"Approaching USA"

State of play of the SFIC initiative and contribution to a joint EU/ MS roadmap vis-à-vis the USA

State of play

In December 2009 the Strategic Forum for International S&T Cooperation (SFIC) agreed to develop a joint EU/ Member States (MS) initiative for industrialised countries starting with a pilot initiative towards the USA. As a first step SFIC initiated an analysis about priorities, activities and instruments of EU/ MS bilateral science, technology and innovation (STI) cooperation with US partners. This was followed by several events which have been organised to advance the initiative.

The workshops and conferences¹ initiated a process, based on mutual learning, to facilitate the EU and Member States working together vis-à-vis the USA. The exchange of views and the examples of best practices reflect a plenitude of new ideas and recommendations to combine talent and resources more effectively. The need to achieve progress in the scope of cooperation was strongly expressed also from the US side. The momentum of the events should now be kept by establishing a more detailed roadmap for the SFIC US initiative.

The following recommendations for the next steps are put forward:

(1) Enhancing the scale of European-US S&T cooperation

Global challenges need global partnership and concerted action. Both, the EU and Member States have not fully tapped into the wealth of existing expertise, experience and talent when cooperating with the US. The outcome of the work done so far underlines that SFIC should initiate the discussion how existing joint platforms (like the EU-US Energy Council, the Transatlantic Economic Council and similar high-level initiatives) can contribute to these objectives. This should also aim at increasing cooperation at lab to lab level, among others in energy research, using a mix of top-down and bottom-up measures.

On the European side the Joint Programming Initiatives (JPIs), the ERA Nets, the Joint Technology Initiatives and other cooperative measures have the potential to further develop this dimension.

On the US side, for example, the new SAVI scheme (*Science Across Virtual Institutes*²) of the National Science Foundation (NSF) is an innovative concept to foster interaction among scientists, engineers and educators around the globe. First projects with European partners have been initiated.

Ways could be explored on how to promote interaction at EU and MS level together with European and US research and funding agencies.

In the framework of the US-EU Energy Council for example, both sides already agreed to prioritise four technology areas with greatest potential for results with added value for cooperation (smart grids, including storage for grids, materials for energy, including critical materials, nuclear fusion and hydrogen and fuel cells). Two-year joint actions plans in each of

¹ See list of events and links to summaries/ conclusions in the Annex.

² See: <u>http://www.nsf.gov/news/special_reports/savi/index.jsp</u>

the four priority sectors are being developed, including on fusion. Cooperation on nuclear fission (which is a part of the cooperation areas within the EU US Energy Council framework) will also continue and focus mainly on nuclear safety.

Action point 1

The US Core Group³ has started identifying specific research areas with a clear European added value. It discussed and explored how existing European platforms could contribute to such a process, and how synergies and coordination of their respective strategic priorities could be enhanced. Work can build on the conferences and workshops organised so far. Furthermore, Member States' stakeholders and the EU and Member States Science Counsellors need to be involved, and thereafter the relevant US partners. Depending on the decisions on priorities and specific themes, reflections should include on-going activities within the SET-Plan, the JPIs and thematic ERA-Nets. Other thematic programmes and projects on EU, bilateral and multilateral Member States level also need to be considered.

The Core Group started working on how thematic refinement could be done in a structured and analytical way. The situation in the USA is challenging because of its high diversity and decentralisation. A first step has been to approach on national level partners involved in the JPND4 (Joint Programming Initiative on Neurodegenerative Diseases) as it already works successfully on international level. JPND and Member States Science Counsellors considered health research in this area as interesting for the USA and organised a workshop with US organisations in November 2012. US partners expressed their interest to cooperate.

The idea has been raised to continue in this way by encouraging other appropriate JPIs5. SFIC could bring added value to any international ambitions of JPIs in supporting their internationalisation.

(2) Developing the innovation dimension

Linking public and private initiatives is a key issue to foster innovation. Commercialisation of research in small and medium enterprises remains a challenge. Moreover, funding schemes to bridge the gap between public research and private exploitation are often linked to national economic interest and do not stimulate trans-border collaboration. Innovation related action of several Member States in the USA have shown that these obstacles can be overcome and synergies created, even in highly competitive areas like ICT or pharmaceuticals.⁶ Building bridges between innovation centres and clusters on both sides will stimulate researchers, entrepreneurs and technology ventures to create or further develop their business models.

Here again, parallel activities need to be taken into account, such as the Innovation Partnership under the Transatlantic Economic Council or the various Member States activities. The workshops showcased innovative approaches bridging the gap between research and commercialization. A certain readiness can be stated to open existing bilaterally established networks, clusters and innovation hubs to non-nationals when added value is

³ All SFIC members and observers are invited to join or to nominate their USA desk officers as experts. Currently COM, DE, DK, ES, FI, IT, NO, PI, PT, SI have volunteered.

