the linkages with Member States
- 3 In the context of the possible revision of the governance of COST, the Ministers from the COST Member States are suggested to reconsider the role and the composition of the CSO.

Secondly to the **European Commission**, as the funder of COST and to **the EU Council**:

- 4 As mentioned in the Green Paper on ERA, and on the basis of the results of the consultation and debate, the Commission intends to propose initiatives in 2008. In this context the Commission could make a recommendation to the Council on the COST position, strategy and role in ERA. Consequently, COST should be discussed at one of the forthcoming Competitiveness Councils, where ERA is on the agenda.
- 5 The Commission services responsible for COST should do more to increase the synergy between COST and the Framework Programme activities through involving DG Research and other DGs of the research family more closely in the partnership between COST and the Commission.
- 6 The Commission should ensure the continuity of the COST management by providing, under FP7, follow-up contracts to the ESF for the support of the COST Office well in time to avoid discontinuities, which would ensue in distrust from the research community.

The Final Review Panel's **recommendations** are also addressed to the other stakeholders involved in **COST (CSO, COST Office, ESF)**

- 7 The CSO should focus on the ESF/COST policies and procedures and act as a Member State based high-level advisory body. In this context the CSO should not be involved in the decisions related to individual Actions.
- 8 Adapt procedures and processes in such a way as to maximise the possibility of supporting new areas and new comers, which are not supported by other programmes and initiatives, consequently using the bottom-up principle
- 9 Transparency should be improved by reasonable rotation of the domain committee members.
- 10 Reconsider the nine domain committees and find a structure which maximises the opportunities for multidisciplinary and 'out-of-the-box' research networks.
- 11 Refocus the – future regular – user survey to not mainly include the current customers and their views on the COST processes but also to have a better insight in the views on COST from the wider scientific community (and thus the non-users and potential users).
- 12 Launch a comprehensive impact study on the basis of finalised COST Actions including scientific, socio-economic and societal impacts. In order to do this, COST should today prepare a methodological approach, define indicators and collect relevant data to be well prepared to launch such a study for the mid-term evaluation.
- 13 In the present situation of the increased budget, devolution of management responsibilities and changes in governance, the good standards of science and

financial management must be maintained, in particular with the introduction of the Annual Grant Scheme.

- 14 ESF should consider how it will take on board the future constellation of COST and consider how/whether it fits with its core-mission within the realisation of ERA.
- 15 The synergy regarding the scientific management and scientific expertise between COST and ESF should be reinforced.

6.3 Recommendations for the FP7 mid-term evaluation

- 16 The Commission should make its further support beyond €210 M, dependent on the progress of the further reforms that have been suggested by the Final Review panel in all its recommendations. This should be the main subject of the FP7 mid-term evaluation.
- 17 The FP7 mid-term evaluation should make a specific review of the use of the new COST Action annual Grant Agreements and their impacts on quality monitoring, the speed of payments, the administrative burden to the user community and the overall acceptance of COST.
- 18 An aspect of the review should be to consider the COST Office staff levels in view of the changes in the COST activities.
- 19 The mid-term evaluation should be able to rely on a solid and comprehensive impact study in order to appreciate the COST effects.

APPENDIX A MEMBERS OF THE HIGH LEVEL PANEL

Jeanne Monfret (Chair)	Former deputy manager for scientific information in CNRS, Former counsellor for European and international policies in the Cabinet of the Minister for research.	FR
Maria Luz Peñacoba	Director European Consumer Centre in Spain. Former Deputy Director for Training and Mobility of Researchers in the Spanish Ministry of Education and Sciences.	ES
Pim Fenger	Former Acting Director Policymaking Higher Education and Research and Coordinator for International Research and Science Policy	NL
Toivo Maimets	Professor of Cell Biology and Director National Centre of Excellence for Gene and Environmental Technologies	EE
Heikki Kotilainen	Former Minister of Education and Research	FI
Patries Boekholt	Former Deputy Director General of TEKES Director Technopolis Group (Rapporteur)	NL

APPENDIX B: LIST OF PERSONS INTERVIEWED BY THE PANEL

The European Science Foundation:

Dr. John Marks, Chief Executive Officer
Mr. David Weber, Director of Administration and Finance

COST:

Prof. Francesco Fedi, President of the CSO
Dr. Martin Grabert, Director of the COST Office
Dr. Eva Klaper, Member of the CSO
Mr. Hendrik Monard, Member of the CSO
Dr. Sjur Baardsen Chair of DC FPS (Forests, their Products and Services)
Prof. Axel Kranzmann, Chair of DC MPNS (Materials, Physical and Nanosciences)

