



Bilateral Coordination of the Enhancement and Development of S&T Partnerships between the European Union and the United States of America

Name of Deliverable	US FP7 participation in collaborative research projects and support actions
Number of Deliverable	D 2.1
Work Package	WP 2
Work task Number	WT 2.1
Task Leader and contributing partners	FFG
Deliverable Dissemination Level	PU
Submission	June 2015



Table of Content

1. Executive Summary	3
2. Introduction.....	7
2.1 Background.....	7
2.2 Objective of the report.....	10
3. Transatlantic STI cooperation in FP7.....	12
3.1 U.S. participation in FP7	12
3.2 U.S. participation in FP7 Coordination and Support actions.....	16
3.3 Motives and challenges to transatlantic research cooperation in FP7	18
3.4 U.S. Collaboration with European countries	19
4. Main findings from transatlantic research cooperation in FP7.....	20
4.1 Learnings from U.S. participation in FP7	20
4.2 Recommendations for future STI collaboration under H2020	22
Annex 1 Abbreviations	23
Annex 2 References.....	24



1. Executive Summary

Transatlantic STI cooperation in the 7th Framework Programme (FP7) (2007-2013) is characterised by 517 U.S. participations in 410 projects and more than 80 Million Euro EC contributions. These figures make the U.S. one of the most important Third Country partners for the European Union and for European consortia in FP7.

International Cooperation targeting the USA was represented in three of the coordination and support actions (CSAs) in FP7, i.e. BILAT USA (2009-2012), Link2US (2009-2012), and the current BILAT-USA 2.0 (2012-2015) providing about 857,000 Euro EC funds to U.S. cooperation partners.

Health research which sums up to 63% of total EC contributions to U.S. partners started to take a predominant role in transatlantic STI cooperation under FP7 after the NIH-EC Reciprocity Agreement in 2008 on equal funding conditions, followed by **ICT with 19%**, and **Food, Agriculture and Fisheries, and Biotechnology with 4% EC contribution**.

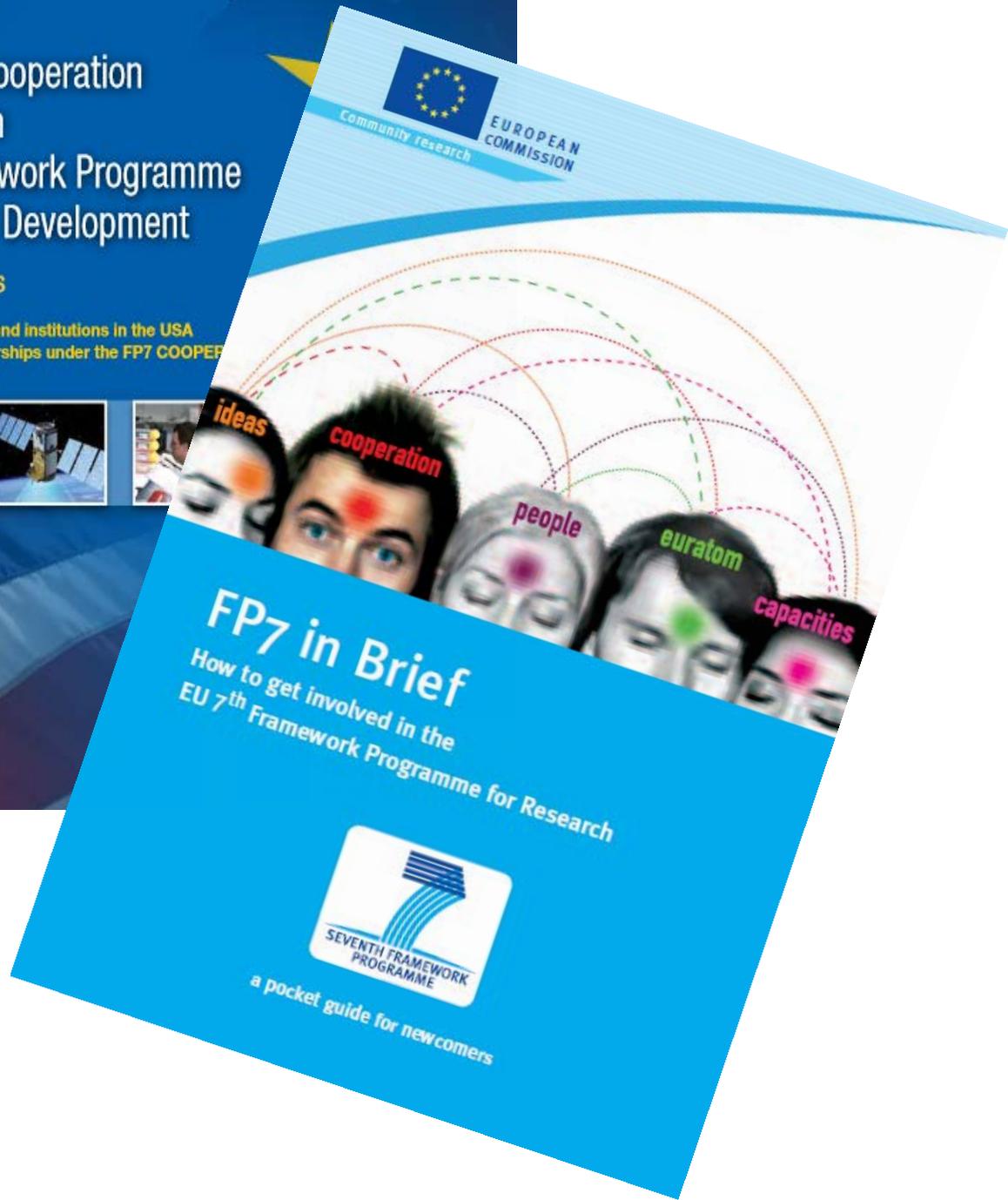
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA was the most important FP7 participant with 42 participations and about 5 Million Euro EC contributions participating in FP7 research projects mainly in the fields of Health, ICT, Environment, Research Infrastructures, Nano technologies and Space.

According to the BILAT USA **Analysis of Existing Instruments, Regulations and Obstacles for U.S. participation in FP7**, based on an online survey in September 2011, the main reasons for U.S. project partners to get involved in FP7 projects were on the one hand the improvement of scientific excellence of the research endeavor and access to specific expertise and on the other hand the establishment of a wider cooperation network and improved relations to European researchers.

U.S. collaboration in FP7 projects is concentrated on several European countries, i.e. **Germany with 1,047 collaborative links and the UK with 1,009 collaborative links in FP7**. France (702), Italy (610), the Netherlands (554) and Spain (417) are following as main European Member States (MS) for transatlantic STI collaboration.

