



***D.4.1 – Benchmarking on best practices for
EU-LAC cooperation in ICT***

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EXECUTIVE SUMMARY

The LEADERSHIP project supports European and Latin American research and innovation (R&I) cooperation in ICT by providing input to bilateral and bi-regional dialogues on Science, Technology and Innovation, thus ensuring continuity and enhancing collaborative ICT R&I in Horizon 2020 and other programs.

The main objective of this document, Benchmarking on best practices for EU-LAC cooperation in ICT (D4.1), is to identify and communicate good practices in order to enhance Latin America participation in ICT cooperation projects under Horizon 2020 and other programmes. This study, as described in DoW (Task 4.2), was carried out in three phases: (1) Analysis of the state of the art of the EU-LAC cooperation, (2) Identification of good practices for R&I ICT cooperation between Europe and Latin America, and (3) Recommendations for a bi-regional roadmap in ICT.

An analysis of the the state of the art of the EU-LAC cooperation was performed. It shows that the four LAC target countries with Liaison Offices (Argentina, Brazil, Chile and Mexico) have developed a very productive relationship with Europe. In the case of Mexico and Brazil, which are not automatically eligible countries in H2020, different approaches were selected in order to continue their cooperation with Europe: Brazil through EU-Brazil-ICT coordinated calls, whereas Mexico has set up a programme to finance their national participants in H2020 projects.

In addition to the four BILAT projects (Argentina, Brazil, Chile and Mexico) supporting bilateral cooperation with Europe, INCO projects funded by the EC DG Research and Innovation (ALCUE NET, ERANet-LAC) and ICT projects funded by EC DG CONNECT (LEADERSHIP, CONECTA2020) support the bi-regional cooperation in R&I and ICT, in line with the European Commission' strategy to strengthening International Cooperation in Research and Innovation with Latin American countries.

The document also identifies good practices and lessons learnt from the experience gathered in EU-Brazil Coordinated Calls, the ERANet-LAC First Joint Call, the FIWARE Mexican initiative, the EUREKA initiative, the Enterprise Europe Network (EEN) nodes in Latin America, as well as from the insights gathered through in-depth interviews with coordinators and partners of INCO and ICT cooperation projects between Latin America and Europe. Preliminary findings were discussed at the Workshop on EU-LAC cooperation in ICT organized by LEADERSHIP and ABEST III projects on 11 March 2015, in Buenos Aires.

As a result of this work, the following 10 Good Practices for EU-LAC cooperation were identified:

GP1: In the countries where a Liaison Office is in place, the governmental support is quite effective.

GP2: The themes and the areas to be included in Brazil-EU Coordinated Calls are established by common agreement between Brazil and the European Commission.

GP3: Both parties, Brazil and the EC, have shown a common interest to jointly implement and evaluate the Coordinated Calls.

GP4: High interest from Brazilian and European institutions to articulate consortia for research projects

GP5: Both Brazil and the EC showed willingness to solve the problems that appeared while the different calls were launched.

GP6: As Mexico is not automatically eligible for financing through the H2020 programme, its government quickly agreed to finance their nationals participating in funded H2020 projects through a specific programme managed by CONACYT.

GP7: ERANet-LAC showed the viability of implementing joint initiatives that involve several funding agencies from Europe and Latin America countries.

GP8: The high number of proposals received by ERANet-LAC showed that these initiatives have a high impact among researchers.

GP9: The Mexican FIWARE platform offers numerous opportunities to develop applications and services (enhancement their computing capacity, and external parties), and it shows a possible roadmap for the expansion of a European platform to the LAC region.

GP10: Latin American nodes of the EEN (located in Chile, Mexico, Brazil, Peru and Argentina) support public and private entities (SMEs and research institutions) to participate in processes of innovation, cooperation, internationalization and knowledge transfer with international networks of science and technology including stakeholders of the EU.

Furthermore, a set of recommendations to enhance EU-LAC institutional dialogues and coordination concern to the nomination of ICT country representatives to the EU-CELAC SOM Working Group, to reinforce the strategic content and agendas of the SOM, to disseminate the ICT R&I priorities identified by LEADERSHIP to define areas of common interest, as well as to harmonise the different bureaucracies and national rules among the two regions when implementing joint and coordinated calls. Also, it is suggested to promote joint education opportunities into R&I programmes, to capitalise on the experience of EU-BR coordinated calls, to define common rules on key issues (e.g. IPR, privacy) as well as to involve a big number of funding agencies in joint calls.

Additional recommendations to the EC are provided, in the sense to include the whole Latin America region among its priority and strategic partners as well as to support joint calls between EU and LAC funding agencies.

Finally, the last set of recommendations addressed the Latin American governments and funding agencies to offer funding instruments empowering local organisations (in particular SMEs), to be actively involved in bi-regional cooperation, as well as to take advantage other international cooperation opportunities such as FIWARE, EUREKA and EEN. Furthermore, it is suggested to support networking and brokerage activities in Latin America, to consider several funding agencies to participate in joint activities, as well as to promote reciprocity by giving visibility to LAC funding programmes open to Europeans.

1 INTRODUCTION

1.1 Objectives

The main objective of the Benchmark on best practices for EU-LAC cooperation in ICT is to identify and communicate good practices in order to enhance Latin America participation in ICT cooperation projects under Horizon 2020.

