

# Report on the BILAT USA 2.0 EU-U.S. Innovation Conference 'How to integrate the innovation dimension in the EU-U.S. S&T Agreement?'

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Brussels, Belgium

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# BILAT USA 2.0

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#### 1 Conference Background and Session Contents

#### **Opening**

The EU-U.S. Innovation Conference on 'How to integrate the innovation dimension in the EU-U.S. S&T Agreement' was organised by the EU funded BILAT USA 2.0 (FP7) project on January 14-15, 2015 in Brussels. It gathered about 30 experts and 120 policymakers and stakeholders from the U.S. and from Europe. In six panels and roundtables participants discussed the upcoming challenges and opportunities in innovation partnerships under the EU-U.S. Science and Technology Agreement (STA) considering the lessons learned from best practice examples on academia-academia and academia-industry cooperation.

Robert Burmanjer, Head of Unit North America, Latin America and Caribbean at DG Research and Innovation, opened the conference together with Jennifer Haskell, Director of the Office of Science and Technology Cooperation at the U.S. Department of State, highlighting the top priority relationship in terms of Science and Technology within the four flagship topics, marine and arctic sciences, health, energy and transport. Jennifer Haskell outlined that the EU-U.S. research collaboration is the most robust relationship in the world, built on trust and having an optimum environment.

#### Panel Discussion: Research, technology and innovation

The purpose of the panel discussion was to discuss tools and mechanisms for the successful and effective transition of technology from discovery (basic research) to invention (applied research) and the role governments play in supporting the innovation process.

Major recommendations for good academia-industry collaboration were, among others, the establishment of collaboration platforms, mobility of research personnel between academia and industry, transparent management and collaboration rules as well as including R&D, recruitment and education in the process and finally finding ways to adopt these provisions into the S&T Agreement (Ormala).

The solution for intellectual property (IP) challenges would be to establish one membership agreement that applies to all members of a research consortium and all centres, providing a royalty free, non-exclusive license to all parties in an agreement. A cooperatively defined precompetitive research portfolio defined on shared value represents a win-win for all parties. To solve issues of





trust, NSF provides seed funding for center operation, additional funding opportunities, facilitation, oversight, and branding (Montelli).

In order to bypass constraints created through U.S. IP ownership policies, EU and U.S. policymakers should identify non-sensitive topics of mutual benefit (common good), connect the relevant agencies from both sides to coordinate programs, and use and support existing networks focused on matching technology and business needs and offers, such as the Enterprise Europe Network (EEN) in the EU and Manufacturing Extension Partnership of the National Institute of Standards and Technology (NIST) in the U.S. (Rieth).

#### Best Practices workshop: Transatlantic innovation policies between EU MS & the USA or States

The objectives of the session were to

- a) understand the basic principles of well-working Science and Technology Agreements (STAs) and its effects and benefits on EU-U.S. cooperation, and
- b) learn from actually practical EU-U.S. innovation cooperation examples with the aim to formulate recommendations to policy-makers.

Technopolis analyzed and assessed the STAs between the EU and the Member States (MS) as legal basis. The analysis dealt with the question of whether STAs effect and even encourage cooperation. Main findings were that EU and the U.S. are still the main determinants of agreement structures which may then be copied by smaller (MS) countries and that an evaluation of the STAs should happen on an automatic basis. Among others, existing difficulties are that thematic interests are in most cases not aligned in the different agreements and that IPR arrangements dealt with in STAs can differ immensely. In general however, it was stated that according to the study specific IPR arrangements do not add significant values in agreements.

Regarding the innovation impact of the agreement a point was made by saying that the STAs do increase cooperation however only "lightly". Reciprocity and mutual awareness of the legal framework conditions at the research community's level is unfortunately still low.

As the innovation output from EU-U.S. cooperation is still rather low, there is a need for improvement. Actions such as working on an alignment of thematic interests – here in particular between the EC, the U.S. and MS – are necessary. It was recommended not to spend too much time and effort on the alignment of IPR issues, however, as this is a complex matter that may need to be solved in each individual case. Further, a regular evaluation of the STAs is necessary.

Trust as well as mutual interest and commitment are keys to succeed in international collaborative R&I projects. The low awareness of available funding opportunities (in the U.S. and worldwide) was identified as a general challenge. Further, the goal of having a reciprocal understanding of legal, administrative and financial issues (of EU & U.S. programs) that can lead to a uniform – and with this





– less time-consuming understanding of the respective "foreign" regulations were identified as beneficial. Engaging in collaboration was "like climbing a mountain". A lack of common documents whether in the domain of health, technology or others should exist and be promoted.