⁴ Joint Programming Initiative on Neurodegenerative Diseases

⁵ E.g. Clik'EU Connecting Climate Knowledge for Europe

⁶ See among others the programmes of some Member States supporting entrepreneurial exchange, cluster cooperation or other innovation activities in the USA (AT, CH, DE, DK, FR, NL, PT)

offered.

Action point 2

Bilateral Member States programmes already foster cooperation between innovation centres on both sides of the Atlantic and thus strengthen innovation networks. These bilateral initiatives could be explored in view of opening them up to participants from other Member States and how synergies can be achieved by capitalising on the experience of existing networks (e.g. the Enterprise Europe Network). It is also suggested to explore ways to better foster business collaboration on research and innovation activities through cluster collaboration (e.g. through the EU' Cluster Collaboration Platform⁷) The BILAT USA 2.0 project⁸ has a dedicated work package for innovation actions. A bigger innovation event is planned in the course of this project; SFIC will be kept informed about this activity.

(3) Developing a level playing field and improving framework conditions

Legal and administrative impediments still hamper transatlantic cooperation. The BILAT USA project has delivered an analysis of the issues at stake. The workshop in Vienna has presented experience and expertise how solutions for legal impediments can be found. The workshop underlined that mutual trust and added-value of collaboration for each partner is the basis for enhanced cooperation and that flexibility is crucial for the implementation. Administrative and legal problems have often been solved on an ad-hoc basis related to the respective cooperation arrangement. Enhancing transatlantic cooperation needs solid frameworks with harmonized or parallel funding and evaluation mechanisms.

Action point 3

The commitment of national authorities and funding organisations on both sides is necessary to use existing tools more efficiently and to widen the good practice initiatives which have been developed recently. Information sharing should be continued with a view of joining efforts.

Several of the best practice examples presented at the Vienna workshop are open for participation from other Member States to join in. New models for cooperation may arise by opening up bilateral national or funding agencies driven programmes, by promoting joint funding and joint call mechanisms.

It is very important to raise awareness of what is offered and what is at stake. Funding agencies need to better understand the (different) philosophy of respective grant systems and what resources are to be committed and how. One outcome of the Vienna workshop is, that a better distribution of information is necessary to informing European and US agencies about existing instrument and joint funding procedures. The 'Destination Europe' can then communicate these opportunities.

(4) "Destination Europe" initiative

Europe has put research and innovation at the heart of its 2020 Strategy for Growth and Jobs. The Innovation Union Flagship Initiative states that "Europe's success depends on its ability

⁷ www.cluster-collaboration.eu/

⁸ Funded by the INCO-programme of FP 7, duration Nov 2012 – Oct 2015

to reverse several decades of a relative 'brain drain' and to attract leading talents". We must now show that we are serious in our ambition to attract talent to Europe. Member States and the EU agreed in the SFIC⁹ to establish a strategic alliance vis à vis the USA capitalising on the potential of the US based knowledge reservoir which includes around 115,000 European researchers. Through this strategic alliance the initiative will showcase:

- that Europe is vibrant and attractive in science, technology and innovation,
- that Europe provides opportunities for career advancement;
- that Europe's industry offers challenging opportunities of working in world-class environments and
- that Europe also offers attractive opportunities for women researchers.

The 'Destination Europe' workshop with stakeholders held on 7 May 2012 in Brussels showed the wealth of ideas for building the added value of a European approach, based on the richness and experience of existing initiatives. Tailor-made approaches and specific, welldefined messages are necessary for the next steps to reach the various groups in the USA, including US nationals. The innovation dimension, as well as research opportunities should be covered. However, all actions taken should be sustainable, and it is therefore important to continuously monitor and evaluate the activities organised so far and to integrate lessons learnt in any follow-up action..

Action point 4

The Commission will further develop the "Destination Europe" initiative in close contact with Member States and funding agencies, universities, research organisations etc. Synergies and coordination with ongoing Member States as well as EU initiatives such as Marie Curie Actions, the FP7 Ideas Programme and EURAXESS should be continued.

Moreover, several of the initiatives of Member States and to FP7 Associated Countries (AC) are generally open or have the potential to associating national endeavours with parallel actions of European partners. Such an approach should be pursued.

Existing networks and communities should also be used much more systematically to inform, promote and follow up on "Destination Europe" activities. This includes science counsellors and attachés, umbrella research organisations, networks of researchers/ alumni, research managers and administrators and venture capitalists etc.

"Piggybacking" on existing successful events (which may be European Career Fairs or large US Scientific Conferences, where many post-docs are looking out for their next job), is another good option to increase the visibility and impact of European-level initiatives. It would entail calendar-sharing to identify suitable events. The relevant Science Counsellors and research organisation liaison officers will play an important role.