While BILAT USA set the ground for supporting transatlantic research cooperation in FP7, BILAT USA 2.0 strengthened the transatlantic policy dialogue as well as contributed to raise the awareness of FP7 and Horizon 2020. To this end, it supported the **National Council of University Research Administrators (NCURA) to become the first U.S. pilot National Contact Point**.

The further transatlantic policy dialogue and STI collaboration shall be supported by future BILAT projects in Horizon 2020. These should aim at activities of cooperation and communication that raise awareness and are based on the experiences and learnings gained in the previous projects.



Information Material regarding FP7 from the European Commission

7 reasons

for U.S. researchers to participate in the last FP7 Calls

The Seventh Framework Programme for Research and Technological Development (FP7) is the European Union's main instrument for funding research in Europe. One of the goals of the international dimension of FP7 is to increase U.S. participation. FP7 will expire in 2013 and the final FP7 Calls were published in July 2012, with most of them closing in autumn 2012 / winter 2013.

1. Funding Budget is High

The last round of FP7 Calls is the biggest ever with respect to available funds. In general, the EU budget for U.S. researchers is accessible if certain conditions are met.

[See U.S. funding conditions.](#)

2. Transatlantic Cooperation is Stimulated

Collaborative research is encouraged within FP7 aiming at establishing excellent research projects and networks able to attract researchers and investments. Tackling global challenges and addressing more ambitious problems become easier through international cooperation where mutual interest exists. Clear provisions foreseeing the integration of entities established in the U.S. may be included in the work programme/call for proposals.

3. Participation in FP7 is Simple

Participation for U.S. partners in FP7 research consortia is simple. The role of European research project coordinators is to guide partners, support them during the project proposal phase and to manage the project during project life cycle. In addition, the Participant Portal has become the European Commission's single authoritative website for the publication of FP7 calls, organisation registration, all project related services and all FP7 related legal and guidance documents.

[See all relevant FP7 participation information.](#)

4. Timing is Good

Now is the best time to reactivate research networks, reshape research ideas and get started: the last round of FP7 Calls opened in July 2012. It offers a good opportunity for U.S. researchers to secure partial funding of their research by FP7. The new Science, Technology and Innovation Programme, Horizon 2020, will start in January 2014 creating a gap between the two research funding programmes.

5. Re-submission is Encouraged

It is common that most research project proposals become successful when being submitted the second or third time! Re-submission of proposals is encouraged by the European Commission giving the research consortium enough time to complete, review and adapt the research project proposal to the objectives of the work programme. It is fact that project consortia with U.S. participation have a higher success rate!

6. Established European Networks are Available

During the lifetime of FP7, numerous European Networks have been established, a number of research consortia have been dealing with research on European scale and several teams have been successful. Finding an existing research consortium is easier than ever! The European Commission offers [partner search services on CORDIS](#).

7. BILAT-USA and Link2US are Supporting

The projects BILAT-USA and Link2US, funded by the EC under FP7, support the enhancement and development of transatlantic S&T partnerships. All relevant services and information offered can be found under the following link.

<http://www.EuUsScienceTechnology.eu>



Home » Background & Setting » EU-U.S. cooperation within FP7

EU-U.S. cooperation within FP7

'Framework Programmes' (FPs) have been the main financial tools through which the European Union supports research activities covering almost all scientific disciplines. The current FP7 will expire in 2013. It is designed to build on the achievements of its predecessor towards the creation of the European Research Area, and carry it further towards the development of the knowledge economy and society in Europe.

For detailed information, please visit:

- Understanding FP7:
[CORDIS - The gateway to European research and development](#)
- What is FP7:
[CORDIS - The gateway to European research and development](#)

On 10 July 2012 most of the final FP7 calls for proposals were published, with some further specific calls to follow in autumn. The FP7 Research Participants Portal shows all latest calls and necessary information documents.

- European Commission - Press Release:
<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/752&format=HTML&aged=0&language=EN&guiLanguage=en>
http://ec.europa.eu/research/fp7/index_en.cfm?pg=press
- Questions and answers on FP7 2013 work programme:
<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/12/528&format=HTML&aged=0&language=EN&guiLanguage=en>
- FP7 work programme 2013:
http://ec.europa.eu/research/participants/portal/page/fp7_documentation
- Open FP7 calls:
http://ec.europa.eu/research/participants/portal/page/fp7_calls

U.S. participation and funding under FP7

Participation is open to organizations and legal entities established in Third countries: Any company, university, research center, organization or individual, legally established in any country, can participate in a collaborative project provided that the minimum conditions laid down in the 'FP7 Rules for Participation' have been met, as well as any additional conditions laid down by the FP7 Specific Programmes (Cooperation, Ideas, People, Capacities) or individual FP7 Work Programmes.

Information about FP7 participation and funding conditions for Third countries (non-EU Member States or FP7 Associated Countries) such as the U.S. (High-income country) can be found [here](#).

Funding for research organizations and researchers from high-income countries, such as the U.S., is possible under the following conditions:

1. Provision is made to that effect in the specific programmes or in the relevant work programme,
2. Contribution is essential for carrying out the research project and,
3. Funding is provided for in a **bilateral scientific and technological agreement*** or any other arrangement between the Community and the country in which the legal entity is established.

* The European Community has concluded bi-lateral S&T agreements with a number of individual countries. These agreements constitute a framework and a privileged forum to identify common interests, priorities, policy dialogue, and the necessary tools for S&T collaboration.

FP7 2013 Calls open specifically for U.S. Participation

Based on the participation rules, organizations from third countries can participate in FP7 open calls for proposals.

Nevertheless, in some cases, for example under the thematic areas or under the International Cooperation programme, there can be calls specifically targeting third countries, e.g., the U.S. The European Commission published a presentation on the **opportunities for U.S. partners in the FP7 calls (2013 Work Programmes), targeting U.S. partners**.

DG Research & Innovation organised on 11 July 2012 an Information Meeting about the new calls for proposals under the 2013 Work Programme of the Activities of International Cooperation (INCO). Read all relevant documents presented at the **FP7 2013 Work Programme Info-Day**.

Find all topics (filtered by research themes and prepared by BILAT-USA) in the FP7 2013 Work Programmes addressing (in-)directly U.S. partners [here](#).

Read "7 reasons for U.S. researchers to participate in the last FP7 Calls".

2. Introduction

2.1 Background

The Seventh Framework Programme (FP7) was the European Union's Research and Innovation Funding Programme for European Research and Technological Development from 2007 until 2013. Subsequently, a new approach towards international cooperation was introduced. It aimed at reinforcing international research collaboration throughout the Framework Programme by introducing special instruments, such as Specific International Cooperation Actions (SICA), coordinated calls, or the twinning of projects that allows for targeted geographic and thematic activities. International Cooperation activities were also reinforcing the external dimension of the European Research Area (ERA), particularly through the implementation of the Strategic European Framework for International S&T Cooperation and the establishment of the Strategic Forum for International S&T Cooperation (SFIC), consisting of high-level representatives from the Member States, Associated Countries and the EC.

