

European Cooperation in the field of Scientific and Technical Research - COST -Secretariat **Brussels, 4 December 2009**

COST 295/09

NOTE

To: COST Committee of Senior Officials (CSO)
Subject: COST Strategy towards increased support of early stage researchers

Delegations will find attached the COST Strategy towards increased support of early stage researchers as approved by the CSO at its 176th meeting on 1 - 2 December 2009¹.

This document replaces doc. COST 212/07.

COST Strategy towards increased support of early stage researchers

Introduction

A widely accepted deficiency in European research is the lack of opportunity for early stage researchers to develop independent careers and to establish their first research group under their own responsibility. This is a structural problem that leads to a dramatic waste of research talent in Europe. It limits or delays the emergence of the next generation of researchers, who bring new ideas to the European Research Area (ERA).

The issue of increasing support to early stage researchers in the COST system has been raised several times in recent meetings of the CSO. In 2007 the CSO adopted the COST Strategy towards increased support of early stage researchers following intense discussions on how to improve the impact of COST to enhance the situation. A revision in the light of the changing environment seems to be appropriate now.

The CSO has clearly stated its desire and intention to increase support to early stage researchers by reinforcing the use of the already existing instruments in favour of early stage researchers. Several delegations have also expressed their opinion on how important the collaboration between experienced researchers and early stage researchers is and on how beneficial the cooperation is for COST and the ERA in general.

The definition of the term "early stage researchers" used in this document is based on the time that elapses between the date of the PhD/doctorate (or similar experience) and the date of involvement in the COST Action. If this time span is less than 8 years, a person fits the definition; of course, periods of career's leave have to be added to the time span mentioned.

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Present situation in the ERA

A number of uncoordinated support schemes for early stage researchers exist in the ERA. Some of these schemes have a multinational character, others are regional or local.

In the following, reference will be made to two of the major international schemes will be mentioned: the ERC (European Research Council) Starting Scientists Grants and the Marie Curie Scheme. For details see Annex I and II.

These two schemes are, however, playing in a different league than COST in terms of their financial potential. Both can finance not only coordination costs, but also spend major amounts to support research and the building-up of research groups under the auspices of an early stage researcher. To give an example, the ERC Starting Grant will have a budget of approx. €300 million per year.

Present situation in COST

Although statistics on the whole of COST are only starting to emerge (see below), national surveys and experience suggest that early stage researchers play a major role in the research projects running in the framework of COST Actions. However, meanwhile a considerable number of early stage researchers propose COST Actions or act as Action or Working Group Chairs. Their role as leading scientists in COST Actions, in the function of working group Chair or Action Chair can, therefore, be strengthened further. To reach this goal a better integration of the early stage researchers is required and means of capacity building has been implemented in 2007. It seems to be time to update these means.

Direct financial support from COST covers the coordination costs of the Actions, including reimbursement of travel costs, short-term scientific missions (STSM) and training schools. According to the COST principles the underlying project funding is a national undertaking, just as the nomination of delegates is a national responsibility.

These requirements set rather tight constraints on the support of early stage researchers in the framework of COST activities. Indeed, increased financial support can be given to all coordination activities; new or additional support measures shall, in general, also concentrate on such coordination aspects.

Consequently, the following general recommendation can be formulated:

Based on the fact that the financial means of COST to support early stage researchers are limited to coordination activities and that COST, as an intergovernmental initiative, cannot prescribe support measures on a national level, it is important that COST herewith defines its policy and strategic will to support early stage researchers within the given instruments.

It is likewise important that COST increasingly motivates early stage researchers to submit Action proposals and to take responsibility in the management of the Actions.

Support measures

There are a large number of possibilities for COST to give early stage researchers better support through the existing instruments. The list of support measures is not conclusive; proposals are not given in priority order. The Action-related support measures can be strongly recommended to all COST Actions and either be implemented by the COST Office or by the Actions, according to their needs. More general support measures shall be given as recommendations to the Actions or to the COST National Coordinators.

Support measure 1: Short Term Scientific Mission

- Set a target figure, from which a percentage of the Action budget shall be used for STSMs (Domain Committee together with the COST Office).
- STSMs of early stage researchers can be expanded in duration beyond 3 months in well
 justified cases. Financial support shall be increased accordingly. The justifications are to be
 documented in the approval of the STSM.

Support measure 2: Training Schools

- Training Schools shall already be planned at the proposal stage of a new COST Action. This shall be reflected in the criteria for the open call at the full proposal stage.
- The current level of this activity shall be raised.

Support measure 3: Action Think Tank

- An early stage researchers' network may be created within the Action as a "think tank".
- Each year one of the workshops of the Action would involve early stage researchers to strengthen links with each other and with experienced scientists involved in the management of the Action.