Throughout 2013 the Commission will organise several events in the 'Destination Europe' context by piggybacking on other events, which have more a specific topical focus. The SFIC Task Force recommended focusing the activities on one big event jointly organised by the Commission and MS/ AC per year. The next one will take place end of 2013; possible

⁹ SFIC – Strategic Forum for International Science and Technology Cooperation.

locations are Chicago or Texas. The format of this event will evolve and might orientate towards a more thematic approach.

(5) Information sharing

All events have shown that there is insufficient knowledge and visibility of bilateral initiatives at the level of funding agencies and stakeholders. The exchange of information about bilateral high-level or joint committee meetings should be enhanced to reach a deeper understanding about priorities and future action. All this demands closer interaction and cooperation amongst Member States, the key stakeholders and their EU networks and between Member States and the Commission. The Science Counsellor network in Washington DC should be closely involved in these activities.

Action point 5

The SFIC should initiate a shared calendar of main events of cooperation with US partners. SFIC Members should regularly report about forthcoming events, especially bilateral high official meetings. The key stakeholders should be involved more closely and contribute to this activity as well as the Science Counsellor network in Washington as far as possible.

The BILAT USA project already has a well structured calendar (see link below). It should be discussed whether this calendar can be used in future for SFIC initiatives and linked to the existing SFIC sharepoint.

http://www.euussciencetechnology.eu/bilat-usa/news

Development and list of activities within the SFIC USA initiative

Several workshop and conferences took place in the context of the SFIC USA initiative. The annex gives an overview of the work done so far according to the action points defined in the SFIC Task Force:

(1) Enhancing the scale of EU/Member States STI cooperation with US partners

Workshop "From common challenges to joint responses – adding a new dimension to EU/ Member States cooperation with the USA" in October 2011 in Brussels

The workshop showcased the diversity of existing partnerships of the EU and Member States with US partners and drew attention to constraints and impediments. It concluded that existing joint initiatives at European level (like the SET Plan, JPIs, ERA Nets etc.) have the potential to play a leading role in leveraging cooperation with US partners. Several approaches were discussed to overcome administrative and legal obstacles.

http://www.minedu.fi/OPM/Tapahtumakalenteri/2011/10/SFIC_USA_Workshop.html

Conference "Science and Technology Landscape in a Changing World" in December 2011 in Washington DC

The conference took place under the auspices of the Polish Presidency with the EU Delegation in cooperation with Member States' Delegations and the AAAS. The Conference's objectives were to review existing experience and to identify possible areas for improvement to enhance EU/ Member States cooperation with US partners. The conference offered the opportunity to discuss the issues with high-level US partners.

http://eurunion.org/eu/Science-and-Technology/Research/Presentations-of-the-Conferenceon-Science-and-Technology-Landscape-in-a-Changing-World-Enhancing-US-Collaborationwith-the-EU-and-its-Member-States-Dec.-12-2011.html

US-EU Research Cooperation Stakeholders Roundtable in September 2012, in Washington DC

The Link2US and BILAT-USA projects convened a one day meeting that brought together over 40 experts from the US and Europe to share experiences about Trans-Atlantic research cooperation that cut across scientific disciplines and research themes. Its aim was to bridge the gap between government dialogues and institutional- or researcher-level interaction. The roundtable addressed areas such as incentives for cooperation, collaboration without transnational funding and the management of international funding. Recommendations highlight the need for platforms bringing together stakeholders of various levels, for capacity training and for identifying priority areas where grants policies can be better aligned.

http://www.euussciencetechnology.eu/news/show?id=352

Workshop "The EU Joint Programming Initiative on Neurodegenerative Diseases Research (JPND): a Potential Platform for Enhanced US-EU Research Collaboration" in November 2012 in Washington DC

The workshop has been organized by science counsellors from the Delegations of Austria, Finland, France, Germany, Ireland, Italy, Poland, Spain and Sweden in close collaboration with the JPND Management Board, as well as the EU Delegation and the AAAS. The aim of the conference was to showcase JPND, attract the attention of potential American partners to achieve their possible accession. The workshop helped to identify several potential areas of mutual interest, such as platforms for open access data and standardization of laboratory procedures. The action plan of the accession of the U.S. to JPND will be further developed by the JPND Management Board together with American partners, beginning with scientific-level discussions to agree the main areas of mutual interest. Above all the workshop demonstrated that Joint Programming Initiatives can be an attractive mechanism for fostering Trans-Atlantic R&D collaboration. It is conceivable that other JPIs have the potential to associate US partners.

(2) Developing the innovation dimension

The above mentioned workshops and conferences (see action point 1) took a first glance on the innovation dimension stating that today's innovation landscape has a more global, more open and networked character. Innovation chains are challenging the boundaries of national economic ecosystems. Innovation support actions often do not reflect these challenges and operate mainly at national level. However, several on-going initiatives have been identified in the USA (like MS support of cluster-activities, incubators, accelerators or innovation relay centres) which aim at overcoming such boundaries. These initiatives should be studied more in-depth so as to explore a more strategic approach between Member States initiatives and those at European level.