The constant flow of information on available funding opportunities (both in the U.S. and EU) needs to be ensured by e.g. promotional activities via BILAT-projects. In this context, the BILAT USA 2.0 "EU tour – Promoting U.S. open funding opportunities for Europeans" was mentioned as a good example. Further, it would be very beneficial to develop a guide that juxtaposes EU terminology and regulations to the specific U.S. funding agency's terminology. An agreement between the EU and the U.S. on General Personal Data Protection and on Data Sharing would further facilitate international cooperation. It would additionally contribute to an enhanced international exchange to have a joint platform to consult it in particular domains of common interest. In some cases, this exists already (especially on policy level with e.g. the Energy Council), however, an inclusion of research community would be beneficial. A joint program agreement on several global issues was considered to be a major innovation (ex: vaccine against Ebola) (Swillen).

A constant exchange between all involved stakeholders is necessary in order to establish functional international fora. A sort of SWOT analysis was considered very useful in order to be able to find out what information and efforts already exist and how the mutual learning from each other can be enhanced (Höfinghoff).

Regarding academia-academia collaboration, the idea of a "<u>catalyst fund</u>" ensures that collaboration and exchange has a funding base. Certainly, the right people with complementary skills have to be in place (O'Connor).

## Expert Roundtable: Framework conditions for transatlantic innovation cooperation with EU and U.S. experts: Promotion of Entrepreneurship, Exploitation, and Dissemination of research results

The purpose of the expert roundtable was to discuss the comparative U.S. and EU framework conditions supporting entrepreneurship and innovation, and how to better exploit and disseminate research results leading to greater innovation.

The panellists represented multiple organizational views such as innovation education programs, companies, venture capital firms, and university and research organizations, as well as multiple country views. Key points from the discussion were:

- There are differences between the U.S. and EU in both culture (risk-taking vs. risk averse) and framework conditions such as access to capital, including venture funding and private R&D
- Recommendations for creating an entrepreneurial culture were:
  - Creating culture change by training people, e.g. students, grad students, professors, through entrepreneurial training programs such as EIT, NSF's iCorps, and programs at Arizona State University
  - Bringing industry people into universities to work side-by-side





- Collaborating through research hubs that bring industry and research organizations together
- Using metrics that are based on impact and not activities
- Venture capital is transportable and can happen anywhere in the world; the issue is that the innovators must make a connection to the funders, and then must make the business case.

## Expert Roundtable: Building transatlantic bridges: standards and norms, legal issues, confidentiality, data security, IPR issues

The expert roundtable aimed at highlighting challenges and discussing solutions and recommendations in terms of framework conditions for transatlantic STI Cooperation, i.e. IPR, standards, norms, guidelines and major legal issues, data security, and funding instruments.

It was discussed that there is the need to reduce time required to conclude agreements between actors. One recommendation was to continue with the development of template agreements for cooperation, going beyond the STI framework. Particular emphasis was given regarding the attitude of actors in the STI cooperation, with a strong message on the <u>idea of a "yes" culture for administrations, universities, and businesses.</u> This idea was developed as a will to cooperate and work to create the right conditions for collaboration between various communities and different types of organizations (e.g. universities, research institutions, businesses) with a view to driving innovation (Casey).

Best practices and challenges have been presented from various German initiatives that work to create an interface between science and industry such as the Excellence Initiative, as well as the German Center for Research & Innovation, the German accelerator which supports German tech startups in entering the U.S. market. It was discussed that bringing the right people into the room to collaborate was key to agreeing on common priorities for collaboration and instruments that can be common joint programmes, summer schools, student exchanges, and professor exchanges (Halpern).

One recommendation was to better organize matchmaking between European and U.S. scientists, as well as start-ups, and to give them the possibility to contact bilingual lawyers able to practice on both sides of the Atlantic (Tumer).

Trust regarding IPR issues is essential to collaborate, and IPR issues should be discussed prior to the project to build trust at an early stage. Exclusive licensing would not be a particularly good solution, i.e. people who create the Intellectual Property should work with organizations that are able to implement the Intellectual Property, as IPR are, above all, a commercialization tool (Harrison).

Recommendations to help building transatlantic bridges to foster innovation would be the harmonization of regulations and working on unified standards, as well as offering more and easier joint funding. Finally the support of "multipliers" was offered such as the European American Chamber of Commerce to EU-U.S. innovation cooperation. One conclusion was that the EU-U.S. Innovation Conference was itself a good practice, as the EU and U.S. need more opportunities to come together to discuss topics and challenges such as IPR and standards, and to network (Sailer).