Support measure 4: Conference Grants

- A Conference Grant shall be established: Each Domain offers 3 supporting grants (max. 3000 €each) per year for early stage researchers to participate in an international conference outside of the COST Action activities.
- In order to be eligible for this grant, an accepted oral contribution is required.
- The grant can be used to cover travel and subsistence costs, conference fees, and the costs of conference workshops.
- Selection Process (Annex III) by written procedure: written application through the COST Office/grant holder to the Executive group of the Domain Committee through the Action's Management Committee, selection based on a list of criteria (to be defined by the Domain Committee), preparation of a short list of max 3 applications by DC. Final decision shall be taken by written procedure by DC Chair and 2 members of the Executive Group of the Domain three times per year for one grant each (suggestion of procedure given in Annex III).
- The support for early stage researchers participating to conferences or training activities in connection with strategic or COST Action activities should always be in form of a fixed grant, rather than individual reimbursements to maintain a manageable level of administration on the one hand and exceptionally address pre-financing issues on the other hand.

Support measure 5: Selection of Chairs

 Recommendation to the Actions to nominate early stage researchers as Chairs of Working groups.

Support measure 6: Open Call

• The text as well as the criteria of the Open Call shall encourage early stage researchers to submit proposals to the Open Call.

Support measure 7: Early stage researchers as national MC delegates

 Recommendation to the COST National Coordinators to nominate early stage researchers as national delegates whenever feasible.

Statistical basis

The COST Office shall provide statistical data on the age distribution of the participants in COST Actions on a yearly base. Only such indicative statistical information will allow for

- a clear picture of the present situation
- monitoring the effect of the measures described in this document.

The introduction of the early stage researchers strategy in March 2007 does not miss its intended effect. Support measure 1: Short term scientific mission boasts 350 such missions by early stage researchers in 2008 and already 916 in 2009^2 compared to none in 2007. For support measure 6: Open Call the effect is most noticeable in the number of preliminary proposals with early stage researchers' involvement. In 2008 both collection dates attracted 326 such proposals out of 946 and 219 out of 764 in 2009.

Data up to 1 October 2009

The activities involving early stage researchers which were implemented under the COST Outreach strategy (COST 207/08) namely the organisation of three early stage researchers workshops at ESOF2008 in July 2008 and the organisation of 15 specific training schools in the first half of 2009 are a testimony to the success of the strategy as well.

Financial implications and visibility of the support measures

Support to early stage researchers is one of several strategic lines under discussion in the CSO. The financial implications of this and other strategic initiatives have to be considered carefully within the larger frame of the whole COST operation.

The Conference Grant will create costs in the order of euro 80.000, if implemented and fully exploited. The COST Office can implement fixed grants for conference participation to maintain a manageable level of administration with prior approval by the COST Office Director.

The COST Office is invited to comment on the possible implementation of the various support measures in the near future and their financial implications. The COST Office shall also inform the CSO about the implementation of these measures on a regular basis.

Increase the visibility of early stage researchers in COST

The COST Office is asked to use, in particular, projects involving early stage researchers for the publication of success stories and develop other activities targeting early stage researchers.

Specific measures to stimulate ESR involvement which benefit other researchers involved in COST

COST considers the gender balance and early stage researchers as part of its strategic priorities.

COST Actions are specifically asked to consider this issue when planning their activities.

Guaranteeing gender balance in the moving societal structure raises practical issues which need to be addressed. Specific procedures seem to be necessary to achieve these goals in a more and more dynamic ERA to improve career prospects of, in particular, researchers who decide to combine a challenging research career with a family.

COST family friendly policy

In order to enable COST Action meeting organisers to make meetings more accessible to researchers with family duties the following aspects need to be considered:

- Plan meetings outside major school holidays, variations across participant countries permitting;
- Provide information on venues with family rooms;
- Advertise local childcare options as a standard part of the conference organisation;
- Collect requests from participants on whether childcare is needed.

In addition to the above, if a single participant requests childcare support:

- Provide the parent with local emergency and health services numbers;
- Assign a contact person to assist with local language issues, if needed. This may be necessary on a 24 h basis (e.g. local organiser can be contact via mobile phone at all times).

However, if multiple requests (i.e. from several participants with multiple children) are received, in addition to the above-mentioned measures, COST encourages to:

- Arrange childcare facilities at the meeting/conference venue including the provision of meals
 for children and the provision of a means of communication (e.g. provide a pager) for the
 parents;
- Investigate whether assistance, in practical or financial terms, for multiple requests related to childcare can be provided by the CNC of the country in which the meeting takes place.

Appropriate arrangements shall be taken by the COST Action participants to limit the liability of the local organiser, according to the applicable law.

Accompanying persons travelling with the COST Action participant take care of their own travel and accommodation organisation and travel and health insurance and financially bear the related costs.

