

**EUROPEAN RESEARCH AREA
COMMITTEE
Strategic Forum for International
S&T Cooperation**

Secretariat

ERAC-SFIC 1356/11

NOTE

Subject: Strategic Forum for International S&T Cooperation (SFIC) opinion on the ERA Framework (input to the ERAC opinion on the ERA Framework)

Delegations will find in the annex Strategic Forum for International S&T Cooperation (SFIC) opinion on the ERA Framework (input to the ERAC opinion on the ERA Framework), as adopted by SFIC on 18 November 2011.

**Strategic Forum for International S&T Cooperation (SFIC) opinion
on the ERA Framework** (*input to the ERAC opinion on the ERA Framework*)

1) BACKGROUND

Following the Council Conclusions on the development of the European Research Area (ERA) through ERA-related Groups of 31 May 2011 (doc. 11032/11), the Strategic Forum for International Science and Technological Cooperation (SFIC)¹ has undertaken the task of preparing a contribution to the ERAC opinion on the ERA Framework. The specific aim of this contribution is to focus on issues relevant to the SFIC area of activities, in particular on the external dimension of the European Research Area and the EU-MS work carried out internationally *vis à vis* third countries. As cooperation in science and research on a global scale is becoming increasingly important, European science, technology and innovation are shaped by different trends influencing both the present and future scenarios:

- The globalisation of science, technology and innovation activities, which calls for a global research policy platform;
- The changing level-playing field with the emergence of new STI superpowers (BRICS, Korea, Singapore, etc.) with whom Europe needs to cooperate but also compete with;
- The need to access knowledge from in and outside Europe and to remain competitive on a worldwide scale;
- The need for a global STI cooperation to address grand and societal challenges;
- The need for optimal foreign market access and related support.

¹ Member States (MS) and the Commission are members of SFIC while Associated Countries (AC) have an observership status.

Until now SFIC has constantly addressed tasks defined in its mandate: sharing and pooling information and knowledge (a tool for common information sharing and management has been set up) and coordinating and proposing initiatives where appropriate: pilot initiatives have been launched with a regional focus on India, China and the USA, and one thematic initiative has focused on energy. Moreover, first steps towards a common European strategic approach in the international dimension of S&T have been taken according to the SFIC mandate.

Fulfilling its tasks, SFIC has identified some of the key obstacles/issues for the completion of the external dimension of ERA at different levels, taking into account the complex governance structures and the variety of actors involved in the STI internationalisation processes. At the same time, SFIC gives response to the identified obstacles and challenges with concrete solutions and finally proposes some recommendations for further action as a window of opportunities for SFIC.

The SFIC recommendations should be seen as a 'menu of possible international orientations' dealing with science, research and research-based innovation (STI) which could be taken on a voluntary basis by Member States / Associated Countries in partnership with the Commission. While all delegations have contributed to the approach in advance, the recommendations may not be in complete conformity with national positions being taken in the context of the ERA Framework.

2) SFIC'S APPROACH TO CHALLENGES AND OPPORTUNITIES

a) *Policy and Governance*

Although a number of MS cooperation initiatives with variable geometry have been successfully implemented towards a common European strategic approach, the main drawback for the completion of the external dimension of ERA is the lack of a shared European Strategy for international STI cooperation in order to complete the external dimension of ERA. National officials, ultimately answerable to ministers elected by national electorates, tend to think nationally when dealing with research issues and it is worth noting that many countries do not have a comprehensive national strategy for international cooperation. However, they may consider cooperation with third countries within the European framework as long as there is a clear European added-value.

European Added-Value (EAV)

SFIC proposes a definition of European Added-Value as a way to identify **a common EAV approach on the external dimension of the European Research Area**, which should guide SFIC activities and be embedded in future SFIC work. European Added-Value in the external dimension of ERA is achieved when EU/MS-driven international STI activities fulfil some of the following conditions¹:

- *Scale and complexity*: International STI activities of such scale and complexity that no single Member States can provide the necessary financial or human resources, and hence need to be carried out at European level in order to achieve the critical mass;
- *Coordination of the EU and MS STI potential*: International STI actions that contribute to the development of the external dimension of the European Research Area (ERA) by promoting EU and Member States STI potential emerging from European science and technology policies and programmes in a global context and work in international fora as well as research that may lead (when necessary) to the establishment of uniform international rules or standards;
- *Enhanced European knowledge-base*: International cooperation that contributes to increase excellence and attractiveness of European research and innovation;
- *Economic impact, efficiency gains and financial benefits*: International action at European level *vis à vis* third countries that has an economic impact, either in the form of efficiency gains (e.g. simplification and streamlining, pooling and more efficient use of scarce public resources, etc. allowing avoidance of duplication and rationalisation of efforts) or financial benefits (even after considering all costs and risks inherent in international cooperation);
- *Societal/grand challenges*: International STI activities that focus on specific societal/grand challenges that are shared across Europe and with third countries;
- *European values*: International cooperation at EU-level that can enhance European values in cooperation with third countries (i.e. mutual interest, respect, reciprocity).