To conclude, interesting good practices and recommendations were mentioned, such as a template for consortium agreements (the DESCA agreement, among others), working on the entrepreneurship culture in academic communities, and at another level integrating a chapter on IPR issues in the next Science and Technology Agreement, as well as going beyond the EU-U.S. bilateral level on IP discussion to address the issue globally.

The topic of standards and norms also emerged at an advanced stage of the discussion, when Camille Sailer reminded that different standards can often be challenging, even discouraging, for actors willing to engage in collaboration. Regarding EU centers for research and innovation around the world, Joann Halpern raised the question whether they had an added value compared with European national centers. In reply to this question, Manfred Horvat concluded that bilateral cooperation and initiatives would always be less impactful than broader collaboration on EU level.

#### Panel Discussion: Future innovation direction of the EU-U.S. S&T relations

The goal of the final panel discussion was to elaborate on how the EC and Member States (MS) could better coordinate their S&T strategies, and which functions the EU-U.S. S&T Agreement should have with respect to supporting transatlantic innovation policies.

Addressing major societal problems such as food, water, and security as a means to support transatlantic innovation policies was a recommendation given by the European Commission. Other activities with S&T relevance for considering cooperation on innovation related topics would include the following (Wittke):

- Transatlantic Innovation Action Partnership, a government-to-government forum that was
  established in 2009 under the Transatlantic Economic Council (TEC) in order to spur growth,
  productivity, and entrepreneurial activity by sharing best policy practices and identifying
  steps that will improve the policy environment for innovative activities across the Atlantic.
- SME support DG GROW U.S. Department of Commerce
  - Enterprise Europe Network
  - o EU-U.S. SME dialogue
  - Regional clusters mapping
- EU-U.S. Energy Council
  - Technology working group

Another recommendation from the European side was the need to <u>think European</u>, which <u>is considering all common interests</u>, when designing national policy. The best means to find common interests is in discussing global challenges that require everyone to work together (Grablowitz).





The conclusion from U.S. side was that the umbrella S&T agreement is very important because it enables better coordination for the U.S. with all EU member states. NSF considers international collaboration to be very important for U.S. interests (Suskin).

The conference ended on a very positive note with understanding that innovation ecosystem works best across public and private sectors when working together to find solutions for key global societal challenges. The desire from both U.S. and EU counterparts to listen and learn from one another through a dialog in science provides an excellent opportunity to build stronger future S&T agreements. And while there are no simple answers to complex problems, we must continue to find ways to say "yes" to one another (Donovan).

## 2 Conference Outcomes & Recommendations for future transatlantic STI Cooperation

#### Successful and effective transition of technology from basic research to applied research

In order to overcome constraints created through U.S. IP ownership policies, EU and U.S. policy makers should identify non-sensitive topics of mutual benefit (common good) and support:

- Connection of relevant agencies from both sides of the Atlantic to coordinate programs, and use and support existing networks focused on matching technology and business needs, such as the Enterprise Europe Network (EEN) in the EU and Manufacturing Extension Partnership of the National Institute of Standards and Technology (NIST) in the U.S.
- Establishment of collaboration platforms, mobility of research personnel with transparent management and collaboration rules





#### Alignment of transatlantic innovation policies between EU MS & the USA or States

Since reciprocity and mutual awareness of the legal framework conditions and of available funding opportunities at the research community level is still low the following is recommended for more aligned transatlantic innovation policies:

- Constant flow of information on available funding opportunities
- Constant exchange and functional dialogue between all involved stakeholders
- Alignment of thematic interests between the EC, the EU MS/AC the U.S. and states
- Alignment of the EU terminology and the specific U.S. funding agency's terminology
- The idea of a "catalyst fund" ensuring that collaboration and exchange has a funding base for academia-academia collaboration

It was recommended not to spend too much time and effort on the alignment of IPR issues since they are not seen as real obstacles.

#### Promotion of Entrepreneurship, Exploitation, and Dissemination of research results

There are differences between the U.S. and EU in both culture (risk-taking vs. risk averse) and access to capital, including venture funding and private R&D, with the U.S. having more access to capital. To overcome these differences the following solutions have been suggested:

- Creating culture change by training students, grad students or professors, through entrepreneurial training programs such as the <u>EIT</u> (the European Institute of Innovation and Technology, <u>NSF's iCorps</u> (the NSF Innovation Corps is a set of activities and programs that prepares scientists and engineers to extend their focus beyond the laboratory and broadens the impact of select, NSF-funded, basic-research projects) and programs at Arizona State University
- Bringing industry people into universities to work side-by-side with researchers
- Collaborating through research hubs that bring industry and research organizations together
- Using metrics that are based on impact





