

Standing Committee for the
Physical and Engineering Sciences (PESC)
Self Evaluation Report



PESC 2003-2008

1. Executive Summary

The Governing Council of the European Science Foundation (ESF) approved at its October 2008 meeting the launch of the 5-year reviews of the Standing Committees. The five Standing Committees were last reviewed during 2001 and 2002 and the period assessed in the present review is 2003 - 2008.

The Standing Committee for Physical and Engineering Sciences (PESC) was chaired by Professor M. Mareschal from 2003 till the end of 2008. He was succeeded by Professor M. Gyllenberg in January 2009.

A questionnaire concerning the activities of PESC was sent to all present members of PESC and all those who have been members during the period assessed. The replies have been used when preparing the self-assessment.

In “Science Synergy”, PESC has fulfilled the needs of the scientific community and the desires of the Member Organisations (MOs) within its domain, by maintaining a high level of quality and volume in bottom-up activities throughout its remit, in European Collaborative Research (EUROCORES) themes and most notably in Research Networking Programmes (RNPs).

In “Science Strategy”, PESC has developed its own initiatives, has developed Forward Looks and selects annually a number of Exploratory Workshops (EWs). PESC is seeking to maximise the impact of EWs and to additional ways of conducting effective science foresight, eg through temporary expert committees, which may be well suited to the PESC domain.

PESC has continued to work with other stakeholders, such as ESF Standing Committees and Expert Committees, European societies, the Commission and “non-European” agencies, on topics such as interdisciplinary research, infrastructures, and joint priority setting and funding.

PESC activities in the period have been fully within the spirit and the directions set by the ESF Strategic Plans 2002-2006 and 2006-2010.

2. Context

The general context of the past six years has been a period of deep changes for ESF. Four Chief Executives (CEs) have been in charge, a new governance has been decided at the introduction of the Strategic Plan 2006-2010, new instruments have been defined while others have disappeared. Most meaningful for PESC in particular, one should mention the following:

- While at the beginning of the period, PESC has significantly contributed to the European Research Council (ERC) debate, after the European Commission’s decision to launch the ERC, PESC has been involved into an internal ESF debate leading to a redefinition of the ESF mission: this mission has been presented in the ESF Strategy Plan 2006-2010.

For PESC, this has led to putting more emphasis on its cooperative research instruments and to start acting strategically in a more systematic way, a non-traditional activity for the committee.

- ESF has been given the management role for the renewed COST (European Cooperation in Science and Technology). For PESC, this implied relating to 6 different Technical Committees (Physics, Chemistry, Informatics, Materials, Transports and Urban sciences), before the reformatting of COST into a smaller number of Domain Committees (DCs) (4).
- A more uniform-across-ESF set of procedures have been installed: common calendars for calls for proposals are now the rule, a common pool of referees and parallel treatments by the Standing Committees (SC) and their units are now in place. For PESC, the major changes have been: (a) more proposals are now shared with other SCs, in majority LESC (Life, Earth and Environmental Sciences); and (b) an increased competition for funding using instruments where PESC has been traditionally strong, like Research Networking Programmes (RNPs).
- Implementation of the Science Advisory Board (SAB) has permitted us to confront our excellence standards to those of other committees of highly valued scientists.
- Meetings are now systematically organized (three times a year) with other Standing Committees (SC) and Expert Committee and Board Chairs and the ESF Chief Executive (ESF CE), with, as a consequence a much better communication inside ESF.

PESC was chaired by Prof. M. Mareschal from 2003 till the end of 2008 : Prof. M. Gyllenberg has started his chairmanship in January 2009.

3. PESC organisation

(a) Internal organisation

PESC has 36 full members and 10 observers. The full committee meets twice a year, once in April at the invitation of one Member Organisation (MO) representative and once in October, at the ESF headquarters in Strasbourg.

Some matters are delegated to the Core Group (CG). The Core Group is composed of 8 members: the four major countries (D, F, I, UK) have one member in the CG, and 4 other members represent the following 4 categories: Iberic countries, Nordic countries, central and eastern Europe, small countries. The Core Group meets 4 or 5 times a year.

April and October : linked to the SC meeting, the CG prepares the SC selection of proposals (RNPs, EWs)

Mid June : meeting with Member Organisations

Early September : EUROCORES themes and Forward Looks selection

There is some flexibility in the CG composition. Very often, depending on the topics discussed or the expertise required, other members from the SC are invited to join the CG discussions.

Attendance to Core Group meetings is fairly high, whereas attendance to the full Committee meetings is around 60-70% on the average.

Meetings last one day, and together with ESF staff and invited people, the number of participants is regularly about 40. Not surprisingly, full Committee meetings are more formal, and discussions with important issues do not take place as easily as it would be desired.

SC members are encouraged to be active in attending and reporting on Exploratory and strategic workshops, and in making the mid-term and final reviews of RNPs. Members are also invited, given their expertise, to join scientific panels like the ones set up for the ESF conference programme, and to act as liaison with other ESF SCs and COST DCs.

(b) Relations to Member Organisations

In the nomination process for SC members, ESF has been trying to implement a dialogue with the MOs. The procedure is that the MO suggests a few names for a potential new member joining the committee and that the committee states its preferences, having basically in mind a balanced representation of gender and of the various fields inside the committee. This procedure is followed in the majority of the cases, while some MOs, in particular the small organisations, argue that they find it difficult to find many candidates.

(c) Committee budget

It is worth mentioning that SC member expenses related to the committee work, essentially travels, are covered by the MO. Only Core Group members have their expenses covered by the committee budget.

The budget covers expenses related to committee meetings. Once compulsory expenses are spent (travels), an amount of around 50 000 euros remains in this budget at the disposal of the committee for supporting or launching actions of strategic nature.

(d) Relation to the ESF structure

The SC is basically working for ESF, and is the essential body, connecting to scientists, where ESF policy can be implemented. The relation with ESF governance is through the Chair. The Chair attends meetings with the ESF CE and other Chairs where the proposals from all SCs are merged before being sent to the Governing Council, to the SAB or approved by the CE. Policy issues are also discussed at those meetings.

Chairs are also members ex-officio of the Science Advisory Board (SAB) which is the senior science advisory committee of ESF.

Agendas and minutes of the Governing Council meetings can be accessed through a protected web site. The ESF President can invite SC Chairs to Governing Council meetings: this has, however, not yet happened (note – such invitations are now made on a rotating and regular basis from April 2009).

Chairs attend the General Assembly (GA) where they used to report orally on their SC's work. This has not been organized in the last two issues of the GA, the report being part of the written documents appended to the GA agenda. (Note: reporting in person will be re-introduced, coordinated with the Governing Council meetings schedule – see above – starting 2009).

4. Scientific Achievements: quantitative review of the instruments

Research Networking Programmes (RNPs) :

In the years 2003-2008, around 40 to 50 proposals have been received each year by PESC for Research Networking Programmes (RNP). Having been initiated by PESC in the late 1990s, the annual call for RNPs was adopted across ESF in 2005. Each year, between 4 and 6 were selected so that, at present, 25 programmes are active (plus another 5 terminating in 2008). Initially, the reviewing was organized in a two-stage process: the proposals, received in November were sent by the PESC Unit to external reviewers, whose reviews were later assessed by PESC rapporteurs and then discussed in the Core Group January meeting. Those selected (around a dozen) would then be invited to write a full proposal, more detailed, which would be discussed in the SC meeting in April, following a similar procedure. It was felt by the Committee that the two-step process was inefficient, in the sense that not much new elements in the full proposal would modify the appreciation and rating of the quality and timeliness.

PESC selection is then gathered with other SC RNP lists and forwarded to the CE for approval to launch the *a la carte* budget process. The procedure is then that the proposals are sent to the relevant MOs which decide whether they participate on an a-la-carte basis to the programme funding. Programmes selected by the SC could very well fail in this process, either due to a negative appreciation at the ESF level or due to insufficient funding by MOs. This happened only once to PESC selected proposals during the Review period, but it has to be noted that, since the synchronization of the procedure inside ESF, reaching the launching threshold has been more difficult : some proposals were launched even though they did not achieved the necessary 80% funding of what they requested.

PESC considers the RNP instrument as very useful and successful. In order to follow the work achieved more closely, it was decided to invite every RNP Programme chair to come and present the advancement of their programme to the Committee at the occasion of the mid-term review. At each SC meeting, 2 to 3 programme chairs make a presentation on their objectives and the work performed, before a discussion with the Committee (one of its members acting as rapporteur) takes place. The Committee has then to formally decide for the continuation of the RNP up to completion. While it never occurred that a RNP was stopped at mid-term, the Committee finds the interaction useful as (a) it keeps the SC members aware of the science achieved and (b) it reminds the RNP committee to stick to their objectives.

Looking at the list of RNPs provided in the appendix, it will appear clearly that all domains of PESC are represented, with a strong group of physics-related themes, a very good number of programmes in chemistry, computer sciences and mathematics and a poorer proportion of engineering related networks. Of course, selection is based on scientific excellence : the proposals received from the engineering community have been, thus far, fewer and, in the opinion of peer review, of a lower quality. Note that fundamental engineering science groups are also participating in programmes which are listed in the other fields.

EUROCORES

Although the EUROCORES instrument is more ambitious than the RNP, funding collaborative research rather than networking, PESC's role is less important in its monitoring: the SC is asked to select the EUROCORES themes, but not to select the research proposals submitted after calls are issued at the later stage. This task is fulfilled by selection panels of experts set up by the office and approved by the CE, based on lists of scientists nominated by participating MOs.

Proposals are received in June, sent to reviewers (5 reviews being asked) by the unit, assessed by PESC rapporteurs and discussed in the early September meeting of the Core Group. Selected proposals by all SC are then merged into a single set by the SAB, during a meeting at the end of September. The SAB, of which SC Chairs are members, receives the proposals, the external reviews and the CG ranking together with the motivation.

8 active EUROCORES are within the domain of PESC, the last ones (EuroGraphene and EuroGenesis, the latter proposal emerging from an Exploratory Workshop) are approved but still in a preparatory stage. The SC is asked at its November meeting to endorse the work of the Core Group. It is more difficult to evaluate the success rate, as the stationary state has not yet been reached. In 2008, PESC received 11 proposals to consider, selected 3 of them, all three being eventually approved after MOs decisions for commitment.

PESC considers this instrument as extremely valuable and the research it allows to be performed is considered to be at the highest level. The procedure itself, being complex and long, may explain a relatively small number of applications.

Sorting the PESC EUROCORES list by discipline, it will appear as strongly biased towards Physics. It is to be noted that one EUROCORES "S3T" is in the field of engineering, a successful research collaboration which followed a programme completion. Following a strategic workshop co-organized with the NSF in 2008, PESC also encouraged the submission of a proposal in the field of bio-inspired engineering. The proposal was judged very good by the SAB, and it is expected to be launched by the Governing Council. (Note: EuroBioSas was integrated into the 2009 call cycle and launched in 2010.)

Exploratory Workshops

A list is appended of the Exploratory Workshops supported during the period 2003-2008: it shows that in the PESC domain, every year, between a dozen and twenty proposals are funded, out of 50 to 60 applications. The procedure for selection is as follows: proposals, received in June, are sent to external reviews by the office (at least two reviews); each proposal is then examined by a SC rapporteur who makes a suggestion to the CG. The Core Group discusses the proposals and provides its ranking, with a short motivation.

Further discussion takes place among the SC Chairs, leading to the set of approved Workshops. It should be noted that Exploratory Workshops are directly funded by ESF from its General Budget.

PESC asks SC members to volunteer to attend the workshops. Their role is then to make a presentation of ESF and the various instruments which can possibly be used in the future by the community taking part in the workshop.

This seems particularly relevant since the strategic nature of the instrument is not always well understood by applicants. A report is being written by the attending SC member.

In late 2008, it was decided to invite the convenors of PESC EWs held in 2008 to a dedicated meeting with the Core Group in early 2009 to cover the science topics discussed and what future developments and support might be offered. (Note: As a result of this dedicated meeting, PESC has made a proportion of its strategic budget available for Exploratory Workshops follow-up activities, and will repeat the dedicated meeting in 2010).

Forward Looks (FL)

Three Forward Looks have been/are within the PESC remit with the period of this report. The first one in chronological order (NanoSciences and the future of IT) was organized in 2004, with its steering committee being essentially composed of motivated/interested members of the SC. Having been a pure foresight exercise launched in the early days of ESF's development of this instrument, it did not lead to any special action, though anecdotal evidence indicates it was influential in shaping some national and European Commission Framework Programme priorities.