The COST Secretariat, Council of the European Union:

Dr. Kimmo Peippo, Coordinator
Mr. Erwin van Rij, former coordinator

External experts:

Prof. Raoul Kneucker, Chair of the COST Mid-Term Review panel (2005)
Dr. Georges Wanet, Member of the COST Mid-Term Review panel and Chair of the high level panel for the COST Customer Satisfaction Survey
Dr. Susanne Ott, TNS Infratest, responsible for the COST Impact Study

The European Commission:

Mr. Robert-Jan Smits, Director of Directorate B, DG RTD
Mr. Markku Warras, Project Officer, RTD-B2
Mr. Michael Sucker, Head of Unit, RTD-B5
Mr. Bertrand Michaud, Controller, RTD-B5
Mr. Jean-David Malo, Head of Sector, RTD-B4
Mr. Ivan Conesa Alcolea, Project Officer, DG RTD-B1
Mr. Peter Wintlev-Jensen, Head of Sector, DG INFSO-H3

APPENDIX C: LIST OF DOCUMENTS USED BY THE PANEL

1. Report by the ESF for the Final Review
2. Busch Report
3. MoU - COST Doc.262/2
4. Declaration of Dubrovnik - COST Doc.252/03
5. Mid-Term Review 2005 - Final Panel Report
6. Mid-Term Review 2005 - Questions to be addressed
7. COST Quarterly Reports (Q2-2005 to Q4-2006)
8. COST Annual Report 2005
9. News from the COST and COST Office
10. Report from the President of the CSO
11. Statement of COST on the synergies between COST and the European Commission
12. Commission's discussion paper "Towards a New Partnership between COST and the Commission"
13. ESF Strategic Plan 2006
14. General statistics about COST Actions
15. List of COST Publications
16. Open Call Statistics
17. Addendum to the MoU - COST Doc 291/06
18. Dr W.Obert's presentation to COST review panel - handout
19. COST Doc.212/07
20. COST Doc.213/07
21. About COST 2006
22. About COST 2007
23. Success Stories - COST Networking at the Hub of Success
24. List of meetings in Brussels
25. Overview Major workshops
26. COST Plan and organigram
27. COST Customer Satisfaction survey (CSS 2007)
28. COST Guidelines
29. Domain Mandates and Descriptors
30. COST Instruments
31. New Actions Booklet
32. COST Leaflet
33. Domain brochures and leaflets
34. COST Days
35. COST Newsletter
36. COST Doc.327/05
37. PIC Study 2007
38. COST-ESF Synergies
39. Minutes COST-ESF Joint Chairs meeting 15.02.07
40. Review of the COST Domains in Agriculture, Biotechnology, Food Sciences, Forestry and Forest Products, Environment and Meteorology
41. Review of COST Domains in the Chemical and Physical Sciences
42. Review of the COST Domains in Transport and Urban Civil Engineering
43. Report from the President of the COST Committee of Senior Officials (CSO) June 2004 to April 2005
44. Guidelines for Assessment, Monitoring, Evaluation and Dissemination of Results of COST Actions - approved by the CSO by written procedure on 22 February 2007
45. COST Networking - At the hub of success

APPENDIX D ACRONYMS

COST : Coopération européenne dans le domaine de la Recherche Scientifique et Technique
CSO : Committee of Senior Officials within COST
DC: Domain Committee
DG INFSO : European Commission General Directorate on Information Society
DG RTD : European Commission General Directorate on Research
DG TREN : European Commission General Directorate on Transport and Energy
EC: European Communities
EEC : European Economic Community
ENDS : Detached National Expert (Expert National Détaché)
ERA : European Research Area
EU : European Union
EUREKA : European Research Coordinating Agency
ESF: European Science Foundation
FP5 : Fifth Multiannual Framework Programme for Research, Technological Development and Demonstration (1998-2002)
FP6: Sixth Multiannual Framework Programme of the European Community for Research, Technological Development and Demonstration Activities aimed at contributing towards the creation of the European Research Area (2002-2006)
FP7: Sixth Multiannual Framework Programme of the European Community for Research, Technological Development and Demonstration Activities aimed at contributing towards the creation of the European Research Area (2007-2013)
GDP : Gross Domestic Product
JAF : Working Party on Legal, Administrative and Financial Affairs within COST
MC : Management Committee of a COST Action
MoU : Memorandum of Understanding
CNC : COST National Co-ordinator
R&D: Research and Development
S&T: Science and Technology
STSM : Short Term Scientific Mission
TC: Technical Committee of a COST scientific domain