'EURAXESS Links' (funded under the Specific Actions part of the People Programme) is a pan-European initiative providing access to a complete range of information and support services to researchers that wish to pursue their research careers in Europe or stay connected to it. The initiative helps to maintain the ties to European researchers abroad by keeping them updated on research policy, funding and cooperation opportunities in Europe. In addition, it reinforces their role as catalyzers to boost cooperation with their host countries (USA, Japan, China, Singapore and India).

This approach, together with the general opening of all activities to Third Country teams, has reinforced the international dimension, which had grown in volume and awareness under FP7.

Cooperation

The core of FP7, representing two thirds of the overall funding budget, was the Cooperation Programme. It fostered collaborative research across Europe and other partner countries through projects by transnational consortia of industry and academia in ten key thematic areas:

- Health
- Food, agriculture and fisheries, and biotechnology
- Information and communication technologies
- Nano sciences, nanotechnologies, materials and new production technologies
- Energy
- Environment (including climate change)
- Transport (including aeronautics)
- Socio-economic sciences and the humanities
- Space
- Security.

Long-term public-private partnerships in the form of Joint Technology Initiatives ([JTI](#)) combine private sector investment and/or national and European public funding, including grant funding from the Research Framework Programme and loan finance from the European Investment Bank.

http://cordis.europa.eu/fp7/cooperation/home_en.html

Ideas

The Ideas Programme in FP7 supported "frontier research" solely on the basis of scientific excellence in any area of science or technology, including engineering, socio-economic sciences and the humanities. In contrast to the Cooperation Programme, there was no obligation for cross-border partnerships. Projects were implemented by "individual teams" around a "principal investigator". The programme was implemented via the new European Research Council (ERC).

<http://erc.europa.eu/>

People

The People Programme provides support for researcher mobility and career development, both for researchers inside the European Union and internationally. It is implemented via a set of Marie Curie actions, providing fellowships and other measures to help researchers build their skills and competences throughout their careers:

- Initial training of researchers - Marie Curie Networks
- Industry-academia partnerships
- Co-funding of regional, national and international mobility programmes
- Intra-European fellowships
- International dimension - outgoing and incoming fellowships
- International cooperation scheme, reintegration grants
- Marie Curie Awards.

<http://ec.europa.eu/research/mariecurieactions/>

Capacities

The Capacities Programme strengthened the research capacities in order for Europe to become and remain a thriving knowledge-based economy. It covered the following activities:

- Research infrastructures
- Research for the benefit of SMEs
- Regions of Knowledge
- Research Potential
- Science in Society
- Specific activities of international cooperation.

The Specific activities of international cooperation were dedicated to support the S&T policy dialogue and to promote cooperation opportunities under FP7 for international partners. Main activities were and still are (since some of the FP7 initiatives are currently still ongoing):

- Coordination of national policies and activities of Member States and Associated States concerning international S&T cooperation (so-called ERA-NET and ERA-NET Plus projects),

- Bi-regional coordination of S&T cooperation, including priority setting and the support of the S&T policy dialogue (so-called INCO-NET projects),
- Support for trans-national cooperation among NCPs (INCO-NCP networks),
- Support of EU access to third country programmes (ACCESS4EU), and
- Bilateral coordination of S&T policies with those countries that signed (or are in the process of signing) an S&T agreement with the Community (so-called BILAT projects).

http://cordis.europa.eu/fp7/capacities/home_en.html

BILAT projects

BILAT projects target a specific Third Country, supporting the coordination and development of S&T partnerships and focusing mainly on providing information on programs designed to promote cooperation of Third Countries in the Framework Programme. They help to identify and demonstrate mutual interests and encourage the sharing of best practices, state of the art and enhance the prospects for cooperation in particular fields.

BILAT projects comprise information and awareness activities, the establishment and reinforcement of information services, a comprehensive website and a mailing database. Furthermore, they offer specialized thematic workshops or special high-level events both at the scientific level in specific third countries and in Europe as well as at the political and policy-making level. The activity is restricted to third countries, which have signed an S&T cooperation agreement with the EC or are in the process of signing such an agreement. BILAT projects are continued in Horizon 2020.

<http://www.bilat.eu/>

INCO-nets

INCO-nets support the bi-regional STI dialogue between Europe and a whole region outside of Europe. INCO-NETs are platforms bringing together policy makers and stakeholders of target regions to facilitate international research collaboration. They focus on the establishment of first contacts and the creation of international networks. Next to analyses and monitoring of regional STI developments, they are occupied with establishing thematic priorities that would be of mutual benefit from cooperation between the regions. Inco-nets do not exist under in Horizon 2020 any longer. An example of an ongoing INCO-net is ALCUE-net.

https://ec.europa.eu/research/participants/portal/doc/call/fp7/fp7-inco-2007-1/29020-uct_200701_en.pdf

ACCESS4EU projects

The ACCESS4EU projects in FP7 were set up with the intention to support the development of the reciprocity aspect of the S&T Agreements by identifying the programmes open to EU researchers and promote their participation. They aimed at increasing the awareness and dissemination within the Member States and Associated Countries of access opportunities for European researchers and research organizations in national research and/or innovation programmes managed by Third Countries and at providing information and reports which would be useful to the Joint Committee meetings of the S&T Agreements (JSTCC). Under Horizon 2020, ACCESS4EU projects as such do not exist anymore.

The ACCESS4EU projects have been completed and the joint database was migrated to the new BILAT web portal to ensure its continuity. It was also enhanced to include bilateral funding opportunities. The database will continually be updated by the BILAT projects.

<http://www.bilat.eu/247.php>

Nuclear Research

The programme for nuclear research and training activities comprised research, technological development, international cooperation, dissemination of technical information, and exploitation activities, as well as training. Two specific programmes were implemented:

- Fusion energy research (in particular ITER, a large-scale scientific experiment intended to prove the viability of fusion as an energy source, and to collect the data necessary for the design and subsequent operation of the first electricity-producing fusion power plant; the ITER Agreement was signed by China, the European Union, India, Japan, Korea, Russia and the USA), and nuclear fission and radiation protection;
- Nuclear energy, including nuclear waste management, and environmental impact, nuclear safety, and nuclear security (Joint Research Centre (JRC)).

<https://ec.europa.eu/jrc/>

2.2 Objective of the report

This report is based on data from E-CORDA. Data extraction was carried out on October 6th 2014. The tables presented here and the data analyses are based on 484 calls under FP7. They describe the two most important funding schemes for U.S. participation in FP7, i.e. Collaborative Projects (CP) and Coordination and Support Actions (CSA).