The second one, on Computational Sciences (known as the Lincei initiative from the site of its formative meeting), was undertaken following a call for proposals and successful application by a group of computational condensed matter scientists. Its final report was submitted in early 2009, and its recommendations might lead to further action: a strategic workshop, held in December 2008 with PESC members and Forward Look committee members, recommends the creation of a temporary expert committee in computational sciences.

The last one, Mathematics and Industry, was suggested by the Centre National de la Recherche Scientifique (CNRS) and PESC contacted the European Mathematical Society (EMS), asking to formulate the questions to examine, to organize and run it. (Note: This Forward Look was launched in 2009, and will complete in 2010).

Forward Looks topics may now be suggested by MOs with an open call and proposals for topics are discussed inside the Core Group, twice a year, before the SAB meetings. Proposals which were received and not selected very often missed the point of what is the purpose of this instrument. One may also comment that the procedures and recommendations for FL have taken a few years to converge into what it is now.

Strategic activities

In this category, we have listed the activities for which we thought that a special effort was in order, because of the importance and timeliness of the problem. They mostly correspond to workshops and meetings, possibly leading to new proposals or to specific actions. We wish to single out the following points which we find particularly meaningful:

- The creation of a temporary Expert Committee on Material Science and Engineering (MatSEEC). PESC has supported this creation (which is now being taken forward at the level of the CE and Governing Council), following a request of the European Materials Forum, which is one of the organisations attending our meetings as an observer. The topic of Materials research is indeed understood as very important and of great societal impact. The timeliness comes also from the discussions around the creation of the European Institute of Technology. (Note: MatSEEC was launched in 2009).

- A similar attitude was taken about the temporary Expert Committee on Computational Sciences. The importance of the topic is also widely acknowledged, while timeliness is linked to the European effort on High Performance Computing (PRACE). The advancement of this process is still at the level of the SC, awaiting the final report of the Forward Look and potential support from Member Organisations.
- A policy briefing has been published on solar energy research, following a strategic workshop supported by PESC. Other issues relevant to PESC remit were supported by the funding of conferences and meetings, listed in the annexes.
- The leading partners at the Interdisciplinary New Initiative Fund (INIF) “synergy of new light sources in Europe” workshop teamed up to develop the IRUVX proposal which made it on the European Strategy Forum on Research Infrastructures (ESFRI) list. In 2008, the Commission approved the "EuroFEL" project which is a "preparatory phase contract" to prepare IRUVX for the next round.

Most of those initiatives did not follow a call, and PESC has essentially been responding to initiatives taken by scientists. This remains consistent to the bottom-up nature of ESF, while taking into account that strategic actions are never fully bottom-up. PESC has been pragmatic, encouraging initiatives as long as there was (a) a strong scientific motivation and (b) a potential European support for the actions.

5. Relation to other bodies

Since the late 1990s, PESC organizes in June every year a meeting with representatives from the MOs having a member in the SC. The meeting is known as the “Round Table” and has since been adopted by all SCs. The meeting’s objective is to keep the research funding organisations aware of our activities and of the discussions taking place inside the SC, and to have a dialogue. This communication is important in particular for the many instruments which are à la carte and has proven useful in the implementation of EUROCORES where the difficulties in the procedure could be discussed in depth. These meetings were held, at the beginning, at the request of MOs : following a decrease of attendance, as many of the original issues had been dealt with, the CG has transformed these meetings into workshops, assessing the quality, opportunities and advancement of given fields of research in Europe. We come back to this point in the next section.

The relations with the other SC are organized in two different ways. First, systematic meetings of all Chairs with the ESF Chief Executive allow all SCs to be aware of what is happening. It also allows the merging of the selections and rankings for given instruments. A second way of relating is through appointment of a SC member acting as liaison with LESC, and report at each committee meeting of what is happening in LESC. LESC is obviously the closest to PESC with respect to the fields of research it touches and to its portfolio of activities. A common meeting with the LESC Core Group has also been organized, at the initiative of the SC chairs.

Three Expert Committees relate to PESC in the fields of Nuclear Physics (NuPECC), Space Sciences (ESSC), and radio-frequency protection (CRAF). Those committees are funded directly by supporting national organisations and are hosted by ESF. The chairs of these committees are invited to PESC full committee meetings and do report every 18 months on their activities. There is no hierarchical relation between those committees and PESC.

The SC keeps itself informed of the various activities reported, and, possibly, takes part in the regular evaluations of the Expert Committees. The more general issue of relationships to Expert Committees has been addressed in the ESF Strategic Plan.

Relation with COST Domain Committees (DC, formerly TC) is organized through members volunteering to act as liaison. Common activities with COST are encouraged by the ESF and the COST office: in the fields relevant to PESC, this has consisted in the common organisation of a large conference on Nano-sciences in Brussels, and in several meetings of chairs which, in the case of PESC, have not led to further activities. One has to stress that most of the COST actions are more oriented towards applications than those proposed to and supported by PESC.

PESC has established regular relations to other bodies: the European Research Collaboration in Informatics and Mathematics (ERCIM), the European Materials Forum (EMF) and the European Mathematical Society (EMS) are attending our meetings with the status of observers. The same observer status applies to a representative of DG Research of the European Commission, and to a representative of the National Science Foundation (NSF). Concerning NSF, it is worth mentioning that the PESC Chair was also invited to attend the MPS Advisory Committee (MPSAC) meetings in the NSF premises in Arlington, leading to common activities and the possibility of coupling RNPs to NSF grants.

6. Self-critical view

The ESF Strategy Plan 2006-2010 defines three different roles for SCs: (a) to act as a scientific committee ranking proposals; (b) to relate to Member Organisations and finally (c) to develop strategic actions at the European level.

(a) to act as a scientific committee

This is certainly the task where the Committee feels the more at ease. The expertise among committee members appears well balanced, ranging from Mathematics to Engineering. No field is not represented: this is a consequence of the procedure set up for members' appointment. Each organisation having a PESC seat is asked to nominate three to five names of potential members for the committee when it has to renew a membership (every 6 years at most). Input coming from the SC (essentially the Chair) allows the balancing of expertise among the members.

The ranking of proposals usually takes place in the Core Group as it is very difficult to have those discussions in the full committee of 40 persons. The ranking is then presented to the full committee which is asked to endorse the proposed ranking: no difficulty ever appeared in the last six years. The work done by the PESC Unit for gathering reviews is of course essential, the quality of the reviews and the referee response rate has been constantly increasing during the last years.

(b) Relate to Member Organisations

As already mentioned, a yearly meeting is organized to exchange information between PESC and the Member Organisations. In the course of time, we have however observed a decrease of attendance, importance of the participants and interest of the discussions. Following this, it has been decided that this encounter would be a workshop with a subject ; in the three last instances we have focused our discussions on the evaluation of the advances of various fields in Europe: as a consequence, we have organized meetings on « the relation between biology and physics » (Almeiria, 2006, with EMRC and LESC), « Challenges in Chemistry » (London, 2007), to « Engineering » (Taormina , 2008). Those meetings were considered as interesting by participants, however they have not led to significantly larger attendance.

Another aspect of the relation to the member organisations is to insure that SC members are indeed circulating the relevant information (both ways). The situation is very contrasted: for some countries, the corresponding SC member is indeed having some responsibility inside the national organisation and the information is efficiently exchanged. For some other countries, however, this is not so, leading at times to embarrassing situations: this is particularly critical when it comes to estimate potential support for EUROCORES or RNPs where a critical threshold has to be met. The problem is intrinsically complicated, as it has to do with the national habits inside the funding organisation, and not with the commitment of the individual PESC members.

PESC has started publishing a newsletter, having in mind to spread the information more widely and in particular into the direction of the MOs. While very positive, this initiative has also lowered the pressure on the shoulders of the SC members to act as links with the member organisations.

(c) *Strategic role*

This role is more difficult to perform, or maybe less natural, as compared to ranking proposals, for example. A simple way to answer the request of the ESF governance to initiate strategic activities (as explicit in the strategy plan), has been to rely on the corresponding instruments (Exploratory Workshops, Forward Looks), with calls, therefore in a bottom-up approach. This is a partial answer, PESC playing an increasing strategic role in monitoring the preparation and follow-ups of Exploratory Workshops and Forward Looks.

Concerning a possible more pro-active role, one is faced with the following difficulty. The Committee is truly interdisciplinary, and, indeed, it is sometimes needed to have a wide view of how Science fields are evolving in Europe and what are the priorities to state and support. However, when it comes to build an influence where the SC would speak with a real authority, it is likely that policy makers would rather give importance to more specialized panels. An example is given by NuPECC : the expertise gathered inside this ESF expert committee is the highest one can gather in Europe, and they have succeeded in being influential in the establishment of the ESFRI list, to cite an example. Neither PESC, nor even ESF, have gained such an influence in their remits.

This has motivated PESC to envisage the implementation of temporary expert committees, which, as defined in the ESF Strategic Plan 2006-2010, should be given the task to formulate a policy for a field where it is widely agreed that an important effort should be done.

PESC has supported setting up the Materials Science and Engineering (MatSEEC) Expert Committee and has engaged the process for Computational Sciences.

It should be added that this new instrument remains theoretical thus far, as no other proposal than the two which have been mentioned has been received or is envisaged at this time for other temporary expert committees. As in many examples, ESF is learning by doing in new developments, and the ongoing discussion inside ESF will be useful for the future.

7. PESC commentary on the Recommendations of the 2001 Statutory Review of EMRC, LESC and PESC

See Annex 1

8. The future

As said in the introduction, the last years have been a time of change for ESF. Change for the better, in the sense that the structure of the organisation has been rationalized, Standing Committees are working in a more uniform and coordinated way, and the information is circulating in a very satisfactory manner.

An independent external review on RNP and workshops was conducted by Technopolis a few years ago and concluded positively on the quality of the funded activities. PESC is certainly motivated in keeping increasing the scientific excellence of the research activities it does fund through its instruments. This is the first and basic mission of the committee.

Connecting to the national funding organisations remains also a priority for the committee and the present situation can certainly be improved in this respect.

As for the future of the strategy role of the committee, it appears that the present situation is bound to evolve and that the « learning by doing » attitude of ESF will lead, in the future, to more precise guidelines and means for action.

Science of today is becoming more and more interdisciplinary. Modern molecular biology relies heavily on physics and chemistry. The methodological sciences mathematics, statistics and computer science are indispensable for the life and earth sciences as well as for the medical sciences and they are becoming increasingly important for the social sciences and the humanities. PESC, which hosts both the "hard" natural sciences and the methodological sciences, plays a key role in advancing interdisciplinary collaboration. To date, there has been a surprisingly small number of cross-committee Research Networking Programmes and Exploratory Workshops. As a strategic action, PESC will in the future actively work to enhance the collaboration between the five standing committees and to encourage scientists to propose truly interdisciplinary projects.

ANNEX 1

PESC commentary on the Recommendations of the 2001 Statutory Review of EMRC, LESC and PESC**1: Dissemination of information to Member Organisations (MOs) about the role, remit and objectives of the Standing Committees needs to be improved.**

Corporate-level communications with MOs are handled through the ESF Communications Strategy, and greater efforts have been made at this level since 2001. At the Committee level, PESC was, in 1998, the first Committee to initiate an annual round table meeting with its MO contacts and since 2003 the first to introduce a newsletter, normally produced twice yearly after each plenary meeting, aimed at the contact points. Both these actions have been introduced by the other Committees.

2: MOs should be asked to nominate two or three candidates to improve balance of discipline, sex and age on Standing Committees.

This recommendation has been implemented in PESC.

3: EMRC meeting frequency.

not relevant to PESC

4: Reduce the amount of paperwork presented at meetings and simplify decision-making procedures.

All of PESC's documents and processes are now handled electronically, by email or via dedicated web pages. Whilst PESC's policy has been to limit the amount of material circulated solely for information, the bulk of a "set" of committee documents is still significant – being made up largely of peer review and application documents. PESC secretariat with others introduced, in 2007, a streamlined version of the Agenda and cover sheets, with supporting information being in optional annexes. A survey of PESC members indicates they feel the documents, their presentation and volume have improved.