#### Standards and norms, legal issues, confidentiality, data security, IPR issues

In order to reduce time required to conclude agreements between actors recommendations are:

- Continuing the development of template agreements for cooperation, going beyond the STI framework. Particular emphasis was given regarding the attitude of actors in STI cooperation.
- Bringing the right people together to collaborate in order to agree on common priorities for collaboration and instruments that can be common joint programmes, summer schools, student exchanges, or professor exchanges.
- Better organisation of matchmaking between European and U.S. scientists, as well as start-ups in order to give them the possibility to contact bilingual lawyers able to practice on both sides of the Atlantic.
- Increasing awareness and changing the attitude towards a "yes" culture for administrations, universities, and businesses.

#### Future innovation direction of the EU-U.S. S&T relations

Different standards can be challenging, even discouraging, for actors willing to engage in collaboration. Therefore the following was recommended for a joint future direction of transatlantic S&T collaboration:

- EU centers for research and innovation around the world would have an added value compared with European national centers since bilateral cooperation and initiatives would always be less impactful than broader collaboration at EU level.
- European MS need to think European, which is considering all common interests, when designing national policy.
- One means to support transatlantic innovation policies is addressing major societal problems such as food, water, and security as they affect both regions.
- Make use of existing partnerships, networks and working groups by sharing best policy
  practices and identifying steps to improve the policy environment for innovative activities
  across the Atlantic, such as the <u>Transatlantic Innovation Action Partnership</u>, Enterprise Europe
  Network, EU-U.S. SME dialogue or the technology working group of the <u>EU-U.S. Energy Council</u>.
- The EU and U.S. need more opportunities to network and to discuss topics and joint challenges such as IPR and standards.





The main final conclusion discussed by the experts was that the EU-U.S. Innovation Conference was itself a good practice. Therefore the overall recommendation to EU policy makers and to the European Commission is to continue working closely with the BILAT USA 2.0 project and its follow-up project in order to align activities and make use of the projects' services. BILAT USA 2.0 hence draws the following overall conclusions from the session outcomes and recommends:

#### Successful and effective transition of technology from basic research to applied research

Future BILAT projects addressing the U.S. shall simplify networking and support enhancing the exchange between existing networks, such as the Enterprise Europe Network (EEN) in Europe and Manufacturing Extension Partnership of the National Institute of Standards and Technology (NIST) in the U.S. This way they might work more closely together, use synergies more often, and learn from each other in the future. The BILAT projects themselves shall make use of the outcomes and learnings, provide relevant results and recommendations to policy makers and consequently give more impetus to identify joint topics of mutual benefit.

#### Alignment of transatlantic innovation policies between EU MS & the USA or States

Future BILAT projects addressing the U.S. shall continue enhancing the flow of information on available funding opportunities on both sides of the Atlantic and the regular dialogue between relevant stakeholders. In addition, the alignment of joint thematic interests and joint terminology shall be continued and supported through regular meetings and exchange rounds.

### Promotion of Entrepreneurship, Exploitation/Dissemination of research results and joint standards and norms

Future BILAT projects addressing the U.S. shall facilitate networking and matchmaking between industry and academia through specific events and platforms in order to foster collaboration and to identify common priorities for collaboration and instruments.

#### Future innovation direction of the EU-U.S. S&T relations

One major outcome of the EU-U.S. Innovation Conference was that more opportunities would be needed to establish broader collaboration on EU level. Consequently, future BILAT projects addressing the U.S. shall be used as initiators and facilitators to foster comprehensive STI collaboration on EU level including all relevant stakeholders and policymakers.

#### **BILAT USA 2.0 project homepage**

#### Authors:

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#### 3 Agenda

#### **BILAT USA 2.0 EU-U.S. Innovation Conference**

"How to integrate the innovation dimension in the EU-U.S. S&T Agreement?"