Collaborative projects (CP) are focused research projects with well-defined scientific and technological objectives and specific expected results (such as developing new knowledge or technology to improve European competitiveness). They are carried out by consortia made up of participants from different countries, and from industry as well as academia.

Coordination and Support Actions (CSA) are actions that cover not the research itself, but the coordination and networking of projects, programmes and policies. Among others, these are coordination and networking activities, dissemination and use of knowledge, as well as studies or expert groups assisting the implementation of the FP. Furthermore, these actions comprise support for transnational access to major research infrastructures, actions to stimulate the participation of SMEs, civil society and their networks or support for cooperation with other European research schemes.

The report intends to provide an overview of the most important characteristics of U.S. participation under FP7. The lessons learned are highlighted and recommendations addressing European and U.S. policy makers as well as the research communities on both sides of the Atlantic are made for the years to come.

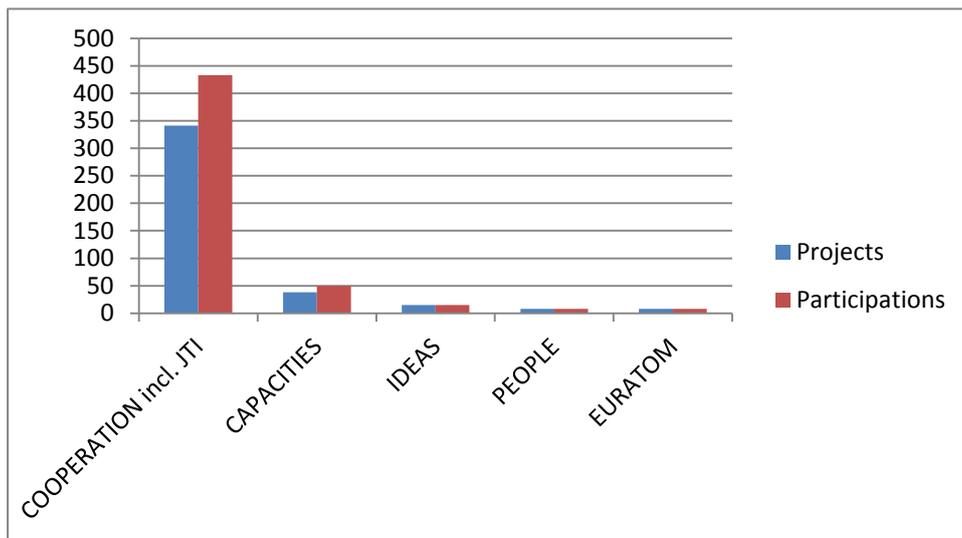


3. Transatlantic STI cooperation in FP7

3.1 U.S. participation in FP7

As Robert Burmanjer, Head of Unit for North America, Latin America and Caribbean at DG Research and Innovation, said in his speech at the BILAT USA 2.0 EU-U.S. Innovation conference (14-15 January 2015), the results of the EU-U.S. cooperation in the EU Research and Innovation Framework Programmes have been significant so far.

According to data extracted in October 2014, FP7 generated a **total of 517 U.S. participations, including 3 coordinating U.S. participations, in 410 projects** (signed Grant Agreements) with an EC contribution of about 80 million Euro. In terms of EC contributions, Russia ranked second with 73 Million even though it participated in 545 projects (leading Themes being Transport, Space and Food, Agriculture and Biotechnology). China ranked third with 383 participations and 35 Million Euro EC contributions under FP7.

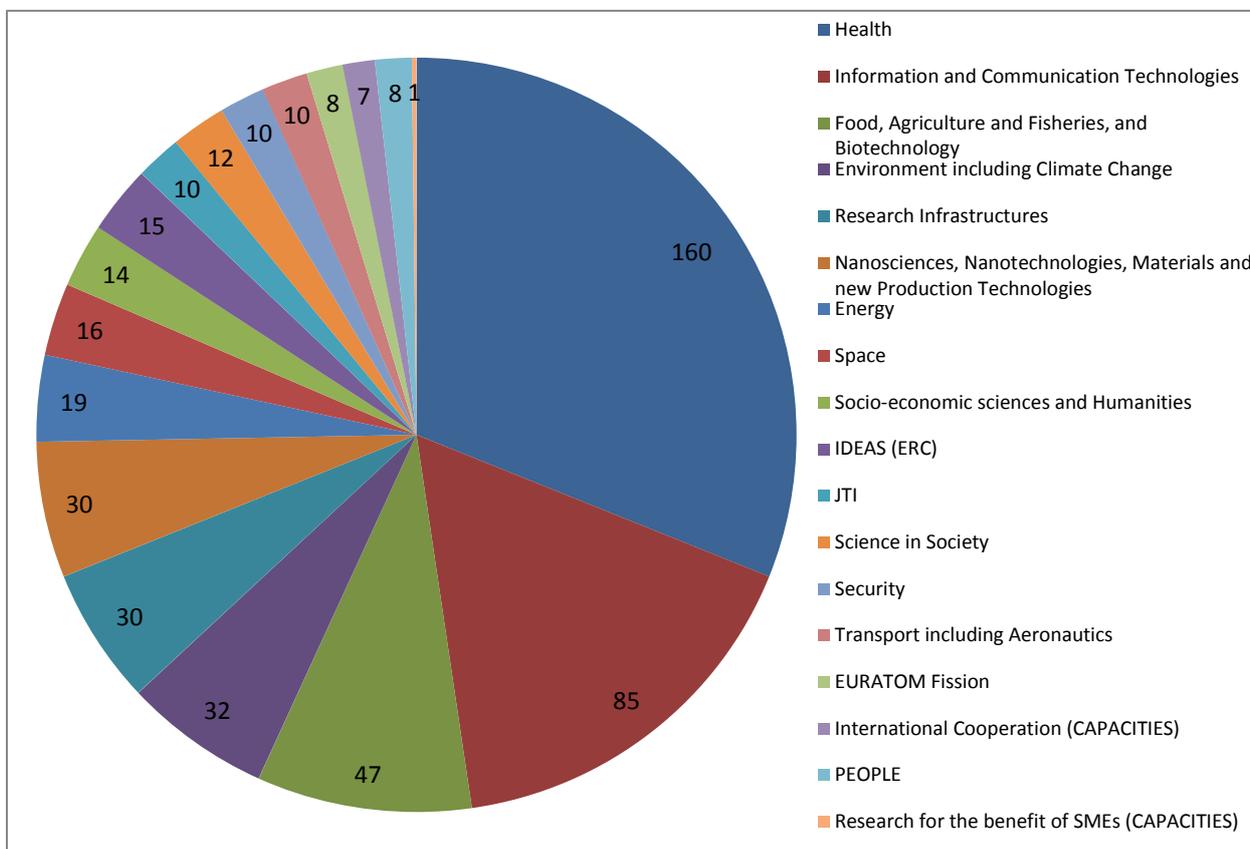


U.S. projects and U.S. participations in FP7 Programmes

Thematic distribution of U.S. participations in FP7

Health related projects ranked first with 160 U.S. participants (31%), accounting for 63% of total EC contributions to U.S. participants. This result is obviously supported by the NIH-EC Reciprocity Agreement 2008 on equal funding conditions making U.S. funding possible within FP7 and all following Framework Programmes. Consequently, there was a high funding rate of 87.5% for U.S. participations in Health.