(3) Developing a level playing field and improving framework conditions

Symposium "Ways of successful science, technology and innovation cooperation between Europe and the USA" jointly organised by the SFIC and the BILAT USA project, 23-24 April 2012 in Vienna

The symposium built upon the analysis of the SFIC and the BILAT-USA project, in particular the survey carried out amongst coordinators and US participants in FP7 projects. It invited practitioners from the EU, MS and AC to showcase best practices of STI collaboration between European and US partners in view of the legal and administrative framework of their partnership.

http://www.euussciencetechnology.eu/bilat-usa/event/id/109

(4) "Destination Europe" initiative

The Conference "Destination Europe – Your Research and Innovation Opportunities" in Boston in January 2012

It was organised by the European Commission and the European Research Council in consultation with Member States and the SFIC. It aimed at raising awareness about Europe's potential in research and innovation and showcased Europe's attractive funding opportunities and support schemes. The feed-back from participants reflects a high demand for more information.

http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=destinationEurope

The workshop "Destination Europe - raising the awareness of Europe's research and innovation excellence and opportunities in the USA" in May 2012 in Brussels

Representatives from European research and funding organisations of MS and AC and from the European Commission discussed parallel initiatives to raise the attractiveness of research and innovation. Experience was shared and the outcome assessed. The objective was to determine how best the "Destination Europe" initiative can communicate these opportunities and thereby promote Europe as a whole as a destination for research and innovation.

http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=destinationEurope

The Conference "Destination Europe – Your Research and Innovation Opportunities" in San Francisco in December 2012

The Conference continued the series of events raising awareness about Europe's potential in research and innovation. Parallel breakout sessions organised by numerous Member States and Commission programmes showcased attractive funding opportunities and support for researchers to work in Europe. An evaluation will take place which will reflect the views of participants and coordinators to further develop the format of the initiative.

http://destinationeurope.teamwork.fr/en/

(5) Information sharing

This issue was discussed several times in the SFIC Task Force. All events have shown that there is insufficient knowledge and visibility of bilateral initiatives at the level of funding agencies and stakeholders. The exchange of information about bilateral high-level or joint committee meetings should be enhanced to reach a deeper understanding about priorities and future action. All this demands closer interaction and cooperation amongst Member States, the key stakeholders and their EU networks and between Member States and the Commission. The Science Counsellor network in Washington DC should be closely involved in these activities.

Overview of activities/ calendar

Action point	Objectives/ outcomes so far	Agenda for 2013/ 2014	Stakeholders/ actors
Enhancing scale and scope of cooperation with US partners	Identifying common priorities in the context of existing EU/ MS platforms; first results from workshops (e.g. SET Plan, JPND)	Establishing a joint EU/MS - USA roadmap based on priorities/ thematic areas/ existing platforms (JPIs, ETPs, ERA Nets) identified in the workshops and in on-going bilateral activities of the EU and MS	In close contact with Washington Science Counsellors, European funding agencies, research organisations and their US counterparts
Developing the innovation dimension	Identifying synergies of EU/ MS activities in the USA (e.g. start-up support, cluster building, incubators, accelerators and similar initiatives)	Workshop in 2013/14 based on the activities of the BILAT USA project which will (1) analyse the innovation framework conditions in the USA, (2) Identify the innovation actors and (3) establish platforms for common actions	BILAT USA project In contact with Science Counsellors, Science Attachés in the San Francisco Area, the European innovation relay centres, clusters, incubators, accelerators in the USA
Developing a level playing field/ improving framework conditions	Identifying solutions/ best practices to overcome legal obstacles; improving governance of programme level cooperation; see conclusions from SFIC/ BILAT Workshop in April 2012	Follow-up of the BILAT-USA/ SFIC Vienna workshop: Exchange of best practices about approaches of programme level cooperation; involve US partners and foster joint activities of existing common platforms (JPIs, ETPs, ERA Nets)	In close contact with Washington Science Counsellors, European funding agencies, research organisations and US partners
"Destination Europe" initiative	'Destination Europe' Conference in Boston, January 2012 Workshop with MS and stakeholders in Brussels in May 2012 'Destination Europe' Conference in San Francisco 2012	'Destination Europe' events - back to back with MIT/ Boston Career Fair in February 2013 - next 'Destination Europe' conference end of 2013	SFIC Task Force recommends a joint EU/ MS preparatory group for the next big 'Destination Europe' event
Information sharing	Establishing a shared calendar of main EU/MS events with US partners		All SFIC members; Science Counsellor group Washington need actively contribute