In summary, the EAV in the external dimension of ERA should be seen as a necessity to cooperate in situations where joint action by MS/ACs together at European level is more beneficial and has more gains and benefits than acting on an individual basis. EAV is not a synonym of abandoning MS/ACs' own international cooperation activities; on the contrary, the European Added-Value of international cooperation is the possibility of choosing the level of cooperation from the perspective of the mutual interest of the partner country and the MS/AC/European actor. It should also be noted that the EAV can vary from country to country depending on its research base – thus the need for the concept of variable geometry.

¹ European Added-Value is a moving target. Therefore, it is possible for these conditions to be fulfilled without the European dimension through cooperation and collaboration of a group of Member States (i.e. Nordic countries).

Moreover, a better interface may be called for between ERA, EU's international STI cooperation activities and the European External Action Service (EEAS) as current coordination is limited if not inexistent. Besides, research is too often seen as a stand-alone field. Linkages and connections with other areas, actors and policy-makers from other domains such as innovation, education, industry, health, economic development, trade, etc. have to be intensified in the context of the Knowledge Triangle.

b) *Actors*

Due to the various multi-governance levels and the wide variety of stakeholders involved in international STI cooperation, there is a multiplicity of actors and participants in the external dimension of ERA (researchers, universities, research performing organisations, funding agencies, national ministries, private sector, etc). However, coordination between all actors involved is still limited. There is need for defined responsibilities and mission of each existing body and entity that works in science and innovation issues.

c) *Processes*

Several different approaches towards third countries exist in Europe, with different processes in the research and innovation domain. Europe needs a common knowledge-base in international STI cooperation as well as joint foresight activities with third countries to address joint challenges. There is also a need to better understand how priorities are set in third countries. Obstacles may exist at the priority setting phase, with lack of resources to establish or reinforce partnerships with third countries; at a later stage other challenges may emerge, such as the coexistence of different evaluation mechanisms, with lack of a joint European model for evaluation and assessment. Additionally, Commission DGs, national ministries and responsible entities for international STI cooperation have not yet realised the potential of information sharing. On another note, it is worth noting that one of the pillars of international STI collaboration is mobility of researchers. There are currently limited mobility and research career initiatives between the EU/Member States and third countries. In this respect, stronger cooperation should be envisaged between SFIC and the SGHRM.

d) *Resources & Infrastructures*

Due to the current crisis climate, resource constraints at national level, in particular human resources in national ministries and agencies, are an inescapable worrying feature of the current international STI activities environment. Moreover, the contextual situation does not lead to a clear path on current and future investment in research and innovation environments and their related infrastructure and human resources. However, economic crisis and cuts on public spending can also be seen as a true opportunity for European cooperation in STI, mainly through: the complementarity of EU and national resources, the role of the EU as a facilitator in MS-third countries relations and the use of EU funding instruments, in particular the Framework Programme 7 and the future Horizon2020.

e) *Societal challenges*

In tackling grand and societal challenges, some of them already defined in the GPC/JPI framework, Europe and its Member States need to cooperate with countries outside Europe. In order to do so, there is the urgent need to discuss common priorities as uncoordinated activities and isolated bilateral agreements could lead to duplication of efforts and fragmentation. Global challenges call for global solutions and research does not recognise geographical boundaries, as work is already carried out in global research networks. Global solutions could be efficiently developed between SFIC and other international actors to form the basis for a "global research policy platform". In this respect, there are possibilities to turn particular challenges into cooperation opportunities in the external dimension of ERA in selected areas where a joint effort is needed to effectively tackle particular challenges in consistency with a common methodology and the identification of "what and with whom?". An existing barrier is, for instance, how to connect the process of the annual work programmes (at national and EU level) with corresponding processes in target countries. This is a consequence of the fact that the priority setting processes in EU and third countries may be very different.

3) RECOMMENDATIONS

SFIC proposes a comprehensive and integrated package of common research and innovation policies for the implementation of the external dimension of the ERA Framework as a window of opportunities towards the challenges ahead. On the basis of the work already carried out by the Forum, SFIC strongly recommends the **design of a European strategy for international STI cooperation with clear European Added-Value: the EDERA (External Dimension of the European Research Area) Strategy, which could serve as a set of common principles and guidelines for Member States in their international STI cooperation activities** that could, where appropriate, be used as inspiration by all MS/ACs and EU in their respective bilateral dialogues with third countries.