ICT ranked second in FP7 with 85 participants (9%) and 10% of EC contributions. The third rank is occupied by Food, Agriculture and Fisheries, and Biotechnology (FAFB) with 47 participations and 4% of EC contributions. The following graph shows the exact distribution of U.S. participations in FP7 by theme:

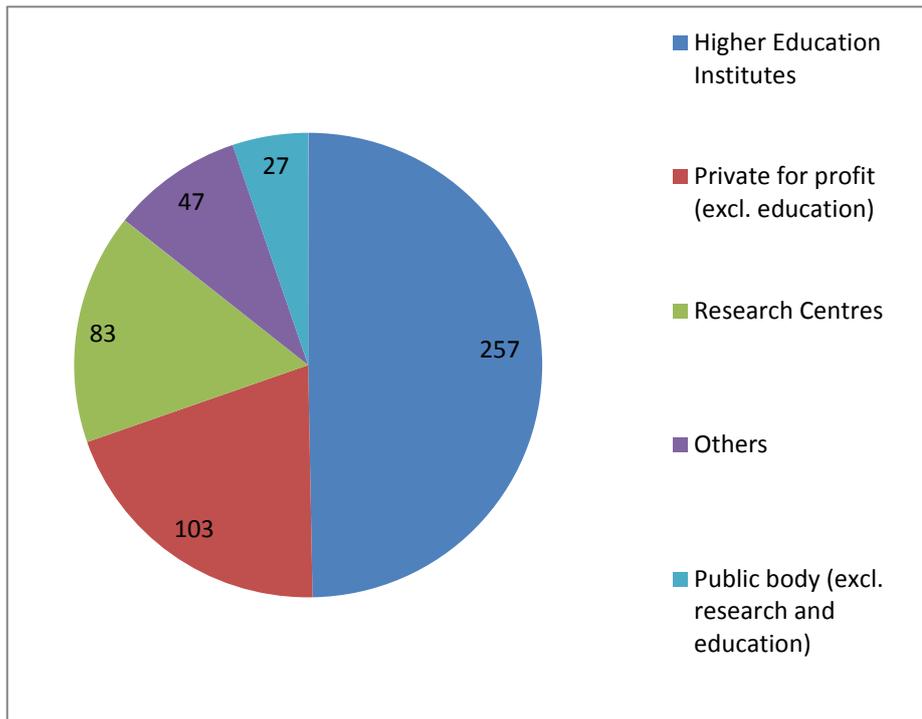


Number of U.S. participations in FP7 areas

The top three priority areas with together 77% of total EC contributions to U.S. participants are embedded in the Specific Programme COOPERATION. The remaining 23% of the EC contributions to U.S. participants is distributed among the remaining Themes in COOPERATION and the rest of the Specific Programmes and their Priority areas (IDEAS, PEOPLE, CAPACITIES, NUCLEAR RESEARCH).

Types of U.S. participants

The distribution of institutional types among the U.S. participants is similar to the distribution under FP7 in general. **U.S. academia (higher education institutes) are the biggest shareholders of FP7 funds (50%),** followed by the **U.S. industry (private-for-profit organizations) with 20%** and by **U.S. research centers representing 16% of all participations.** “Other” organizations amount to 9% and public bodies to 5% of the U.S. participations under FP7 as shown in the following graph:



Types of U.S. participants in FP7 (in absolute figures)

Three of the participating U.S. organizations (one private-for-profit organization, one public body and one association (others) in the Themes of Energy, Security and International Cooperation had the role of a coordinator. The two projects in Security and International Cooperation were coordination and support actions (CSA), one was a joint research project in Energy.

FP7 Success rates

The overall FP7 success rate (with regard to proposals) is around 20%, but it varies across different programmes. Success rates in the COOPERATION programme are continuously improving, while the specific programme PEOPLE is getting more competitive over time. However, the Ideas programme remains the most competitive programme: despite its growth the success rate is still less than 15%.

By reaching 24.5%, the success rate of project proposals with U.S. participants was higher than the overall FP7 success rate.

Top U.S. participants

The Regents of the University of California participated most often in FP7 with 42 participations and about 4.92 million Euro EC contribution. The following list shows the top 5 U.S. participants under FP 7 for each of the Themes (number of participation in parentheses).

Health

- THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (13)
- ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI (5)

- THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA (4)
- DUKE UNIVERSITY (4)
- BRIGHAM AND WOMEN'S HOSPITAL, INC. (4)

ICT

- THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (10)
- THE UNIVERSITY SYSTEM OF MARYLAND FOUNDATION, INC. (4)
- THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK (4)
- JOHNS HOPKINS UNIVERSITY (4)
- THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY (3)

Food, Agriculture and Fisheries, and Biotechnology (FAFB)

- INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE – IFPRI (3)
- UNITED STATES DEPARTMENT OF AGRICULTURE (3)
- UNIVERSITY OF NEBRASKA (2)
- DOW AGRO SCIENCES LLC (2)
- WASHINGTON STATE UNIVERSITY (2)

Environment

- THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (5)
- ARIZONA BOARD OF REGENTS (2)
- UNITED STATES GEOLOGICAL SURVEY (2)
- UNIVERSITY OF SOUTHERN CALIFORNIA (2)
- HYBRID PLASTICS (1)

Research Infrastructures

- THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (4)
- SMITHSONIAN INSTITUTION (3)
- UNIVERSITY OF WISCONSIN-MADISON (2)
- CONSORTIUM OF UNIVERSITIES FOR THE ADVANCEMENT OF HYDROLOGIC SCIENCE INC CORPORATION (2)
- THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS (2)

Nanotechnologies, Materials and new Production technologies (NMP)

- THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (3)
- UNIVERSITY OF ROCHESTER (3)
- DUKE UNIVERSITY (2)
- NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (2)
- UNIVERSITY OF NEBRASKA (1)

Energy

- ALLIANCE FOR SUSTAINABLE ENERGY LLC (3)
- THE TRUSTEES OF INDIANA UNIVERSITY (2)
- THE CITY UNIVERSITY OF NEW YORK (1)
- BATTELLE MEMORIAL INSTITUTE NON PROFIT CORPORATION (1)
- THE UNIVERSITY OF TEXAS SYSTEM (1)