Decision making procedures themselves have changed little since 2001, being largely concerned with peer-review. Despite the recommendations of an external review of its peer review, ESF has set itself against any dilution of peer review, though a streamlining experiment concerning Exploratory Workshops was launched in late 2008. In fact the work load on Committees and Units has increased notably, with new Instruments (eg Forward Looks and EUROCORES) and with new Quality Assurance (QA) procedures being introduced. Within PESC, the work of the Core Group is now almost exclusively focused on proposal processing, rather than on strategic issues, and an additional meeting is normally required to deal with EUROCORES Themes.

5: Additional Secretariat staff is needed to support Standing Committees to ensure ESF objectives are met and achieved.

Whilst all SC Units have grown in this period, this is in response to new instruments, particularly EUROCORES and to a lesser extent Forward Looks. In reality, the time available to the small number of Unit staff supporting the Standing Committee (the Head of Unit, the administrator/ Unit Coordinator, and part of a science officer and part of an admin assistant) has been further diminished as they have additional responsibilities with new instruments and strategies, and new internal practices. PESC now receives significantly less support than it did in 2001.

6: ESF should set standards for communications between Standing Committees and MOs, and introduce mechanisms to deal effectively with absenteeism.

See the responses and 1, 2, 7 and 14. The PESC Unit automatically circulates all PESC documents to MO contacts. Attendance at PESC is monitored by the Unit and any persistent problems brought to the notice of the nominating MO, in the first place informally; which is usually sufficient to result in improved behavior or a new member. The expected obligations of Members with respect to both PESC and their MO and national communities are laid out in the document "Introduction to PESC" which has for many years been circulated to all new members on appointment, and to MOs, and is regularly updated.

7: Ensure active involvement of elected MO representatives in Standing Committees.

See 1, 2 and 6 above. The amount of Committee business has made it difficult to generate discussions in the PESC Plenaries which can engage all members equally, and there is limited enthusiasm for additional working groups and meetings due to time pressure. A further attempt is being made in 2009 to restructure Committee business in such a way that the optimum use is made of all members' interests and participation.

8: Standing Committees should investigate ways in which EC funding can be coupled to ESF activities without compromising ESF's independence.

This is a corporate-level matter and handled by the Chief Executive and the Governing Council. ESF has in fact been relatively successful in attracting contracts under FP6 and FP7.

9: Encourage MOs to accept ESF review rather than conduct their own, to shorten decision time in MOs..

ESF has made some progress with its MOs in terms of acceptance of ESF Peer Review, most notably in EUROCORES. This has required long and hard discussions, which are an integral part of ESF's Peer Review and Quality Assurance strategy. In areas such as RNPs, some MOs continue to conduct their own peer review, either through tradition or legal obligation requirements. It has to be recognized that MOs have their national pressures on funding and have to justify decisions to fund ESF programmes.

10: Encourage interdisciplinary activities.

All ESF instruments are interdisciplinary, advertised as such, and have procedures that are carefully constructed to ensure that interdisciplinary proposals are not handicapped. The Committees are encouraged to work together and the establishments, post 2005-2010 Strategic Plan, of the Science Advisory Board and of the regular meetings of Chairs of Committees with the ESF CE, have facilitated interdisciplinary behaviour.

In a further development, the ESF CE established the “Interdisciplinary Initiative Fund – INIF” to which Committees could apply for joint actions. The INIF was funded by unused funds from RNPs and ran from 2005 until 2008, when it was closed due to both budget reasons and a diminution of good proposals.

PESC participated in a number of INIF activities, some of which are mentioned in the main report. However, it has to be recognized that the generation and development of ideas requires effort by both Committee members and the Committee secretariat, and the pressure of other work (see 4, 5 and 7 above) do not create the best environment for creativity.

11: Clarify the relationship between Expert Boards and Committees and Standing Committees

This is unfinished business at the Governance level (Expert Boards and Committees Task Force) arising from the earlier round of Statutory Reviews and the Strategic Plan Task Forces.

More locally at PESC, good relations with NuPECC, CRAF and ESSC have been maintained. The chairs of these expert committees have a standing invitation, which they normally take up, to PESC plenaries to report on their work and participate in discussions. ESSC is supported by a Strasbourg-based ESF staff unit, so liaison is simplified: NuPECC and CRAF have non-ESF secretariats, and liaison at their meetings is secured by ESF staff, normally the PESC Head of Unit.

12: Encourage promotion of ESF and Standing Committees within the scientific community.

This is largely concerned with the ESF corporate Communications Strategy and the priority attached to that by Governance. Activities in EUROCORES, where there has been sufficient finance and scientific staff support available, has allowed good quality communication material to be produced, and a good tracking of the scientific achievements to be made. Elsewhere within PESC, efforts have stayed rather at the earlier levels with dissemination being left to the scientists involved, with highlights being taken for use in Newsletters and similar limited visibility communication activities.

13: Encourage Standing Committees to provide scientific advice and guidance for the Governing Council of ESF in developing pan-European scientific policy and strategy.

Standing Committees remain willing to assist the ESF CE and the Governing Council on policy and strategy matters, and are encouraged to develop their own strategies. The creation of the Science Advisory Board, on which the chairs of Standing Committees sit, and which advises both the CE and the Governing Council, has created the mechanism by which advice and guidance flows. The initiation during 2008 of regular presentations by chairs of committees to governance meetings has also improved communication.

14: Place formal reporting obligations to MOs on Standing Committee members and develop ways of involving more senior MO executives and leading scientists.

See also 1,2 and 6. Senior MO executives are more properly engaged at ESF Governing Council or General Assembly level. PESC is a committee of leading scientists and nominations to it by MOs are expected to, and generally do, follow that. From 2007, PESC has attempted to generate greater attendance and focus in its Annual Round Table meetings by having a disciplinary focus (eg chemistry, mathematics) and these meetings do attract programme manager (“disciplinary heads”) from MOs. It is in any case a matter for the nominating MO to organise the communication from its nominee, and it remains worrying that MOs say they do not receive communication from somebody who they have nominated and whose expenses they pay.

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PESC Membership listPESC Core Group and Standing Committee Members

Name	Country	Gender	Position	Years of mandate
Carmen N. Afonso	ES	F	Member Core Group	2000 - 2004 2004 - 2006
Andreas Alexandrou	CY	M	Member Core Group	2002 - 2005 2005 - 2007
Jean-Marie André	BE	M	Member	2003 - 2009
M. Antonopoulos-Domis	GR	M	Member	1999 - 2005
Conny Battiston	IT	M	Member	2001 - 2006
Polina Bayvel	UK	F	Member	2001 - 2006
Salim Belouettar	LU	M	Member	2008 -
Venko N. Beschkov	BG	M	Member	2003 - 2009
Flemming Besenbacher	DK	M	Member	2001 - 2003
Emile Biémont	BE	M	Member	1997 - 2003
Yvonne Brandt Andersson	SE	F	Member	2007 -
Cesare Bucci	IT	M	Core Group	2000 - 2003
Ian Butterworth	UK	M	Core Group	2001 - 2006
José Cardoso Menezes	PT	M	Member	2005 - 2007
Katarzyna Chalasinska-Macukow	PL	F	Member	2007 - 2008
Charalambos D. Charalambous	CY	M	Member	2008 -
Pavel Chráska	CZ	M	Member	2001 - 2007
João Pedro Conde	PT	M	Core Group	2001 - 2004
Gabriel Crean	IE	M	Member	2001 - 2007
Kenneth Adrian Dawson	IE	M	Member	2007 -
René de Borst	NL	M	Member	2007 -
Manuel de León	ES	M	Member Core Group	2006 – 2006 2006 -
Rafaël Dekeyser	BE	M	Member	1997 - 2003
Gerhard Erker	DE	M	Core Group	2004 - 2007
Wolfgang Ertmer	DE	M	Member	2007 -

Name	Country	Gender	Position	Years of mandate
Stavros C. Farantos	GR	M	Member	2005 -
Hans-Joachim Freund	DE	M	Core Group	1999 - 2004
Walter Gear	UK	M	Member	2006 -
Serge Gillé	LU	M	Member	2002 - 2004
Hafliði Petur Gislason	IS	M	Member	1998 - 2003
Elisabeth Guazzelli	FR	F	Member Core Group	2003 - 2005 2005 - 2008
Mats Gyllenberg	FI	M	Member	2001 - 2004
Judith A.K. Howard	UK	F	Member	2001 - 2006
Ivan Hubac	SK	M	Member	2004 -
Fjola Jonsdottir	IS	F	Member	2004 -
Zsolt Kajcsos	HU	M	Member	2008 -
René Kamermans	NL	M	Member	2001 - 2007
Maria Kaminska	PL	F	Core Group	2008 -
Venceslav Kaucic	SI	M	Member	1997 - 2003
S. Engin Kilic	TR	M	Member	2004 -
Janos Kollar	HU	M	Member	2002 - 2008
Ilmar Koppel	EE	M	Member	2003 - 2005
Ulrich Langer	AT	M	Member	2005 -
Louis Laurent	FR	M	Member Core Group	2001 – 2003 2003 - 2005
Knut Liestøl	NO	M	Member Core Group	2001 – 2004 2004 - 2007
Bozidar Liscic	HR	M	Member	2003 - 2009
Pasquale Lubrano	IT	M	Core Group	2006 -
Michel Mareschal	BE	M	Chair	2003 - 2008
Elaine Martin	UK	F	Core Group	2006 - 2009
Massimo Martinelli	IT	M	Member Core Group	2000 – 2003 2004 - 2005
Karol Matiascko	SK	M	Member	2001 - 2004
Enn Mellikov	EE	M	Member	2005 -
Henri-Noël Migeon	LU	M	Member	2005 - 2008

Name	Country	Gender	Position	Years of mandate
Mogens Mogensen	DK	M	Member	2005 - 2005
Isabel Moura	PT	F	Member	2008 -
Radu Munteanu	RO	M	Member	2003 - 2008
Ole John Nielsen	DK	M	Member	2003 – 2005 2005-
Moira C. Norrie	CH	F	Member	2005 - 2008
Pär Omling	SE	M	Core Group	2001 - 2003
Hans Rudolf Ott	CH	M	Member	1999 - 2005
Marc Parlange	CH	M	Member	2008 -
Radovan Stanislav Pejovnik	SI	M	Member	2008 -
Valdemaras Razumas	LT	M	Member	2005 -
Kenneth Ruud	NO	M	Member	2007 -
Kaisa Sere	FI	F	Member Core Group	2004 – 2007 2007 -
Sauro Succi	IT	M	Member	2008 -
Henryk Szymczak	PL	M	Member	2001 - 2006
Tugrul Tankut	TR	M	Member Core Group	2001 – 2003 2004 - 2004
Milan Tichy	CZ	M	Member	2007 -
Malgorzata Tkatchenko	FR	F	Member	2005 -
Hans-Jürgen Troe	DE	M	Member Core Group	2003 – 2004 2004 - 2004
Peter Venturini	SI	M	Member Core Group	2003 – 2005 2005 - 2008
Dorothea Wagner	DE	F	Member Core Group	2004 – 2008 2008 -
Michel Warquier	BE	M	Member	2003 - 2009
Håkan Wennerström	SE	M	Member	2004 - 2007
Gabriel Wild	FR	M	Member Core Group	1997 – 2003 1998 - 2003
Jakob Yngvason	AT	M	Core Group	2001 - 2005

PESC Observers

Name	Country	Gender	Position*	Years of mandate
Morris Aizenman	US	M	Observer, NSF	2008 -
Demir Altiner	TR	M	Observer, LESC	2002 - 2004
Michael Ansorge	CH	M	Observer, COST ICT	2008 -
Lorenzo Valles-Brau	BE	M	Observer, EC	2004 - 2008
Salvatore Cannistraro	IT	M	Observer, LESC	2004 - 2007
Gabriel Crean	IE	M	Observer, EMF and EMRS	2007 -
Adriaan de Graaf	US	M	Observer, NSF	2006 - 2008
Angelos Efstathiou	CY	M	Observer, LESC	2008 -
Venceslav Kaucic	SI	M	Observer, COST CMST	2006 -
John Kingman	UK	M	Observer, EMS	2002 - 2006
Joseph Klafter	IL	M	Observer, IAS	2001 -
Ari Laptev	UK	M	Observer, EMS	2007 -
Juan José Moreno Navarro	ES	M	Observer, ERCIM and COST ICT	2005 - 2008
Mihail-Lucian Pascu	RO	M	Observer, COST BMBS	2007 -
Luisa Prista	BE	F	Observer, EC	2001 - 2003
Alex Quintanilha	PT	M	Observer, LESC	2008 - 2008
Renzo Tomellini	BE	M	Observer, EC	2008 -
G. Wayne Van Citters	US	M	Observer, NSF	2002 - 2005
Thomas A. Weber	US	M	Observer, NSF	2005 - 2006