Final statement

COST follows an overall policy of increasing its support to early stage researchers. The preferred strategic initiative is to use the existing instruments and to apply them in favour of early stage researchers and as a means of capacity building. Based on the availability of funds, the support measures described in this paper shall be implemented by the COST Office or recommended to the Domain Committees, the Actions or the National Coordinators.

ERC Scientific Council - Starting Independent Researcher Grant

The ERC is a new initiative, and is due to begin operating in 2007 as part of the Seventh Framework Programme (FP7). As the work programme explains, 'The fundamental principle for all ERC activities is that of stimulating investigator-initiated frontier research across all fields of research, on the basis of excellence.'

Two types of grant will be available, the Advanced Investigator Grant (ERC Advanced Grant) and the <u>Starting Independent Researcher Grant</u> (ERC Starting Grants - for "early stage" researchers). These grants will be open to excellent researchers of any nationality who are in the EU or an associated country, or moving to the region, who are establishing and leading their first research team or program. The budget for the first call (Starting Grants only) will be around €300 million.

The grant will be awarded to the host institution, which will be asked to commit to allowing the Principal Investigator the independence to manage the research funding for the duration of the project.

'Independence' is spelled out in the work programme as allowing the principal investigator to:

- apply for funding independently of senior colleagues;
- manage the research funding for the project and make appropriate resource allocation decisions;
- publish as senior authors and invite as co-authors only those who have contributed substantially to the reported work;
- supervise team members, including research students or others;
- have access to reasonable space and facilities for conducting the research.

Starting Grants will amount to between €100,000 and €400,000 per year for a period of up to five years, depending on the peer review evaluation and the needs of the project.

The Scientific Council emphasizes that 'Proposals of an interdisciplinary nature which cross the boundaries between different panels, proposals in new and emerging fields and 'high-risk, high-gain' proposals are encouraged.' The proposals will be evaluated twice, with only those that pass the first stage being invited to submit a more detailed proposal.

As explained in the work program, the ERC Starting Grant is intended to encourage more early stage researchers to embark upon an independent career in science: 'Europe offers insufficient opportunities for young investigators to develop independent careers and make the transition from working under a supervisor to being independent research leaders in their own right. This structural problem leads to a dramatic waste of research talent in Europe. It limits or delays the emergence of the next-generation of researchers, who bring new ideas and energy, and it encourages highly talented researchers at an early stage of their career to seek advancement elsewhere.'

Marie Curie Actions

A whole bundle of activities (not only) for young researchers can be found under the Marie Curie schemes.

The actions are based on the long and successful experience of the Marie Curie actions and will cover all stages of a researcher's professional life, from initial research training to life long learning and career development. Focus will be - among others - on the following aspects:

- Increase impact by encouraging national, regional or international initiatives. While existing European post-doctoral fellowships have reached a degree of maturity, there is fragmentation among regional, national and international (non-Community) programmes, which are often limited in their European dimension. European co-funding for these programmes (based on open calls) could bring a better structure;
- A stronger international dimension: to reinforce cooperation with researchers from third countries, in particular by introducing a new dimension for collaboration with the EU's neighbouring countries and countries with an S&T agreement. 'Scientific diasporas' of European researchers abroad and foreign researchers in Europe will also be supported.

Marie Curie actions to achieve the aims of the Specific Programme on 'People' cover:

- Initial training via Marie Curie Networks aiming to improve career perspectives by strengthening the initial training and career development of researchers at the European level and to overcome fragmentation of researchers' qualifications and prospects.
- Life-long training and career development to support the career development of experienced researchers through individual fellowships awarded directly at Community level and by cofinancing of regional, national or international programmes.
- Industry-academia pathways and partnerships supporting longer term cooperation programmes between academia and industrial entities, in particular SMEs, through staff secondments and workshops for exchanging information and experience.
- The international dimension: FP7 aims to attract research talent from outside Europe, to foster mutually beneficial research collaboration with researchers from outside Europe and to improve the career development of European researchers by supporting international research stays outside Europe, as well as to support the return of European researchers through reintegration grants. The 'scientific visa' Directive aims to facilitate the entrance of third country research into the Union, and the partnerships between European research institutions and their counterparts in countries covered by the European Neighbourhood Policy or who have a Science and Technology Agreement with the EU will also be actively encouraged and supported.

Detailed information can be obtained from the following address: http://cordis.europa.eu/mariecurie-actions/

Conference Grant - Selection process:

Submission of a written application to the Executive Group of the respective Domain Committee via the Chair of the Management Committee

The application has to contain the following information

- Personal data of applicant
- Short description of involvement in the respective COST Action (300 words)
- Relevant data on Conference at which the applicant wants to participate
- Copy of Abstract submitted to the Conference
- Proof of acceptance of Abstract by the Conference

Executive Group of the Domain prepares a short list

Decision taken by DC Chair and 2 members of the Executive Group of the Domain

Reporting after the Conference: Short written report to the DC and the MC of the respective Action