Space

- THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (2)

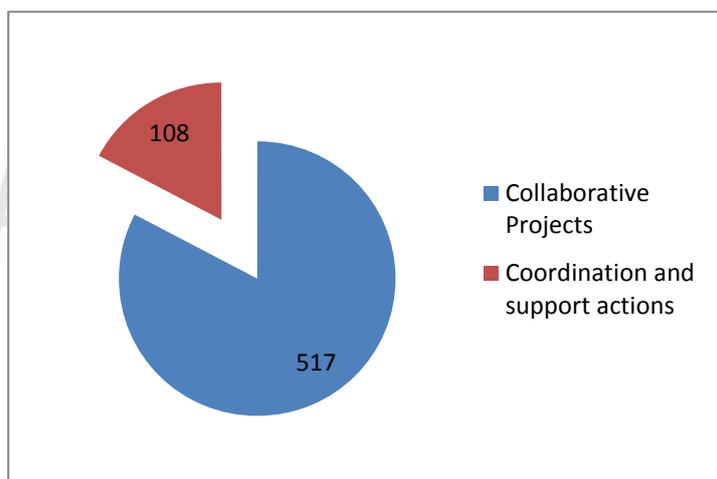
- The Catholic University of America (1)
- ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY (1)
- UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH NONPROFIT CORPORATION (1)
- MOOG INC CORPORATION (1)

Socio-economic Sciences and Humanities (SSH)

- THE CONFERENCE BOARD INC (4)
- INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE – IFPRI (1)
- THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (1)
- AMERICAN UNIVERSITY (1)
- JOHNS HOPKINS UNIVERSITY (1)

3.2.U.S. participation in FP7 Coordination and Support actions

108 (21%) of the 517 U.S. participations were involved in coordination and support actions (CSA) throughout all thematic priorities, including the coordination and networking of projects, programmes or policies.



US participation in Coordination and Support Actions (CSA) and Collaborative Projects (CP)

International Cooperation targeting the USA was represented in three coordination and support actions in FP7, i.e. BILAT USA (2009-2012), Link2US (2009-2012), and the current BILAT-USA 2.0 (2012-2015). As a result, about 857,000 Euro EC funds in total had been provided or were reserved for the following participating U.S. organizations:

- AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (Link2US coordinator and participant in BILAT USA)
- JOHNS HOPKINS UNIVERSITY (participant in BILAT USA 2.0)
- FLORIDA INTERNATIONAL UNIVERSITY (participant in BILAT USA 2.0)
- NCURA, NATIONAL COUNCIL OF UNIVERSITY RESEARCH ADMINISTRATORS (participant in BILAT USA 2.0)
- DIPLOMACY MATTERS INSTITUTE INC CORPORATION (participant in BILAT USA 2.0)

The BILAT-USA coordination and support action 

Between October 2009 and September 2012, BILAT-USA organized numerous policy fora, symposia and workshops, and published several reports and analyses on EU-US S&T cooperation. In addition, it carried out awareness raising campaigns all over Europe and in the U.S. promoting EU-US S&T collaboration within FP7. Main achievements of the BILAT-USA project were the following:

- The **portal www.euussciencetechnology.eu** is an online-hub for transatlantic S&T collaboration providing all relevant data on transatlantic S&T collaboration within FP7 as well as inventories on EU-US S&T Agreements, key-players, thematic taskforces and many more. News and events were published continuously via E-Newsletters reaching more than 1,000 registrants in the U.S. and in Europe.
- Several **events** have been organized that promoted cooperative research, such as symposia on crosscutting issues at horizontal level, workshops at thematic level and science fora at policy level in cooperation with the Strategic Forum for International S&T Cooperation (SFIC), a partnership between the EU Member States and the European Commission.
- An **online survey** analyzed obstacles that affect the participation of U.S. researchers and research organizations in FP7 (see 3.3 of this report).

The Link2US coordination and support action 

As a complementary initiative to BILAT USA running from October 2009 to September 2012, Link2US facilitated easy access to relevant information on U.S. cooperation programmes through electronic communities such as a website, e-newsletter, a virtual helpdesk, and designated activities such as training workshops. The project, co-funded by the European Union's Capacities Programme on International Cooperation of the Seventh Framework Programme on Research and Technological Cooperation was coordinated by the American Association for the Advancement of Science (AAAS) in Washington D.C.

The BILAT USA 2.0 coordination and support action 

Since November 2012 BILAT USA 2.0 has strongly been involved in the following main activities addressing the U.S.:

- The political dialogue within the framework of the EU-U.S. STI cooperation agreement was, among others, supported by the EU-U.S. Innovation Conference "**How to integrate the innovation dimension in the EU-U.S. S&T Agreement**". In six panels and roundtables, 30 experts and 120 participants from the U.S. and from all over Europe discussed efficient possibilities on how to proceed together in a future innovation direction under the EU-U.S. Science and Technology Agreement (STA). This focusses on innovation aspects and learnings from best practice examples on innovation cooperation, including academia-academia collaboration and academia-industry partnerships.

The main outcome of the conference for European policy makers was that they should bundle efforts and boost efficiency in speaking with one voice in international STI cooperation. For U.S. and EU policy makers it was advised to join forces in addressing innovation aspects based on the STA in order to jointly meet global challenges.

<http://www.eusscienceandtechnology.eu/content/very-well-received-eu-us-innovation-conference-on14-15-january-2015-brussels-belgium>

- The cooperation between scientists and innovation actors from both sides of the Atlantic was enhanced by a number of thematic workshops in the four transatlantic thematic focus areas Health, Marine and Arctic Sciences, Nano sciences, nanotechnologies, materials and new production technologies (NMP) as well as Transport and by events on horizontal issues. The BILAT USA 2.0 thematic session during the Ocean Sciences Meeting 2014 on February 27, 2014, in Honolulu, HI, is one example. During this session, priorities and funding opportunities in the areas of marine and arctic research under HORIZON 2020 had been highlighted, while facilitating connections and partnerships among international researchers, universities, industry and SMEs.

<http://www.eusscienceandtechnology.eu/content/bilat-usa-20-session-ocean-sciences-meeting-2014>

A good example for horizontal STI cooperation is the BILAT USA 2.0 sessions organized at the NCURA Pre-Award Research Administration Conference, on March 20, 2014, in San Francisco, CA. An open discussion about Horizon 2020 issues took place, highlighting U.S. participation in European research projects.