* COST CMST – COST Domain Committee for Chemistry and Molecular Sciences and Technologies

COST ICT – COST Domain Committee for Information and Communication Technologies

EC - European Commission

EMF - European Materials Forum

EMS - European Mathematical Society

EMRS - European Materials Research Society

ERCIM - European Research Consortium for Informatics and Mathematics

IAS - Israel Academy of Sciences and Humanities:

LESC - Standing Committee for the Life, Earth and Environmental Sciences

NSF – US National Science Foundation

Gender Balance

Year	Total Number of Active PESC Members (Standing Committee and Core Group only)	Female	% Female	Male	% Male
2003	42	4	9,52 %	38	90,48 %
2004	41	7	17,07 %	34	82,93 %
2005	43	9	20,93 %	34	79,07 %
2006	40	10	25 %	30	75 %
2007	41	9	21,95 %	32	78,05 %
2008	41	11	26,83 %	30	73,17 %

PESC Meeting Attendance**1) Core Group meeting attendance**

Meeting date	Country of Meeting	Total Participants	Attendee	Chair	ESF Staff	Guest	Observer	Total SC Members	Total Attending from SC and CG	% Meeting attendance
31/01/2003	ESF, France	9	5	1	3			8	6	75 %
08/05/2003	Ireland	11	5	1	3	2		7	6	86,8 %
19/06/2003	Germany	10	6	1	2	1		8	7	87,5 %
23/10/2003	Turkey	12	6	1	2	3		8	7	87,5 %
30/01/2004	Austria	12	7	1	2	2		8	8	100 %
22/04/2004	Spain	13	5	1	3	4		8	6	75 %
17/06/2004	France	10	5	1	3	1		7	6	85,7 %
21/10/2004	Cyprus	18	6	1	3	4	4	7	6	85,7 %
28/01/2005	Belgium	11	6	1	4			8	7	87,5 %
28/04/2005	United Kingdom	12	5	1	2	4		8	6	75 %
15/06/2005	Spain	9	5	1	2	1		9	6	66,7 %
02/09/2005	Belgium	9	4	1	3	1		8	5	62,5 %
27/10/2005	ESF, France	12	7	1	3	1		9	8	88,9 %
04/05/2006	Bulgaria	13	6	1	3	3		9	7	77,8 %
15/06/2006	Netherlands	7	3	1	2	1		7	4	57,1 %
01/09/2006	Belgium	10	5	1	2	2		7	6	85,7 %
26/10/2006	ESF, France	13	4	1	3	5		6	5	83,3 %
26/04/2007	Denmark	10	3	1	4	2		10	4	40 %
14/06/2007	United Kingdom	11	5	1	2	3		8	6	75 %
25/10/2007	ESF, France	12	5	1	4	2		7	6	85,7 %
17/04/2008	Spain	13	4	1	4	4		7	5	71,4 %
19/06/2008	Sicily, Italy	9	2	1	5			8	3	37,5 %
29/08/2008	Belgium	12	3	1	2	6		8	4	50 %
16/10/2008	France	13	6	1	3	3		7	7	100 %
Average									76.14 %	

2) Standing Committee meeting attendance

Meeting date	Country of Meeting	Total Participants	Attendee	Chair	ESF Staff	Guest	Observer	Total SC Members	Total Attending from SC and CG	% Meeting attendance
09/05/2003	Ireland	35	28	1	3	1	2	37	29	78,4 %
24/10/2003	Turkey	28	21	1	3	1	2	37	22	59,5 %
23/04/2004	Spain	35	24	1	3	3	4	35	25	71,43 %
22/10/2004	Cyprus	38	22	1	3	7	5	35	23	65,7 %
29/04/2005	United Kingdom	34	25	1	2	2	4	35	26	74,3 %
28/10/2005	ESF, France	33	21	1	6	3	4	37	22	59,5 %
05/05/2006	Bulgaria	26	17	1	4	3	1	36	18	50 %
27/10/2006	ESF, France	41	25	1	6	4	5	36	26	72,2 %
27/04/2007	Denmark	33	16	1	4	10	2	34	17	50 %
26/10/2007	ESF, France	40	22	1	8	7	2	34	23	67,6 %
18/04/2008	Spain	38	22	1	4	7	4	33	23	69,7 %
17/10/2008	France	31	19	1	6	3	2	34	20	58,8 %
Average										64,76 %

2) PESC Attendance at Round Table meetings with Member Organisations

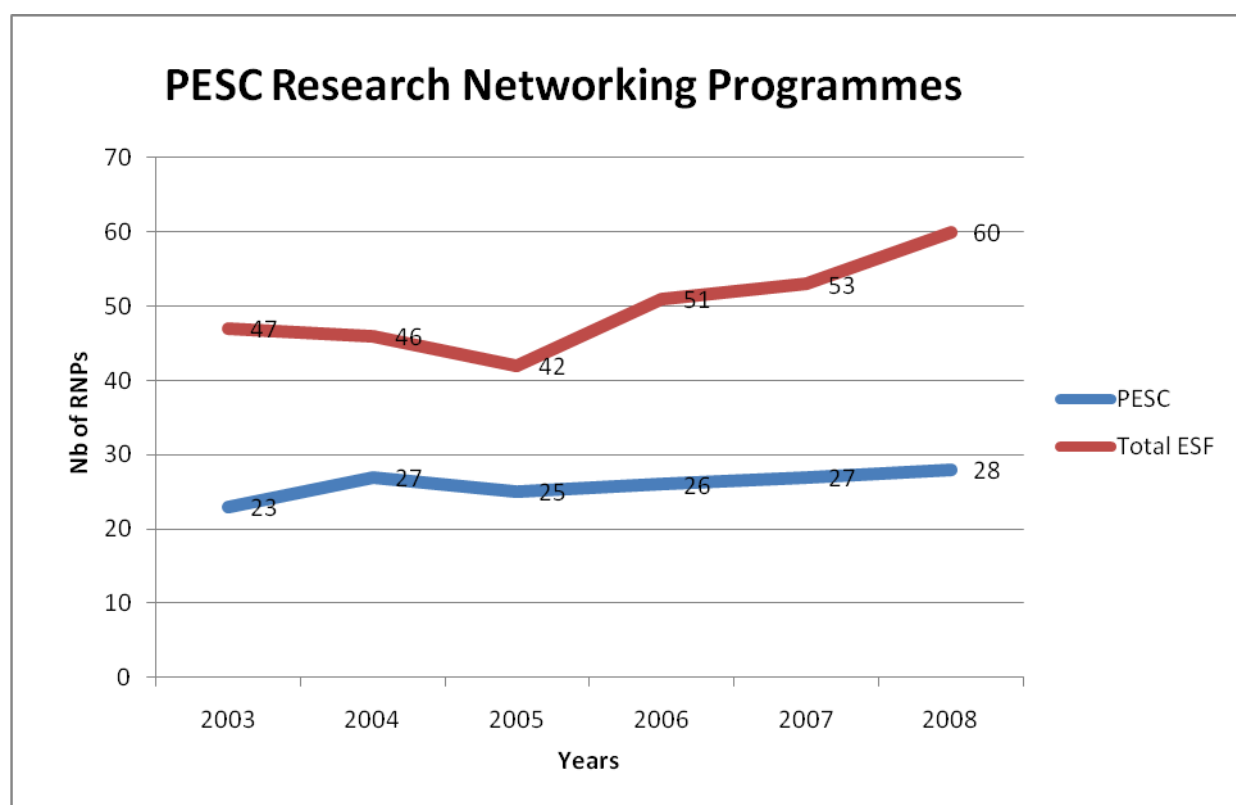
Meeting date	Country of Meeting	Total Participants	Attendee	Chair	ESF Staff	Guest	Observer	Total SC Members	Total Attending from SC and CG	% Meeting attendance
20/06/2003	Germany	27	24	1	2			-	7	-
18/06/2004	France	25	21	1	3			-	7	-
16/06/2005 *	Spain	54	43	2	5	4		-	8	-
16/06/2006	Netherlands	23	19	1	2	1		-	5	-
15/06/2007	United Kingdom	29	21	1	4	3		-	9	-
18/06/2008	Sicily, Italy	28	19	1	4	4		-	4	-

*joint meeting with LESC

Overview of running activities in the PESC Domain

Activity	2003	2004	2005	2006	2007	2008
EUROCORES Programmes in Project Selection Phase*	1	2	4	2	2	3
EUROCORES Programmes In Networking Phase*	-	1	1	4	6	7
Exploratory Workshops	14	11	15	13	14	12
Forward Looks*	1	2	2	3	3	2
Interdisciplinary Initiatives (INIFs)	-	-	1	3	1	1
Networks*	8	7	5	2	-	-
Research Conferences*	15	7	8	8	15	11
Research Networking Programmes*	23	27	25	26	27	28

* Activities spanning several years are counted once each year they are active



Research Networking Programmes

List of running PESC Research Networking Programmes

Title	Duration	Affiliation	Number of contributing Organisations	Total lifetime Budget (kEUR)
<u>Optimization with PDE Constraints (OPTPDE)</u>	10/2008 - 10/2013	PESC	17	415
<u>Interdisciplinary Approaches to Functional Electronic and Biological Materials (INTELBIOMAT)</u>	06/2008 - 06/2013	PESC	15	490
<u>New Trends and Applications of the Casimir Effects (CASIMIR)</u>	04/2008 - 04/2013	PESC	12	475
<u>Games for Design and Verification (GAMES)</u>	03/2008 - 03/2013	PESC	12	607.5
<u>The New Physics of Compact Stars (CompStar)</u>	02/2008 - 02/2013	PESC	11	352.5
<u>Mapping the detailed composition of surface-adsorbed protein layers on biomaterials and nanoparticles - an alternative approach to biocompatibility and nanotoxicity (EpitopeMap)</u>	05/2007 - 05/2012	PESC	10	435
<u>Nanoscience and Engineering in Superconductivity (NES)</u>	05/2007 - 05/2012	PESC	17	512.5
<u>Harmonic and Complex Analysis and its Applications (HCAA)</u>	04/2007 - 04/2012	PESC	12	625
<u>Multidisciplinary Frontiers of Magnetic Resonance (EMAR)</u>	04/2007 - 04/2012	PESC	19	420
<u>Functional Dynamics in Complex Chemical and Biological Systems (FUNCDYN)</u>	11/2006 - 11/2011	PESC LESC	12	450
<u>New generation of organic based photovoltaic devices (ORGANISOLAR)</u>	09/2006 - 09/2011	PESC	13	545
<u>Computational Astrophysics and Cosmology (ASTROSIM)</u>	09/2006 - 09/2011	PESC	15	782
<u>Quantum Geometry and Quantum Gravity (QG)</u>	07/2006 - 07/2011	PESC	11	564
<u>Molecular Simulations in Biosystems and Material Science (SimBioMa)</u>	05/2006 - 05/2011	PESC	19	965
<u>Interdisciplinary Statistical and Field Theory Approaches to Nanophysics and Low Dimensional Systems (INSTANS)</u>	10/2005 - 10/2010	PESC	12	820