EDERA should include an honest analysis of ongoing activities (mapping exercise) as well as targets, opportunities and risks, and involve a EU/MS commitment to its implementation and to monitoring its impact. This strategy should be accompanied by a common methodology for priority setting, common standards of ethics in research and a clear definition of European Added-Value (EAV) identifying what the benefits of EU/MS international cooperation at European level and the complementarities between EU and MS level are in the Knowledge Triangle scenario. The strategy's goal is to achieve tangible impact at all levels (researchers, institutions and companies, policy-makers) as well as to form the basis for a "global research policy platform". When implementing the strategy, special attention should be put on avoiding overlap between different activities at EU level on the one hand and between EU activities and MS activities on the other. In the latter case it should also take proper account of MS competences. The strategy as such should be based on and bring forward the following sub-sets of recommendations:

1. Strategic recommendations

- a) The **development of priorities** for the strategic focus of SFIC's work through appropriate methodologies and a variety of tools to identify and select initiatives *vis à vis* third countries. This includes also an approach to identify common guidelines for priority setting, including a clear criteria on how to identify target countries and themes as well as some modalities to implement the priorities;

- b) The development of a **better policy coordination and policy mix** with enhanced coherence to reap the benefits of the external dimension of ERA allowing avoidance of duplication and rationalisation of efforts, aiming towards *economic impact and efficiency gains*. This could be achieved with a better vertical and horizontal policy coordination at national level (more efficient use of information and know-how), between different Commission DGs and by mainstreaming the external dimension of ERA across Horizon2020 and all policy dialogues while, at the same time, strengthening linkages between international activities in Horizon2020 and ERA initiatives. A clear commitment for the sharing of information among European counterparts on national strategies for international cooperation, bilateral meetings, MoUs, etc. with third countries is also needed to accomplish enhanced coordination. Moreover, linkages between SFIC and other ERA Groups, particularly GPC and the SGHRM, should be encouraged. The interlinkages with the European External Action Service (EEAS) should be strengthened. New mechanisms to coordinate Member States activities towards third countries should be explored;

- c) The **anchoring of collaboration** (and concentration of resources from some national schemes as well as from Horizon2020) for basic and applied research and innovation into a limited set of consensually agreed grand/societal challenges particular to some partners incorporating all stakeholders from the research and innovation ecosystem. This scientific exchange and collaboration would be based on a dialogue and trust with non-European countries, with the *European STI potential* reflecting towards *grand/societal challenges* while, at the same time, offering obvious *financial and economic benefits*. This approach should also take account of multilateral cooperation

and the reality that activities close to R&I market areas will often involve a competition-cooperation framework amongst Member States and/or potential partners.

- d) **Horizon2020** should be used in a more pro-active manner in promoting cooperation between EU and third countries, by giving incentives, added-value to European - third country cooperation in all levels of activities: researchers, institutions, research funding bodies, policy-makers, etc. Moreover, EU funding could also play an instrumental role in facilitating cooperation of European researchers with third countries in joint programmes addressing global challenges, for example, in relation to JPIs and other policies and instruments as well as in capacity building initiatives in key countries and regions in order to jointly address global challenges;
- e) The **prioritisation of long term sustainable cooperation models** including research projects focusing on specific *societal/grand challenges*, innovation activities (IP protection, standardisation, public procurement, ethics, etc) and incentives for international mobility and visa measures in the external dimension of ERA. Such issues could be dealt in the context of Horizon2020 or bilateral/multilateral agreements, EU co-funding of national mobility schemes and the opening-up of EU and national research programmes to non-European scientists both in a reciprocal manner and for capacity-building purposes. Where relevant, support to the SGHRM and national authorities for a better use of the existing Scientific Visa Package should be targeted;

2. Proposed instruments

- f) The implementation of a **mapping exercise** focusing on existing instruments and areas for European Added-Value. The mapping should focus on the current cooperation sectors and those current mechanisms and tools at EU, MS and AC government level for international STI cooperation at a global level, with a view to searching synergies between EU/MS instruments, fine-tuning them and defining a complementarity approach to address unmet needs. The mapping can also be based on a joint foresight exercise, including a better understanding on how priorities are set in selected third countries, for the identification of European Added-Value areas and potential opportunities reflecting towards *scale and complexity*;

- g) SFIC should offer **platforms for strengthening networking initiatives**, building on the existing MS/ACs actions and using the well-tried and effective tools of ERA-Nets and INCO-Nets. Therefore, EU-funded networks could complement Member States' existing networks or could help the setting up of new EU/MS-third countries R&I alliances, building up on the virtual 'European Science House' scheme already proposed by SFIC under the China initiative.

- h) The **involvement of SFIC in regular contacts with research and innovation stakeholders** as well as the creation of potential synergies with a broader range of stakeholders from other related areas (i.e. industry, services, education). This could entail a stronger relation between the worlds of science and business in order to bring ideas into the market and foster the competitiveness of European companies;

- i) The enhanced **visibility** of the role of SFIC and the showcase of ERA as an effective and **attractive** STI cooperation partner, with a strong forward-looking coherent profile.

Diagram: Window of opportunities for SFIC