<http://www.eusscienceandtechnology.eu/content/bilat-usa-20-ncura-pre-award-research-administration-conference-march-18-20-2014-san-0>

- Jointly with 12 further BILAT projects (under the lead of BILAT USA 2.0), an **online survey** was carried out between September and October 2014 to **examine the operational feasibility of establishing joint STI liaison offices for European research organizations in Argentina, Australia, Brazil, Canada, China, Japan, Korea, Mexico, New Zealand, Russia, South Africa, and the USA (EU's Target Countries for fostering STI collaboration)**. The analysis will give recommendations to the European Commission about the necessity of STI Joint European Liaison Offices (STI JELOs) jointly demonstrating European science, technology and innovation in the above mentioned Target Countries and will flow into decisions for possible future joint STI activities.
- The nomination of **NCURA**, the NATIONAL COUNCIL OF UNIVERSITY RESEARCH ADMINISTRATORS, becoming U.S. **'pilot' National Contact Point (NCP) in Horizon 2020** is another important achievement of BILAT USA 2.0 during FP7. NCURA will act as a financial and legal NCP under Horizon 2020 and will be a multiplier reaching out to all U.S. member universities.

3.3 Motives and challenges to transatlantic research cooperation in FP7

An Analysis of Existing Instruments, Regulations and Obstacles for U.S. participation in the 7th Framework Programme (FP7) based on an online survey in September 2011 was provided within the BILAT USA project in 2012. 130 European FP7 project coordinators and 105 U.S. participants in FP7 projects took part in this survey which generated the following main results:

90% of EU-U.S. co-operations in FP7 have been established on the basis of already existing contacts of the U.S. partner –either to the project coordinator (69%) or to another partner from the consortium (21%). Mutual trust is a prerequisite for successful transatlantic research collaboration, for European consortia to convince and include U.S. partners as well as for U.S. researchers to take the risk and accept the additional bureaucratic burden.

The main reasons for U.S. project partners to get involved in FP7 projects were the following:

- Improvement of scientific excellence of the research endeavor (17.5%)
- Establishment of a wider cooperation network (16%)
- Access to specific expertise (15.5%)
- Improve relations to European researchers (13%)
- Expectations of higher research impact (12%)
- Expectations of technological advantages/breakthroughs (7%)

When analyzing the challenges in transatlantic research cooperation under FP7, the **lack of funding for the U.S. partners** was a “very relevant” or “relevant” obstacle to FP7 participation in the opinion of 48% of the U.S. FP7 project partners.

38% of U.S. FP7 project partners claimed that **applicable law/jurisdiction** was a “very relevant” or “relevant” obstacle to FP7 participation.

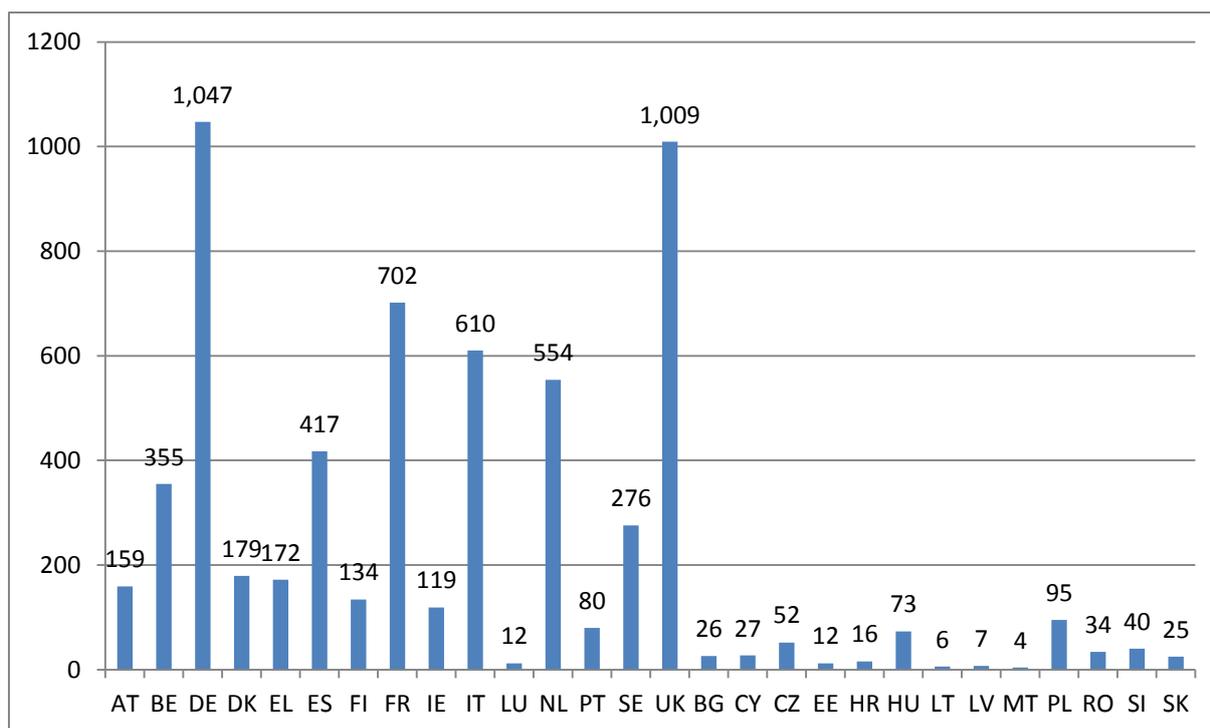
32% of U.S. FP7 project partners claimed that the **administrative burden and costs** were “very relevant” or “relevant” obstacles to FP7 participation.

According to European coordinators of FP7 research projects and their U.S. project partners, one recommendation is to reduce administrative and legal barriers to EU-U.S. FP7 collaboration. Another recommendation is the synchronization of EU and U.S. funding programs allowing the U.S. partner to receive national funding if FP7 funding is not approved.

3.4 U.S. Collaboration with European countries

U.S. collaboration in FP7 projects is concentrated on several European countries and measured by collaborative links by country. A collaborative link is defined between each pair of participants in each contract. The U.S. has clearly two favorite European countries for FP7 collaboration, i.e. **Germany with 1,047 collaborative links and the UK with 1,009 collaborative links in FP7**. France (702), Italy (610), the Netherlands (554) and Spain (417) are following as main European Member States for transatlantic STI collaboration.

Whereas the U.S. has in total 6,279 collaborative links with European Member States, it has 506 collaborative links with Associated Countries (314 with Switzerland, 112 with Norway and 77 with Israel as the main three Associated Countries) as well as 79 collaborative links with EU Candidate Countries (45 with Turkey and 11 with Serbia as the main two EU candidate Countries).