Title	Duration	Affiliation	Number of contributing Organisations	Total lifetime Budget (kEUR)
<u>Ultrafast Structural Dynamics in Physics, Chemistry, Biology and Material Science (DYNA)</u>	05/2005 - 05/2010	PESC	15	695
<u>Automata: from Mathematics to Applications (AutoMathA)</u>	05/2005 - 05/2010	PESC	17	629
<u>Highly Frustrated Magnetism (HFM)</u>	05/2005 - 05/2010	PESC	13	449.5
<u>Experimental and Theoretical Design of Stimuli-Responsive Polymeric Materials (STIPOMAT)</u>	04/2005 - 04/2009	PESC	10	420
<u>Advanced Mathematical Methods for Finance (AMaMeF)</u>	04/2005 - 03/2010	PESC	17	755
<u>Methods of Integrable Systems, Geometry, Applied Mathematics (MISGAM)</u>	07/2004 - 07/2009	PESC	11	519
<u>Global and geometrical aspects of nonlinear partial differential equations (GLOBAL)</u>	06/2004 - 06/2009	PESC	11	484
<u>Arrays of Quantum Dots and Josephson Junctions (AQDJJ)</u>	06/2004 - 06/2009	PESC	16	521
<u>Electron Induced Processing at the Molecular Level (EIPAM)</u>	06/2004 - 06/2009	PESC	15	615.5
<u>Quantum Degenerate Dilute Systems (QUDEDIS)</u>	06/2004 - 06/2008	PESC	18	602.5
<u>Middleware for Network Eccentric and Mobile Applications (MINEMA)</u>	09/2003 - 03/2009	PESC	11	522.5
<u>Thin Films For Novel Oxide Devices (THIOX)</u>	06/2003 - 06/2009	PESC	12	568
<u>Stochastic Dynamics: fundamentals and applications (STOCHDYN)</u>	05/2003 - 05/2008	PESC	14	498
<u>Towards Atomistic Materials Design (PSI-K)</u>	01/2003 - 12/2007	PESC	21	800
<u>Towards Electronic Democracy: Internet based complex decision support (TED)</u>	07/2002 - 12/2006	PESC	11	293
<u>Spectral Theory and Partial Differential Equations (SPECT)</u>	05/2002 - 12/2007	PESC	15	389
<u>Nanotribology (NATRIBO)</u>	04/2002 - 04/2007	PESC	15	627

Title	Duration	Affiliation	Number of contributing Organisations	Total lifetime Budget (kEUR)
<u>Phase Transitions and Fluctuation Phenomena for Random Dynamics in Spatially Extended Systems (RDSES)</u>	04/2002 - 04/2007	PESC	16	497
<u>Cosmology in the Laboratory (COSLAB)</u>	07/2001 - 06/2006	PESC	13	338
<u>Innovative Control Technologies for Vibration Sensitive Civil Engineering Structures (CONVIB)</u>	05/2001 - 06/2005	PESC	13	345.5
<u>Novel Applications of Josephson Junctions in Quantum Digital Circuits (PiShift)</u>	01/2001 - 04/2006	PESC	10	471
<u>Optimisation of Solid State Electrochemical Processes for Hydrocarbon Oxidation (OSSEP)</u>	03/2000 - 03/2005	PESC	10	404
<u>Nonlinear Chemistry in Complex Reactors: Models and Experiments (REACTOR)</u>	01/2000 - 03/2005	PESC	11	276
<u>Nonlinear Acoustic Techniques for Micro-Scale Damage Diagnostics (NATEMIS)</u>	01/2000 - 08/2005	PESC	9	323
<u>Noncommutative Geometry (NOG)</u>	01/2000 - 12/2004	PESC	13	609
<u>Quantum Degenerate Dilute Systems-Bose-Einstein Condensation and Beyond (BEC2000+)</u>	01/2000 - 07/2004	PESC	16	483
<u>Femtochemistry and Femtobiology (ULTRA)</u>	01/2000 - 03/2004	PESC LESC	22	680
<u>Challenges in Molecular Simulations: Bridging the Length and Time-scale Gap (SIMU)</u>	01/1999 - 09/2004	PESC	15	742
<u>Interaction of Superintense, Femtosecond Laser Fields with Atoms, Solids and Plasmas (FEMTO)</u>	01/1999 - 12/2003	PESC	15	521
<u>Experimental and theoretical investigation of complex polymer structures (SUPERNET)</u>	01/1999 - 05/2004	PESC	9	353
<u>Quantum information theory and quantum computation (Qit)</u>	01/1999 - 06/2004	PESC	9	492.5
<u>Statistical physics of glassy and non-equilibrium systems (SPHINX)</u>	01/1999 - 12/2004	PESC	15	517
<u>Vortex Matter in Superconductors at Extreme Scales and Conditions (VORTEX)</u>	01/1999 - 05/2004	PESC	17	656
			TOTAL K€:	25 554.5

Calls for Research Networking Programmes Proposals (2003-2008)**2003-2004****2003 PESC annual Call for Proposals (Outline and Full Proposals)**

		PESC Call 2003	
Number of Outline Applications	Single committee	34 in Total	34
	Interdisciplinary		0
Number of Full Applications	Single committee	12 in Total	12
	Interdisciplinary		0
Number of Recommended Proposals	Single committee		6
Number of RNPs launched	Single committee		6

2004 PESC annual Call for Proposals (Full Proposal stage only)

		PESC Call 2004	
Number of Full Applications	Single committee	35 in Total	32
	Trans-Committee		3
Number of Recommended Proposals	Single committee		6
Number of RNPs launched	Single committee		4 + (1 with LESC)

From 2005 onwards

Single ESF common annual Call for Proposals since 2005

Single ESF common annual Call for *A la carte* Contributions since 2006 (for proposals recommended from the 2005 Call)

		2005		PESC
Number Applications	Single committee	89	57	28
	Trans-Committee		32	13
Number of Recommended Proposals	Single committee	18	12	3
	Trans-Committee		6	3
Number of RNPs launched	Single committee	8	6	2
	Trans-Committee		2	2

		2006		PESC
Number Applications	Single committee	132	88	24
	Trans-Committee		44	22
Number of Recommended Proposals	Single committee	15	11	5
	Trans-Committee		4	-
Number of RNPs launched	Single committee	15	11	5
	Trans-Committee		4	-

		2007		PESC
Number Applications	Single committee	122	86	37
	Trans-Committee		36	16
Number of Recommended Proposals	Single committee	19	17	6
	Trans-Committee		2	1
Number of RNPs launched	Single committee	15**	13**	4
	Trans-Committee		2	1

***Pending final confirmation and ratification*

		2008		PESC
Number Applications	Single committee	112	68	25
	Trans-Committee		44	11
Number of Recommended Proposals	Single committee	Data not available yet		
	Trans-Committee			
Number of RNPs launched	Single committee	Data not available yet		
	Trans-Committee			

Networks

List of running Networks

Title	Duration	Affiliation
<u>Statistical Analysis of Complex Data with Robust and Related Statistical Methods (SACD)</u>	01/2004 - 12/2006	PESC SCSS
<u>Collisions in Atom Traps (CATS)</u>	07/2003 - 06/2006	PESC
<u>Network on Future Advanced Light Sources (FALS)</u>	01/2003 - 12/2005	PESC
<u>Research Links to Explore and Advance Software Evolution (RELEASE)</u>	10/2002 - 12/2005	PESC
<u>Biomass Fermentation Towards Usage in Fuel Cells (BFCNet)</u>	01/2002 - 06/2005	PESC
<u>Space Weather and the Earth's Weather and Climate - Links between Solar Activity, Magnetospheric Variability, Clouds, Thunderstorms and Lightning (SPECIAL II)</u>	01/2002 - 08/2004	PESC / LESC
<u>European Network on Crystal Polymorphism (MORPH)</u>	01/2001 - 12/2003	PESC
<u>Neutrino Astrophysics (NEUTRINO)</u>	07/2000 - 12/2004	PESC
<u>Geometry and Disorder: From Membranes to Quantum Gravity (GeoDis)</u>	01/2000 - 06/2003	PESC

Calls for ESF Networks (2003-2008)

The last Call for ESF Networks was published in May 2003

		2003		PESC
Number Applications	Single committee	25	16	2
	Trans-Committee		9	2
Number of awards	Single committee	4	3	0
	Trans-Committee		1	0

EUROCORES ProgrammesList of EUROCORES Programmes

Title	Duration (Networking Phase)	Affiliation	Number of funded CRPs*	Number of funded IPs*	Amount of Research Budget (Mio Euro)
<u>Origin of the Elements and Nuclear History of the Universe (EuroGENESIS)</u> <i>(currently in project selection phase)</i>	Networking phase in 2010	PESC	n/a	n/a	n/a
<u>Synthetic Biology: Engineering Complex Biological Systems (EuroSYNBIO)</u> <i>(currently in project selection phase)</i>	Networking phase in 2010	LESC (lead)/ PESC	n/a	n/a	n/a
<u>Maximizing the Impact of Graphene Research in Science and Innovation (EuroGRAPHENE)</u> <i>(currently in project selection phase)</i>	Networking phase in 2010	PESC	n/a	n/a	n/a
<u>Quantum Standards and Metrology - EuroQUASAR</u>	06/2008 - 09/2011	PESC	3	16	3.6
<u>Friction and Adhesion in Nanomechanical Systems - FANAS</u>	06/2008 - 09/2011	PESC	7	36	7.1
<u>Cold Quantum Matter - EuroQUAM</u>	07/2007 - 10/2010	PESC	5	38	6.5
<u>Smart Structural Systems Technologies – S3T</u>	03/2007 - 09/2010	PESC	7	24	4
<u>Self-Organised NanoStructures - SONS 2</u>	12/2006 - 03/2010	PESC	7	39	7.3
<u>Fundamentals of NanoElectronics - FoNE</u>	11/2006 - 02/2010	PESC	5	25	4.7
<u>European Mineral Sciences Initiative (EuroMinSci)</u>	01/2006 - 03/2009	LESC (lead) / PESC	9	43	2.4
<u>Self-Organised NanoStructures – SONS</u>	05/2004 - 09/2007	PESC	16	73	11.6
				TOTAL	47.2

* CRPs: Collaborative Research Projects
IPs: Individual Projects

Calls for EUROCORES theme proposals (2003-2008)**Single common annual Call for EUROCORES Theme Proposals since March 2005**

		2005		PESC
Number Applications	Single committee	52	43	7
	Trans-Committee		9	2
Number of Approved Proposals	Single committee	5	3	1
	Trans-Committee		2	1
Number of EUROCORES Programme launched	Single committee	4	3	1
	Trans-Committee		1	0

		2006		PESC
Number Applications	Single committee	47	37	11
	Trans-Committee		10	1
Number of Approved Proposals	Single committee	7	6	2
	Trans-Committee		1	0
Number of Eurocores Programme launched	Single committee	6	5	2
	Trans-Committee		1	0

		2007		PESC
Number Applications	Single committee	35	23 (+2**)	2
	Trans-Committee		10	3
Number of Approved Proposals	Single committee	6	6	1
	Trans-Committee		0	0
Number of Eurocores Programme launched	Single committee	3	3	0
	Trans-Committee		0	0

**Ineligible programmes

		2008		PESC
Number Applications	Single committee	38	30	7
	Trans-Committee		8	5
Number of Approved Proposals	Single committee	6	5	2
	Trans-Committee		1	1
Number of EUROCORES Programmes launched	Single committee	6	5	2
	Trans-Committee		1	1

Exploratory Workshops

List of Exploratory Workshops funded by PESC

12 Exploratory Workshops funded by PESC in 2008	Date of Event	Affiliation
<u>The Relevance Of Mathematics Education</u>	7-10 January 2008, Cambridge, United Kingdom	PESC / SCSS
<u>Singularities In Mechanics: Description And Formation</u>	21-25 January 2008, Paris, France	PESC
<u>Astrophysical Tests Of Fundamental Physics</u>	26-30 March 2008, Porto, Portugal	PESC
<u>Hyperbranched polymers as novel materials for nanoscale applications : insight from experiment, theory and simulations</u>	26-28 May 2008, Heraklion, Greece	PESC
<u>Physics Of Micro And Nano Flows</u>	8-12 June 2008, Leiden, Netherlands	PESC
<u>Science And Technology Of Agreement</u>	18-21 June 2008, Barcelona, Spain	PESC / SCSS
<u>Interplay Between Superconductivity And Magnetism At Nanometer Scale</u>	19-22 June 2008, Paestum, Salerno, Italy	PESC
<u>Correlations In Computer Science</u>	5-8 August 2008, Brussels, Belgium	PESC
<u>Extreme Laboratory Astrophysics: Advances And Opportunities In High-Energy Density Experiments</u>	21-24 September 2008, Paris, France	PESC
<u>Advanced Instrumentation For Cancer Diagnosis And Treatment</u>	23-26 September 2008, Oxford, United Kingdom	PESC / EMRC
<u>Computational Disease Modeling</u>	24-26 September 2008, Barcelona, Spain	PESC / LESC
<u>EuroIce2008</u>	1-4 October 2008, Granada, Spain	PESC / LESC