**Date:** January 14<sup>th</sup> - 15<sup>th</sup>, 2015

**Location:** Representation of the State of North Rhine-Westphalia to the European Union

Rue Montoyer 47, 1000 Brussels, Belgium

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January 14 <sup>th</sup> , 2015						
13.00-14.00	Registration					
14.00-14.10	Welcoming and Introduction	<ul> <li>Ralf König   FFG Austrian Research Promotion Agency, Austria</li> </ul>				
14.10-14.30	1. Opening Session Day 1	Speakers:      Robert Burmanjer   DG Research and Innovation, EC     Jennifer Haskell   U.S. State Department, USA Session leader: Manfred Horvat   Vienna University of Technology, Austria				
14.30-16.00 (incl. 30 min discussion)	2. Panel Discussion: Research, technology and innovation	<ul> <li>Speakers:         <ul> <li>Erkki Ormala   Aalto University, Finland</li> <li>Mats Nordlund   Skoltech, Russia</li> <li>Raffaella Montelli   NSF, USA</li> <li>Kirsten Rieth   RTI International, USA</li> </ul> </li> <li>Session leader: Sinan Tumer   SAP Labs, USA</li> <li>Rapporteur: Rick Satcher   RTI International, USA</li> </ul>				
16.00-16.30	Coffee Break					
16.30-17.30 (incl. 30 min discussion)	3. Best Practice Workshop: Transatlantic innovation policies between EU MS and the USA or States	<ul> <li>Speakers:         <ul> <li>Derek Jan Fikkers   Technopolis, The Netherlands</li> <li>Ann Swillen   Department of Human Genetics, University of Leuven, Belgium</li> <li>Noel O'Connor   Research &amp; Enterprise Hubs, Dublin City University, Ireland</li> <li>Tina Höfinghoff   acatech, Deutsche Akademie der Technikwissenschaften, Germany</li> </ul> </li> <li>Session leader: Rick Satcher   RTI International, USA Rapporteur: Vera Kammann   DLR, Germany</li> </ul>				
17.30-18.00	4. Discussion and closing of Day 1	Session leader:  Manfred Horvat   Vienna University of Technology, Austria Rapporteurs of Day 1: Rick Satcher   RTI International, USA Vera Kammann   DLR, Germany				
18.00-19.00	Networking Buffet					



# BILAT USA 2.0

January 15 <sup>th</sup>	January 15 <sup>th</sup> , 2015				
09.00-09.05	Welcoming	Ralf König   FFG Austrian Research Promotion			
03.00 03.03	Welcoming	Agency, Austria			
09.05-09.30	5. Opening Session Day 2	Key note speaker:			
		Riitta Mustonen   NordForsk, Norway			
		Session leader:			
		Manfred Horvat   Vienna University of Technology, Austria			
09.30-11.00	6. Expert Roundtable:	Speakers:			
(incl. 30 min	Framework conditions for	Riitta Mustonen   NordForsk, Norway			
discussion)	transatlantic innovation	Peter Olesen   EIT, Hungary			
	cooperation with EU and	Jan van den Biesen   Public R&D Programmes,			
	U.S. experts: Promotion of	Philips Research, The Netherlands			
	Entrepreneurship,	Errol Arkilic   M34 Capital, USA			
	Exploitation and	William T. Petuskey   Arizona State University, USA			
	Dissemination of research	Session leader: Victoria Hill   numeritics, USA			
	results	Rapporteur: Kirsten Rieth   RTI International, USA			
11.00-11.30	Coffee Break				
11.30-13.00	7. Expert Roundtable:	Speakers:			
(incl. 30 min	Building transatlantic	Robert Harrison   24IP LawGroup, Germany			
discussion)	bridges: standards and	Joann Halpern   Director of German Center of			
,	norms, legal issues,	Research and Innovation, USA			
	confidentiality, data	Camille Sailer   European American Chamber of			
	security, IPR issues	Commerce EACCNJ, USA			
		James J. Casey   President-elect, State Bar of			
		Wisconsin NRLD, USA			
		Session leader: Sinan Tumer   SAP Labs, USA			
		Rapporteur: Svetlana Klessova   inno TSD, France			
13.00-14.00	Lunch Break				
14.00-15:30	8. Policy Panel:	Speakers:			
	Future innovation	Muriel Attané   EARTO, Belgium			
	direction of the EU-U.S.	<ul> <li>Wolfgang Wittke   DG Research and Innovation, EC</li> </ul>			
	S&T relations	Alexander Grablowitz   BMBF, Lead-MS of the SFIC			
		USA Core Group, Germany			
		Mark A. Suskin   NSF Europe Office, France (TBC)			
		Cole Donovan   U.S. State Department, USA			
		Session leader:			
		Manfred Horvat   Vienna University of Technology, Austria			
		Rapporteur: Rick Satcher   RTI International, USA			
15.30-16.00	9. Closing of the	Session leaders:			
	Conference	Wolfgang Wittke   DG Research and Innovation, EC			
		Cole Donovan   U.S. State Department, USA			
		Rapporteurs of Day 2:			
		Svetlana Klessova   inno TSD, France			
		Kirsten Rieth   RTI International, USA			
		Rick Satcher   RTI International, USA			