U.S. collaborative links in FP7 per European country

The collaborative links strength shows only preferences between European countries and the U.S. and does not allow for any essential bilateral conclusions for transatlantic STI collaboration. Interestingly, many of the above mentioned favourite European collaboration countries for the U.S. are represented in the largest and most important European ancestry groups in the U.S. (Spanish-Americans as first European ancestry group, followed by the German-Americans, English-Americans and Italian Americans; http://en.wikipedia.org/wiki/European_American). One might conclude that the willingness to cooperate with European researchers and successful STI cooperation implies some prerequisites for U.S. researchers, either affinity to the country in question, knowledge of the language, already established contacts and experienced trust during professional stays in Europe, and maybe more. Another reason certainly is that the mentioned countries are the largest and most research intensive ones in Europe.

4. Main findings from transatlantic research cooperation in FP7

4.1 Learnings from U.S. participation in FP7

U.S. as one of the most important Third Country partner in FP7

With about 80 Million Euro EC contribution, the U.S. was ranking first among Third Countries receiving European funds for its contribution in FP7 EU research projects. Compared to about 11 Million Euro in FP6 for the same period of seven years, the increased importance of the U.S. as targeted Third Country for the European Union is obvious.

U.S. researchers as very important research partners for European consortia

The total number of **517 U.S. participations in 410 projects** (signed Grant Agreements), second highest figure after Russia, also shows that U.S. researchers were very important partners for European research consortia in FP7 **compared to 400 participations of U.S. organizations in 358 projects in FP6.**

The European Commission's endeavors to reinforce international and especially transatlantic research collaboration in FP7 compared to FP6 were apparently fruitful.

Health research having a predominant role in transatlantic STI cooperation under FP7

In FP6

- ICT with 46% EC contribution ranked first,
- Life Sciences with 28% (comparable to Health in FP7) ranked second, and
- Sustainable development, global change and ecosystems with 17% EC contribution ranked third (comparable to Environment in FP7).

Comparing EC contribution over the thematic areas in **FP7**,

- **Health** with 63% EC contribution,
- **ICT** with 19%, as well as
- **Food, Agriculture and Fisheries, and Biotechnology** with 4%, were the top three priorities for U.S. participation.

Health research started to take a predominant role in transatlantic STI cooperation under FP7 due to the NIH-EC Reciprocity Agreement in 2008 on equal funding conditions. Whereas ICT was an important priority in FP6 already, research cooperation for Food related issues ranked third in FP7 displacing Environment related research cooperation on the fourth place in FP7.

Mutual trust as very important prerequisite for establishing cooperation networks and successful STI cooperation in FP7

According to the online survey under the BILAT USA project Analysis of Existing Instruments, Regulations and Obstacles for U.S. participation in the 7th Framework Programme (FP7), the main reasons for U.S. researchers joining FP7 projects were, on the one hand, improving scientific excellence and access to specific expertise. On the other hand, the establishment of a wider cooperation network and improving the relations to European researchers were named as the second most frequent reason. With 90% of the interrogated FP7 STI cooperation activities having been established on the basis of previous contacts of the U.S. partner – either to the project coordinator (69%) or to another partner from the consortium (21%) it is evident that the establishment of cooperation networks and successful collaboration needs mutual trust and experience.

Lack of funding, applicable law and administration as main perceived hurdles to U.S. participation in FP7

According to the above mentioned online survey under the BILAT USA project, **the lack of funding for the U.S. partners** was the most frequently named hurdle to FP7 collaboration, followed by **applicable law and jurisdiction** and the **administrative burden and costs of FP7 participations.**

4.2 Recommendations for future STI collaboration under H2020

Transatlantic research cooperation in Health as best practice example

An agreement of equal funding between a U.S. funding agency and the European Commission, such as the NIH-EC Reciprocity Agreement signed in 2008 on equal funding conditions, can boost transatlantic STI cooperation. Transatlantic research cooperation in Health is a best practice example which should be considered being implemented for other joint transatlantic priorities as well (such as Marine and Arctic Sciences, Nanotechnologies or Transport).

Strategic and aligned activities in fields of mutual interest and joint priorities

Reaching agreements between funding agencies needs smaller steps ahead, which are each very important and necessary when focused in the same direction towards a joint goal. BILAT USA 2.0 made the experience that oftentimes there is no joint vision and that more communication and discussion is needed in order to make progress more efficiently and reach results more effectively. Future BILAT projects should support this process and set measures to improve communication.

Increase visibility in the U.S. to build trust

While BILAT USA set the ground for supporting transatlantic research cooperation in FP7 and initiated the first important activities and collaborations on researcher level as well as on policy level, BILAT USA 2.0 widened and strengthened the transatlantic policy dialogue as well as contributed to raise the awareness of FP7 and Horizon 2020, not only with supporting NCURA as first U.S. pilot NCP. The following BILAT projects should deepen and improve support activities that address:

- research communities in the U.S. in order to raise awareness about Horizon 2020 (and the following Framework Programmes) and comprehensively address challenges and benefits of transatlantic STI cooperation.
- multipliers in the U.S., such as NCURA, in order to strengthen their position as NCPs and knowledge carriers.
- Policy-makers on both sides of the Atlantic in order to facilitate the upcoming transatlantic policy dialogue and influence future activities and priorities based on the experiences and learnings gained in the projects.

Annex 1 Abbreviations

Abbreviations	Full name
AC	Associated Country
CP	Collaborative Project
CSA	Coordination and Support Action
EC	European Commission
EU	European Union
ERA	European Research Area
ERC	European Research Council
FP6/FP7	Sixth/Seventh Framework Programme
FAFB	Food, Agriculture and Fisheries, and Biotechnology
HES	Higher and secondary education institutes
ICT	Information and Communication Technologies
JSTCC	Joint Committee meetings of the S&T Agreements
JRC	Joint Research Centre
JTI	Joint Technology Initiative
MS	Member State
NCURA	National Council of University Research Administrators
NIH	National Institute of Health
NMP	Nanotechnologies, Materials and new Production technologies
PRC	Private for profit (excluding education)
PUB	Public body (excluding research and education)
REC	Research organizations
SFIC	Strategic Forum for International S&T Cooperation
SICA	Specific International Cooperation Actions
SSH	Socio-economic Sciences and Humanities
STA	Science and Technology Agreement
STI	Science Technology and Innovation
S&T	Science and Technology
U.S./USA	United States of America

Annex 2 References

Inventory of existing programmes in Europe with the USA, BILAT USA 2.0, 2014

MONITORING REPORT 2012, EC, 2013

Analysis of Existing Instruments, Regulations and Obstacles for U.S. participation in the 7th Framework Programme (FP7), BILAT USA, 2012

Report on the Analysis of U.S. participation in the 6th and 7th Framework Programmes, BILAT-USA, 2010

International Cooperation Activities of the Seventh Framework Programme's Capacities Programme - Interim Evaluation Report of the Expert Group, EC, 2010