14 Exploratory Workshops funded by PESC in 2007	Date of Event	Affiliation
<u>Phenomics - Advancing High-Resolution Genome-Wide Phenotyping in Yeast</u>	2-4 March 2007, Göteborg, Sweden	PESC / LESC
<u>Genesis And Applications Of Active Metal-Organic Frameworks</u>	25-28 April 2007, Dourdan, France	PESC
<u>Random Matrix Theory: From Fundamental Physics To Application</u>	3-5 May 2007, Krakow, Poland	PESC
<u>Biominalization: From Biology To Materials</u>	11-14 May 2007, Århus, Denmark	PESC / LESC
<u>Tracing Dust In Spiral Galaxies: Radiative Transfer Studies In The Dawn Of A New Generation Of Observing Facilities</u>	13-17 May 2007, Ghent, Belgium	PESC
<u>Biosupramolecular Chemistry</u>	4-8 September 2007, Bristol, United Kingdom	PESC / LESC
<u>Microfluidic: Experiments and Numerics</u>	27-30 September 2007, Castel Gandolfo (near Rome), Italy	PESC
<u>Coherence, Decoherence & Entanglement Of Non-Degenerate Massive Quantum Systems</u>	4-7 October 2007, Vienna, Austria	PESC

<u>Slow And Fast Light: Fundamental Issues And Applications</u>	7-10 October 2007, Venice, Italy	PESC
<u>Glassy Liquids Under Pressure: Fundamentals And Applications</u>	10-14 October 2007, Ustron, Poland	PESC
<u>Multivariate Interpolation - Its Relation To Algebraic Statistics, Classical Algebraic Geometry And Computational Complexity Theory</u>	16-19 October 2007, Sestri Levante, Italy	PESC
<u>Computational Approaches to the Role of Epigenetic Marks in Transcription Regulation</u>	17-20 October 2007, Basel, Switzerland	PESC / LESC
<u>Proton Conducting Materials For Next-Generation Solid Oxide Fuel Cells</u>	22-24 October 2007, Genova, Italy	PESC
<u>Laser Scanning For Alpine Natural Hazard Management - Development Of New Concepts</u>	15-17 November 2007, Obergurgl, Austria	PESC / LESC

13 Exploratory Workshops funded by PESC in 2006	Date of Event	Affiliation
<u>New Generation Large Aperture Solar Telescopes: Science Drivers, Observational Strategies And Perspectives</u>	9-12 April 2006, Monte Porzio Catone, Italy	PESC
<u>Crackling Noise</u>	24-27 May 2006, Torino, Italy	PESC
<u>Experimental and computational aspects of high-throughput protein NMR</u>	17-20 June 2006, Göteborg, Sweden	PESC / LESC
<u>Mott's Physics In Nanowires And quantum Dots</u>	31 July-2 August 2006, Loughborough, United Kingdom	PESC
<u>Carbon-Based Nanostructured Composite Films</u>	29 August-2 September 2006, Gdansk, Poland	PESC
<u>Self-assembly of guanosine derivatives: from quadruplex DNA to biomolecular devices</u>	12-15 September 2006, Bled, Slovenia	PESC
<u>Silicon/oxide Hetero-Epitaxy: A New Road Towards A Si Cmos-Compatible Resonant Tunnel Diode Technology ?</u>	12-13 September 2006, Como, Italy	PESC
<u>Chains: The Limits Of Neutrality</u>	14-17 September 2006, Compiègne, France	PESC
<u>Computational Aspects Of Stochastic Partial Differential Equations</u>	17-21 September 2006, Salzburg, Austria	PESC
<u>Challenges In Java Program Verification</u>	16-18 October 2006, Nijmegen, Netherlands	PESC
<u>Exotic Radionuclides From Accelerator Waste For Science And Technology</u>	15-17 November 2006, Villigen, Switzerland	PESC
<u>Advances And Opportunities in Freeform Ultra-Precision Micromanufacturing Technologies</u>	22-23 November 2006, Nottingham, United Kingdom	PESC
<u>Physics Of The Cell: From Single Molecules To Collective Behavior</u>	29 November-1 December 2006, Barcelona, Spain	PESC

15 Exploratory Workshops funded by PESC in 2005	Date of Event	Affiliation
<u>Challenging Lagrangian Turbulence Dynamics</u>	1 - 4 September, Castel Gandolfo, Italy	PESC
<u>Effective models for low-dimensional strongly correlated systems</u>	12 - 16 September 2005, Peyresq (Nice), France	PESC
<u>New phenomena in superfluidity and superconductivity</u>	3 - 6 July 2005, Camerino, Italy	PESC
<u>Galaxy Modelling in the Era of GAIA</u>	6 - 9 September 2005, Oxford, United Kingdom	PESC
<u>Long-distance Quantum Communication Networks with Atoms and Light</u>	9-12 April 2005, Prague, Czech Republic	PESC
<u>Information Retrieval in Context (IRiX)</u>	25 - 27 July 2005, Glasgow, United Kingdom	PESC
<u>The Chemistry of the Transactinide Elements</u>	2 - 5 October 2005, Oslo, Norway	PESC
<u>Nanowires: Bridging the Gaps between Materials Science and Biology</u>	25 - 28 May 2005, Bad Hofgastein, Austria	PESC
<u>Rare Earth Oxide Thin Films: growth, characterization, and applications</u>	11 - 13 May 2005, San Remo, Italy	PESC
<u>Toward a 3rd generation European Gravitational Wave Observatory</u>	21 - 23 September 2005, Perugia, Italy	PESC
<u>Novel Superhard Materials</u>	17 - 19 November 2005, Bayreuth, Germany	PESC
<u>Ultracold Chemistry</u>	6- 10 February 2005, Mulhouse, France	PESC
<u>Cellular Computing (Complexity Aspects)</u>	30 January - 2 February 2005, Sevilla, Spain	PESC
<u>Nano-Spintronics</u>	29 - 30 September 2005, Wegberg Wildenrath, Germany	PESC
<u>Self-Assembling Fibrillar Networks (SAFIN 2005)</u>	28 June - 1 July 2005, Agia Pelagia, Crete, Greece	PESC

11 Exploratory Workshops funded by PESC in 2004	Date of Event	Affiliation
<u>The New Optics of the Human Eye</u>	26-27 November 2004, Brussels, Belgium	PESC
<u>The Challenge of Semantics</u>	12-17 July 2004, Vienna, Austria	PESC
<u>Modeling of the Mercury Environment: Where are we before BepiColombo ?</u>	8-11 August 2004, Kiruna, Sweden	PESC
<u>Microwave Chemistry and Specific Microwave Effects</u>	17-20 September 2004, Graz, Austria	PESC
<u>Recent Progress and Future Perspectives in Infrared Microscopy and Spectroscopy with Advanced Light Sources</u>	27-30 October 2004, Trieste, Italy	PESC / LESC
<u>Imaging at the Limits</u>	5-11 September 2004, Cargèse (Corsica), France	PESC

<u>Dynamical Systems: from Algebraic to Topological Dynamics</u>	4-10 July 2004, Bonn, Germany	PESC
<u>Wireless Sensor Networks</u>	1-2 April 2004, Zürich, Switzerland	PESC
<u>Frontiers in Computational Astrophysics</u>	26-30 September 2004, Wengen, Switzerland	PESC
<u>Environmentally Friendly European Composites Workshop (ENVIROCOMP)</u>	20-21 April 2004, Coventry, United Kingdom	PESC
<u>Dynamic Portfolio Choice, Asset Pricing and Mathematical Finance</u>	24-25 September 2004, London, United Kingdom	PESC / SCSS

14 Exploratory Workshops funded by PESC in 2003	Date of Event	Affiliation
<u>Growth, structure and electrical properties of high-k gate dielectrics: atomistic modeling vs experiment (postponed from 2002)</u>	17-18 March 2003, Zürich, Switzerland	PESC
<u>Nano-oxides: perspectives and applications of oxide-based ultrathin films and nanoparticles</u>	15-18 May 2003, Brixen, South Tyrol, Italy	PESC
<u>Signal Processing for Wireless Communication (SPWC)</u>	19-20 May 2003, London, United Kingdom	PESC
<u>Arithmetic, Geometry and Coding Theory</u>	19-24 May 2003, Marseille, France	PESC
<u>Recent Advances in Multiphase Flow and Transport in Porous Media</u>	23-24 June 2003, Delft, the Netherlands	PESC
<u>New Information from Modern Charge Density Studies</u>	27-29 June 2003, Sønderborg, Denmark	PESC
<u>New Perspectives on Aromaticity</u>	5-9 July 2003, Exeter, United Kingdom	PESC
<u>Liquid Crystal Colloid Dispersions</u>	28-30 August 2003, Bled, Slovenia	PESC
<u>Models of Consciousness</u>	1-3 September 2003, Birmingham, United Kingdom	PESC
<u>PDE and Materials</u>	7-13 September 2003, Oberwolfach-Walke, Germany	PESC
<u>Electroweak radiative corrections to hadronic observables at TeV energies</u>	11-15 September 2003, Durham, United Kingdom	PESC
<u>Microwave and optical behaviour of nanogranular ferroxides (powders, fluids and composites). High frequency characterisation and biomagnetic applications</u>	21-24 September 2003, Sofia, Bulgaria	PESC
<u>Computational Methods for Algebraic Spline Surfaces (COMPASS)</u>	29 September - 3 October 2003, Kefermarkt, Austria	PESC
<u>Fractals and geotechnical engineering</u>	15-17 December 2003, Innsbruck, Austria	PESC

Calls for Exploratory Workshop proposals (2003-2008)**Single common annual Calls for Exploratory Workshops**

		2003		PESC
Number Applications	Single committee	228	180	25
	Trans-Committee		48	12
Number of awards	Single committee	52	44	9
	Trans-Committee		8	2

		2004		PESC
Number Applications	Single committee	308	267	64
	Trans-Committee		41	12
Number of awards	Single committee	60 (62**)	56 (54**)	15
	Trans-Committee		6	-

*** 2 awards not taken up/withdrawn in the course of the year*

		2005		PESC
Number Applications	Single committee	329	273	60
	Trans-Committee		56	17
Number of awards	Single committee	64	59	12
	Trans-Committee		5	1

		2006		PESC
Number Applications	Single committee	224	149	25
	Trans-Committee		75	19
Number of awards	Single committee	65 (64**)	53 (52**)	9 (8***)
	Trans-Committee		12	6

*** 1 award withdrawn in the course of the year*

		2007		PESC
Number Applications	Single committee	172	119	22
	Trans-Committee		53	19
Number of awards	Single committee	54	39	7
	Trans-Committee		15	5

		2008		PESC
Number Applications	Single committee	337	205	41
	Trans-Committee		132	14
Number of awards	Single committee	59 (58**)	44 (43**)	3
	Trans-Committee		15	6

*** 1 award not taken up in the course of the year*

ESF Research ConferencesList of Research Conferences in the PESC Domain

2003 EURESCO conferences (European Research Conferences)	Dates and location of Event
Solid / Fluid Interfaces	Sant Feliu de Guixols, Spain, 29 March – 3 April 2003
Molecular Crystal Engineering	Acquafredda di Maratea, Italy, 31 May – 5 June 2003
Vertical Markets and Cooperative Hierarchies: The Role of Cooperatives in the International Agri-Food Industry	Germany, 12-16 June 2003
Advanced Environments and Tools for High Performance Computing	Albufeira, Portugal, 14-19 June 2003
Biological Surfaces and Interfaces	Castelvecchio Pascoli, Italy, 21-26 June 2003
Bionanotechnology	Granada, Spain, 9-14 July 2003
What comes beyond the Standard Model	Portoroz, Slovenia, 12-17 July 2003
Algebra and Discrete Mathematics	Hattingen, Germany, 26-31 July 2003
Molecular Liquids	Castelvecchio Pascoli, Italy, 5-10 September 2003
Fundamental Problems of Mesoscopic Physics	Granada, Spain, 6-11 September 2003
Bose-Einstein Condensation	Sant Feliu de Guixols, Spain, 13-18 September 2003
Surface Plasmon Photonics	Granada, Spain, 20-25 September 2003
Quantum Optics	Granada, Spain, 27 September – 2 October 2003
Fundamental Aspects of Surface Science	Albufeira, Portugal, 4-9 October 2003
Electromagnetic Interactions with Nucleons and Nuclei	Santorini, Greece, 6-11 October 2003
2004 EURESCO conferences (European Research Conferences)	Dates and location of Event
Zeolite Molecular Sieves	Hattingen, near Essen, Germany, 20-25 March 2004
Molecules of Biological Interest in the Gas Phase	Exeter, United Kingdom, 13-18 April 2004
Cluster - Surface Interactions	Giens (near Toulon), France, 8-13 May 2004
Symmetries and Integrability of Difference Equations	Helsinki, Finland, 19-24 June 2004

Inorganic Chemistry	San Feliu de Guixols, Spain, 4-9 September 2004
Interfaces and Colloidal Systems	Giens (near Toulon), France, 10-15 September 2004
Chemistry and Physics of Multifunctional Materials	Tomar, Portugal, 11-16 September 2004

2005 Research Conferences	Dates and location of Event
ESF-JSPS Frontier Science Conference for Young Researchers <u>QUANTUM INFORMATION AND QUANTUM PHYSICS</u>	Kanagawa, Japan, 12-18 March 2005
ESF Conference supported by the European Commission (Human Potential Programme) <u>MOLECULAR CRYSTAL ENGINEERING: EUROCONFERENCE ON EVALUATIONS AND PREDICTIONS OF SOLID STATE MATERIALS PROPERTIES</u>	Helsinki, Finland, 17-22 June 2005
ESF Conference supported by the European Commission (Human Potential Programme) <u>BIOLOGICAL SURFACES AND INTERFACES: EUROCONFERENCE ON BIOMATERIALS, BIOSENSORS AND ANALYTICAL TECHNIQUES</u>	Sant Feliu de Guixols, Spain, 18-23 June 2005
ESF Research Conference <u>FUNDAMENTAL PROBLEMS OF MESOSCOPIC PHYSICS: ENTANGLEMENT AND COHERENCE IN NANOELECTRONICS</u>	Acquafredda di Maratea, Italy, 3-8 September 2005
ESF Conference supported by the European Commission (Human Potential Programme) <u>BOSE-EINSTEIN CONDENSATION: EUROCONFERENCE ON ULTRACOLD GASES AND THEIR APPLICATIONS</u>	Sant Feliu de Guixols, Spain, 10-15 September 2005
ESF Research Conference <u>GEOMETRIC REPRESENTATION AND INVARIANT THEORY: ALGEBRAIC QUANTIZATION AND DEFORMATIONS</u>	Spa, Belgium, 16-21 September 2005
ESF Research Conference <u>SUPRAMOLECULAR CHEMISTRY: MOLECULAR ARCHITECTURES AND SYSTEMS</u>	Obernai, France, 14-19 October 2005
ESF-IAS Winter School in Physics <u>JERUSALEM WINTER SCHOOL IN THEORETICAL PHYSICS: STRING THEORY: SYMMETRIES AND DYNAMICS (23RD SCHOOL)</u>	Jerusalem, Israel, 28 December 2005 – 1 January 2006

2006 Research Conferences	Dates and location of Event
ESF-CERN Cargese Summer School in High Energy Physics & Astrophysics <u>STRINGS AND BRANES: THE PRESENT PARADIGM FOR GAUGE INTERACTIONS AND COSMOLOGY</u>	Cargese, France, 22 May to 22 June 2006
ESF-FWF Conference in Partnership with LFUI <u>BIOMOLECULES: FROM GAS PHASE PROPERTIES TO REACTIONS RELEVANT IN LIVING CELLS</u>	Obergurgl, Austria, 24-29 June 2006

ESF-PPARC-EPSRC Summer School in Physics & Astronomy (SUSSP) <u>NEUTRINOS IN PARTICLE PHYSICS, ASTROPHYSICS AND COSMOLOGY</u>	St Andrews, United Kingdom, 8-23 August 2006
ESF-FWF Conference in Partnership with LFUI <u>SOLID/FLUID INTERFACES: COMPLEX FLUID INTERFACES AND NANOFUIDICS</u>	Obergurgl, Austria, 9-14 September 2006
ESF-UB Conference in Biomedicine <u>NANOMEDICINE: A NEW OPPORTUNITY FOR IMPROVING DIAGNOSIS, PREVENTION AND TREATMENT FOR DISEASE</u>	Sant Feliu de Guixols, Spain, 15-20 September 2006
ESF-COST High-Level Research Conference <u>INORGANIC CHEMISTRY: METAL-NUCLEIC ACID INTERACTIONS</u>	Athens, Greece, 12-17 November 2006
ESF-IAS Winter School in Physics <u>JERUSALEM WINTER SCHOOL IN THEORETICAL PHYSICS: THE LIVES OF LOW-MASS STARS AND THEIR PLANETARY SYSTEMS (24TH SCHOOL)</u>	Jerusalem, Israel, 27 December 2006 – 5 January 2007

2007 Research Conferences	Dates and location of Event
ESF-FWF Conference in Partnership with LFUI <u>TRENDS IN OPTICAL MICROMANIPULATION</u>	Obergurgl, Austria, 4-9 February 2007
ESF-FWF Conference in Partnership with LFUI <u>THE ORIGIN OF GALAXIES: EXPLORING GALAXY EVOLUTION WITH THE NEW GENERATION OF INFRARED-MILLIMETRE FACILITIES</u>	Obergurgl, Austria, 24-29 March 2007
ESF-FWF Conference in Partnership with LFUI <u>OCEAN CONTROLS IN ABRUPT CLIMATE CHANGE</u>	Obergurgl, Austria, 19-24 May 2007
ESF-PPARC-EPSRC Summer School in Physics & Astronomy (SUSSP) <u>EXTRA-SOLAR PLANETS: THE DETECTION, FORMATION, EVOLUTION AND DYNAMICS OF PLANETARY SYSTEMS</u>	Island of Skye, United Kingdom, 28 May – 8 June 2007
ESF-UB Summer School <u>NANOMEDICINE</u>	Hensol, United Kingdom, 10-15 June 2007
ESF-EMBO Symposium <u>BIOLOGICAL SURFACES AND INTERFACES</u>	Sant Feliu de Guixols, Spain, 1-6 July 2007
ESF School of Theoretical Physics <u>STRING THEORY AND THE REAL WORLD: FROM PARTICLE PHYSICS TO ASTROPHYSICS</u>	Les Houches, France, 2-27 July 2007
ESF-ORI Conference <u>RESEARCH INTEGRITY: FOSTERING RESPONSIBLE RESEARCH</u>	Lisbon, Portugal, 16-19 September 2007
ESF-EMBO Symposium <u>BIOMAGNETISM AND MAGNETIC BIOSYSTEMS BASED ON MOLECULAR RECOGNITION PROCESSES</u>	Sant Feliu de Guixols, Spain, 22-27 September 2007
ESF-EMBO Symposium <u>THREE DIMENSIONAL SENSORY AND MOTOR SPACE: PERCEPTUAL CONSEQUENCES OF MOTOR ACTION</u>	Sant Feliu de Guixols, Spain, 6-11 October 2007
ESF Mathematics Conference in Poland in partnership with MSHE and The Institute of Mathematics (PAN) <u>CONTROL, CONSTRAINTS AND QUANTA</u>	Bedlewo, Poland, 10-16 October 2007

ESF Mathematics Conference in Poland in partnership with MSHE and The Institute of Mathematics (PAN) <u>ALGEBRAIC ASPECTS IN GEOMETRY</u>	Bedlewo, Poland, 17-23 October 2007
ESF-EMBO Symposium <u>PROBING INTERACTIONS BETWEEN NANOPARTICLES/BIOMATERIALS AND BIOLOGICAL SYSTEMS - ALTERNATIVE APPROACHES TO BIO- AND NANO-SAFETY</u>	Sant Feliu de Guixols, Spain, 3-8 November 2007
ESF-LiU Conference <u>ELECTRONIC DEMOCRACY: ACHIEVEMENTS AND CHALLENGES</u>	Vadstena, Sweden, 21-25 November 2007
ESF-FWF Conference in Partnership with LFUI <u>WATER INTERFACES IN PHYSICS, CHEMISTRY AND BIOLOGY: A MULTI-DISCIPLINARY APPROACH</u>	Obergurgl, Austria, 8-13 December 2007

2008 Research Conferences	Dates and location of Event
ESF-FWF Conference in Partnership with LFUI <u>QUANTUM OPTICS: FROM PHOTONS AND ATOMS TO MOLECULES AND SOLID STATE SYSTEMS</u>	Obergurgl, Austria, 24 February – 1 March 2008
ESF-JSPS Frontier Science Conference for Young Researchers <u>ROBOTICS: EXPERIMENTAL COGNITIVE ROBOTICS</u>	Kanagawa, Japan, 9-15 March 2008
ESF-UB Conference in Biomedicine <u>SYSTEMS BIOLOGY</u>	Sant Feliu de Guixols, Spain, 12-17 April 2008
ESF-COST High-Level Research Conference <u>NATURAL PRODUCTS CHEMISTRY, BIOLOGY AND MEDICINE</u>	Acquafredda di Maratea, Italy, 18-23 May 2008
ESF-EPSRC-STFC Summer School in Physics & Astronomy (SUSSP) <u>HIGH-PRESSURE PHYSICS: SUSSP N°63</u>	Island of Skye, United Kingdom, 26 May - 6 June 2008
ESF Mathematics Conference in Poland in partnership with MSHE and The Institute of Mathematics (PAN) <u>OPERATOR THEORY, ANALYSIS AND MATHEMATICAL PHYSICS</u>	Bedlewo, Poland, 15-22 June 2008
ESF-CERN Cargese Summer School in High Energy Physics & Astrophysics <u>THEORY AND PARTICLE PHYSICS: THE LHC PERSPECTIVE AND BEYOND</u>	Cargese, France, 16-28 June 2008
ESF-UB Conference in Biomedicine <u>NANOMEDICINE</u>	Sant Feliu de Guixols, Spain, 19-24 September 2008
ESF-COST High-Level Research Conference <u>SYSTEMS CHEMISTRY</u>	Acquafredda di Maratea, Italy, 3-8 October 2008
ESF-FWF Conference in Partnership with LFUI <u>CHEMICAL CONTROL WITH ELECTRONS AND PHOTONS</u>	Obergurgl, Austria, 22-27 November 2008
ESF-IAS Winter School in Physics <u>JERUSALEM WINTER SCHOOL IN THEORETICAL PHYSICS: PARTICLE PHYSICS IN THE AGE OF THE LHC (26TH SCHOOL)</u>	Jerusalem, Israel, 29 December 2008 – 8 January 2009

ESF Research Conferences Scheme - Calls for proposals

Between 50-80% of all ESF Research Conferences are generated 'bottom-up' through the Call for Proposals. Others are generated 'top down' through appointments of chairs by the Science Units in collaboration with external funding partners

A) Call for proposals

Single common annual Call for Proposals since 2005 with increasing number of awards due to increase in external co-funding

		2005		PESC
Number Applications	Single committee	52	4	4
	Trans-Committee		48	36
Number of Awards granted through Call	Single committee	13	2	2
	Trans-Committee		11	9

		2006		PESC
Number Applications	Single committee	52	11	11
	Trans-Committee		41	19
Number of Awards granted through Call	Single committee	14	5	5
	Trans-Committee		9	1

		2007		PESC
Number Applications	Single committee	47	11	11
	Trans-Committee		36	17
Number of Awards granted through Call	Single committee	13	3	3
	Trans-Committee		10	1

		2008		PESC
Number Applications	Single committee	83	29	29
	Trans-Committee		54	33
Number of Pending (Status 20/02/2009)	Single committee	17	0	0
	Trans-Committee		17	1
Number of agreed Awards (Status 20/02/2009)	Single committee	17**	12	12
	Trans-Committee		5	0

** Estimated final number: ca. 23

B) Top-Down generated events

		Total		PESC
2006	Single committee	5	4	1
	Trans-Committee		1	0
2007	Single committee	7	3	2
	Trans-Committee		4	0
2008	Single committee	9	7	3
	Trans-Committee		2	0

Forward Looks

List of running Forward Looks

Title	Duration	Affiliation
<u>European Computational Science Forum : The Lincei Initiative: from Computers to Scientific Excellence</u>	2006-2009	PESC* - LESC
<u>Systems Biology</u>	2004-2007	EMRC* -LESC - PESC
<u>Nanomedicine</u>	2003-2005	EMRC* (1)
<u>NanoSciences and the long term evolution of Information Technology (NSIT)</u>	2003-2006	PESC*
<u>Urban Science</u>	2002-2005	SCSS* - EMRC – LESC – PESC – SCH-COST (started as PESC-led)

*leading unit

(1): PESC contributed to this Forward Look

Calls for Forward Looks

The procedure for this instrument has been mainly top-down, with proposals either originating within the Standing Committee, or upon suggestion from Member Organisations. In 2005, there was an open call to the scientific community, in 2006 a call to Member Organisations and, from 2007 on, an open call to Member Organisations. Independent of the call modality, the ESF Governing Council is the body that formally approves Forward Looks for launch.

PESC Strategic Activities and Publications

Interdisciplinary New Initiatives Fund title	Date of Event	Coordinators, Organisers, Sponsors
JSPS Core to Core Links	2005	
COST-ESF Event “European Forum on Nanosciences”	2006	P.Bressler, M.Marechal, M.Grabert, H.Roemich & EC, EC-ERANET Nanoscience
Workshop on “Emerging new science fields: the synergy of national lights sources in Europe”	2006	Professors S. Svensson (Uppsala U.) and W. Eberhardt (TU Berlin)
Workshop on “Clean Solar Fuels: Scientific perspectives and their impacts on society and the global energy market”	2006	Professor Holzwarth (MPG Mülheim D), Huub de Groot, (Leiden NL)
FACEing the Future: planning the next generation of Elevated CO ₂ experiments on crops and ecosystems (FACET)	2007	
Joint ESF-NSF Workshop on “ BioSensing and BioActuation: Interface of Living and Engineered Systems ”	June 2008	Dr. Graham Taylor (Univ. Oxford), Prof. Rahmat Shoureshi (Univ. Denver)

PESC Strategic Event	Date of Event	Coordinators, Organisers, Sponsors
CERC 3 – YCW Workshop	2004	
PESC Strategic Working Group meeting, Brussels	13 September 2004	
PESC Strategic Working Group meeting	2005	
Strategic Workshop “ESF-Mathematics meeting”	February 22/23, 2006, London	PESC, EPSRC (UK)
Strategic Workshop “The Future of Stable Beams in Nuclear Astrophysics”	2007	
Conference on Computational Physics (CCP 2007)	2007	
Strategic Workshop “ Molecular Frontiers ”	1-3 February 2007, Stockholm, Sweden	PESC, Professor Bengt Norden, CERC3
Strategic Workshop “SONS meets EURODYNA: Brain storming workshop I”	December 3/4, 2007, Lisbon	PESC, LESC, SONS, DYNA (EUROCORES)
Strategic Workshop “ Molecular Frontiers ”	May 30/31 2008, Stockholm, Sweden	PESC, Professor Bengt Norden, CERC3
5 th European Congress on Mathematics, Amsterdam	14-18 July 2008	
Applied Mathematics Committee, Frankfurt	September 2008	

PESC Strategic Event	Date of Event	Coordinators, Organisers, Sponsors
Strategic Workshop "First World Materials Summit on Materials Research: Key to Meeting Energy Needs and Climate Change"	4-5 October 2008, Lisbon, Portugal	European Materials Forum, ESF-PESC,E-MRS, EC
Hot Topics in Molecular Imaging (TOPIM) Workshop	2008	
The Planet in 2050 (IGBP)	2008	PESC / LESC
Preparatory meeting for an INIF proposal on "European Virtual Library Infrastructure in Mathematics"	2008	
EuroQUAM "Taken in a Trap" Workshop, Paris	October 2008	PESC /EuroQUAM
Strategic event "Conference on Nanosciences and Nanotechnologies in Medicine"	Oct 24, 2008, Strasbourg EP	European Materials Forum, ESF-PESC,E-MRS, Council of Europe
Preparatory meeting: Computational Sciences Expert Committee (CSEC)	15-16 December 2008	
Strategic Workshop on Geoengineering Research, Hamburg	2008 (event postponed to 2009)	PESC / LESC
ESF-COST strategic workshop on Complex Systems		PESC / COST

PESC Strategic Publications	Date of Publication
1st NEWSLETTER FROM PESC STANDING COMMITTEE & CORE GROUP MEETINGS, Cork, Ireland	May 2003
Forward Look "Global Change: Global problems, global science - Europe's contribution to global change research"	May 2003
2nd NEWSLETTER FROM PESC STANDING COMMITTEE & CORE GROUP MEETINGS, Antalya, Turkey	October 2003
3rd NEWSLETTER FROM PESC STANDING COMMITTEE & CORE GROUP MEETINGS, Madrid, Spain	April 2004
European Survey of National Priorities in Astronomy	May 2004
4th NEWSLETTER FROM PESC STANDING COMMITTEE & CORE GROUP MEETINGS, Limassol, Cyprus	October 2004
5th NEWSLETTER FROM PESC STANDING COMMITTEE FOR THE PERIOD JANUARY-JULY 2005	May 2005
ESSC-ESF Recommendations "Scientific Perspectives for ESA s Future Programme in Life and Physical Sciences in Space"	August 2005
6th NEWSLETTER FROM PESC STANDING COMMITTEE FOR THE PERIOD AUGUST 2005 – FEBRUARY 2006	February 2006

PESC Strategic Publications	Date of Publication
Forward Look “European Computational Science From Computers to Scientific Excellence”	November 2006
Forward Look “Nanoscience and the Long-Term Future of Information Technology (NSIT)”	December 2006
7th NEWSLETTER FROM PESC STANDING COMMITTEE FOR THE PERIOD March 2006 – FEBRUARY 2007	February 2007
Investigating Life in Extreme Environments – A European Perspective	May 2007
Report on the First World Materials Summit: Materials Research: Key to Meeting Energy Needs and Climate Change, Lisbon, Portugal, 4-5 October 2007	October 2007
The ESF / ENSA Survey 2005 of the Neutron Scattering Community in Europe	November 2007
PESC NEWS N°8, March-November 2007	November 2007
PESC HIGHLIGHTS 2007	November 2007
PESC NEWS N°9, December 2007 - June 2008	June 2008
ESF Science Policy Briefing 34 “Harnessing Solar Energy for the Production of Clean Fuel”	October 2008
PESC NEWS N°10, July 2008-November 2008	October 2008
White Paper “Harnessing Solar Energy for the Production of Clean Fuel”	October 2008
PESC HIGHLIGHTS 2008	November 2008

Additional Note: Each PESC Running Research Networking Programme publishes its own descriptive leaflet and occasional Newsletters and publications

PESC Strategic Activities and Publications

Interdisciplinary New Initiatives Fund title	Date of Event	Coordinators, Organisers, Sponsors
JSPS Core to Core Links	2005	
COST-ESF Event “European Forum on Nanosciences”	2006	P.Bressler, M.Marechal, M.Grabert, H.Roemich & EC, EC-ERANET Nanoscience
Workshop on “Emerging new science fields: the synergy of national lights sources in Europe”	2006	Professors S. Svensson (Uppsala U.) and W. Eberhardt (TU Berlin)
Workshop on “Clean Solar Fuels: Scientific perspectives and their impacts on society and the global energy market”	2006	Professor Holzwarth (MPG Mülheim D), Huub de Groot, (Leiden NL)
FACEing the Future: planning the next generation of Elevated CO ₂ experiments on crops and ecosystems (FACET)	2007	
Joint ESF-NSF Workshop on “ BioSensing and BioActuation: Interface of Living and Engineered Systems ”	June 2008	Dr. Graham Taylor (Univ. Oxford), Prof. Rahmat Shoureshi (Univ. Denver)

PESC Strategic Event	Date of Event	Coordinators, Organisers, Sponsors
CERC 3 – YCW Workshop	2004	
PESC Strategic Working Group meeting, Brussels	13 September 2004	
PESC Strategic Working Group meeting	2005	
Strategic Workshop “ESF-Mathematics meeting”	February 22/23, 2006, London	PESC, EPSRC (UK)
Strategic Workshop “The Future of Stable Beams in Nuclear Astrophysics”	2007	
Conference on Computational Physics (CCP 2007)	2007	
Strategic Workshop “ Molecular Frontiers ”	1-3 February 2007, Stockholm, Sweden	PESC, Professor Bengt Norden, CERC3
Strategic Workshop “SONS meets EURODYNA: Brain storming workshop I”	December 3/4, 2007, Lisbon	PESC, LESC, SONS, DYNA (EUROCORES)
Strategic Workshop “ Molecular Frontiers ”	May 30/31 2008, Stockholm, Sweden	PESC, Professor Bengt Norden, CERC3
5 th European Congress on Mathematics, Amsterdam	14-18 July 2008	
Applied Mathematics Committee, Frankfurt	September 2008	

PESC Strategic Event	Date of Event	Coordinators, Organisers, Sponsors
Strategic Workshop "First World Materials Summit on Materials Research: Key to Meeting Energy Needs and Climate Change"	4-5 October 2008, Lisbon, Portugal	European Materials Forum, ESF-PESC,E-MRS, EC
Hot Topics in Molecular Imaging (TOPIM) Workshop	2008	
The Planet in 2050 (IGBP)	2008	PESC / LESC
Preparatory meeting for an INIF proposal on "European Virtual Library Infrastructure in Mathematics"	2008	
EuroQUAM "Taken in a Trap" Workshop, Paris	October 2008	PESC /EuroQUAM
Strategic event "Conference on Nanosciences and Nanotechnologies in Medicine"	Oct 24, 2008, Strasbourg EP	European Materials Forum, ESF-PESC,E-MRS, Council of Europe
Preparatory meeting: Computational Sciences Expert Committee (CSEC)	15-16 December 2008	
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PESC FINANCIAL DATA • 2003 to 2008*

* amounts do not include employment and infrastructure costs

kEUR	
STANDING COMMITTEE	
576	
	<u>2003</u> <u>2004</u> <u>2005</u> <u>2006</u> <u>2007</u> <u>2008</u>
Core Groups, Plenaries, MO Round Tables, Working Groups	36 33 32 29 30 38
Science Policy & Strategy activity	20 27 15 52 50 63
SC Unit Staff Travel	14 20 17 23 40 39
	70 80 64 104 119 140

kEUR	
FORWARD LOOKS	
456	
	<u>Total Award</u> <u>Kick-off date</u> <u>End-date</u>
The Linco Initiative: from computers to scientific excellence	140 05 / 2006 12 / 2008
Systems Biology (#)	84 2004 2005
Urban Science (#)	172 2002 2005
Nanosciences & Long Term Evolution of Information Technology (#)	60 2001 2005

Lead PESC-LESC

affiliation EMRC/LESC-PESC

affiliation SCSS-EMRC-LESC-PESC-SCH

Lead PESC

(#) incomplete: analytical data unavailable for period 2001-2005

kEUR	
EXPLORATORY WORKSOPS	
1 109	
	<u>2003</u> <u>2004</u> <u>2005</u> <u>2006</u> <u>2007</u> <u>2008</u>
Awarded Exploratory Workshop Funds (excl. Rapporteur costs)	188 149 222 180 204 168

kEUR	
INTERDISCIPLINARY NEW INITIATIVES FUND (INIF)	
204	
	<u>2003</u> <u>2004</u> <u>2005</u> <u>2006</u> <u>2007</u> <u>2008</u>
Biologically Inspired Sensors and Actuators	45
FACEing the Future: planning the next generation of Elevated CO2 experiments on crops and ecosystems (FACET)	40
Clean Solar Fuels: perspectives and impacts on society and the global energy market	40
Emerging new Science Fields: Synergy of National Light Sources in Europe	35
European Forum on Nanosciences	25
JSPS Core to Core Links	19
	0 0 19 100 40 45

Lead PESC-LESC

affiliation LESC-PESC

affiliation LESC-PESC

affiliation PESC-LESC

Co-Lead COST/PESC**Lead** PESC

kEUR

SYNERGY WITH COST**9**2003 2004 2005 2006 2007 2008

ESF-COST Synergy: SC/DC Working Group interactions, Joint events	5	1	2			
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kEUR

RNPs**16 631**2003 2004 2005 2006 2007 2008

Research Networking Programmes: <i>à la carte</i> Contributions	2 553	2 252	2 632	3 094	3 103	2 997
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kEUR

EUROCORES**46 254**Total 2004 2005 2006 2007 2008

Research Funding	44 800					
EC Networking Funding* (FP6 Specific Support Action)	1 454					

* *excludes employment & infrastructure*