This study, as described in DoW (Task 4.2), was carried out in three phases: (1) Analysis of the state of the art of the EU-LAC cooperation, (2) Identification of good practices for cooperation between Europe and Latin America in view to increase in Horizon 2020 and other cooperation programmes, and (3) Recommendations for a bi-regional roadmap in ICT.

1.2 Methodology

The information to build this benchmarking study has been collected and analysed following a standard market research methodology, combining desk research as well as in-depth interviews and discussions with on-going EU-LAC projects framed within ICT, e-infrastructures, INCO-Net, ERA-NET, BILAT and other thematic programmes.

1.2.1 Desk Research

Desk research activities included the review of projects' websites and available documentation such as deliverables and publications. In addition, the outcomes from the former ICT project AMERICAS were taken into account. The results and conclusions of the AMERICAS's feasibility study on joint strategies for future cooperation initiatives were revisited, in particular the assessment of EU-Brazil coordinated calls in ICT and conditions for Europeans to access Latin American countries research programmes. Regarding reciprocity for access to LA programmes, the conclusions from final reports of the two ACCESS4EU projects targeting Mexico (ACCESS2MEXCYT) and Brazil (APORTA) as well as information provided by the SOM cross-cutting working group were taken into account to feed and update reciprocity matters to access LAC R&I programmes.

Finally, the study has been performed in cooperation with ALCUE-NET since the information gathered within its Observatory of the EU-LAC cooperation in the ICT field was monitored and used as input for this benchmarking study.

1.2.2 In-depth interviews and discussion

A total of 16 in-depth interviews with coordinators and experts on EU-LAC R&I cooperation were carried out as detailed in the table below. In addition, a discussion on the preliminary results of this study was held during the EU-LAC International Cooperation Workshop (D4.2) that was carried out on 11 March 2015 in Buenos Aires, Argentina in the framework of ABEST (Argentina-EU Liaison Office) 10 years celebration.

Table 1: Benchmark study methodology

Targeted Programmes	<ul style="list-style-type: none"> • ICT, e-Infrastructures, INCO-Net, BILAT, @Lis, ERA-NET, etc.
Interviews target	<ul style="list-style-type: none"> • Project coordinators and partners
Outcome	<ul style="list-style-type: none"> • Good practices to enhance Latin America participation in R&I ICT
Topics for semi-structured questionnaire	<ul style="list-style-type: none"> • Target areas • Success factors • Barriers for EU-LAC cooperation (during proposals, negotiation and project implementation phases) • Barriers to joint initiatives • Reciprocity for access to LA programmes
Number of Interviews	16 interviews were conducted (9 from LAC, 7 from Europe)

2 STATE OF THE ART OF THE EU-LAC COOPERATION

This chapter presents the state of the art of the EU-LAC cooperation, in particular in the sub-region composed by Argentina, Brazil, Chile, Mexico and Colombia. It compiles information from the different countries' Liaison Offices and EU-LAC projects, and from the Feasibility Study for Joint Initiatives produced by the AMERICAS project¹.

2.1 Argentina

Cooperation among Argentina and a large number of the countries that are currently members of the European Union (EU) has a long and productive tradition. Since 1984, the EU applies a policy of research and technological development based on multi-annual Framework Programmes (FP). A lot of researchers, groups and institutions from Argentina began to participate in the FP since 1986, thus consolidating a strategic partnership of mutual interest.

The signing of the Agreement on Scientific and Technological Cooperation between the European Union and Argentina in 1999 strengthened this relationship. Through this instrument, Argentina became the seventh country in the world and the first in Latin America to provide legal support to joint scientific research and technological development. The Agreement also allows strengthening innovation processes in Argentina through a greater interaction between R&D capabilities from Argentina and EU, as well as the development of new productive and technology-based business linkages in areas of common interest.

Since 2005 the EC supported its Liaison Office through the projects ABEST-Phase I (October 2005- October 2009) and ABEST-Phase II (October 2009- September 2012), and ABEST Phase III (ongoing since October 2012).

Argentina is quite active in participating in all forms of joint initiatives (both bilateral and multilateral). Beyond strengthening EU-AR policy dialogue in STI and supporting the EU-LAC S&T process strongly promoted by the Senior Officials Meetings (SOM) and the Joint Initiative for Research and Innovation Roadmap recommendations, Argentina incorporated new mechanisms and instruments to encourage an innovative approach promoting S&T bilateral cooperation and the articulation with ALCUE-NET and ERA-NET LAC projects, as well as being a node of the Enterprise European Network. All these new instruments and actions are devoted to increase Argentinean participation in EU projects, with an emphasis in innovation: stakeholders from Europe are currently invited to join in the different activities so that they become aware of the opportunities from Argentinean national funding schemes and cooperation programmes; also ICT researchers and business people are encouraged (and funding is provided) to participate in different activities in Europe. These efforts are interconnected with EU innovation and competitiveness programmes, such as those promoted by the Enterprise Europe Network (EEN), and Horizon 2020.

¹ http://leadershipproject.eu/wp-content/uploads/2013/11/D4-2_Feasibility-Study-on-joint-strategies_final.pdf

2.2 Brazil

Established in 1960, the EU-Brazil bilateral relations are governed by the Framework Cooperation Agreement signed in 1992, the EU-Mercosur Framework Cooperation Agreement concluded in 1995 and the Agreement for Scientific and Technological Cooperation signed in 2004, in force since 2006².

The bilateral relation has been also strengthened through the EU-Latin America/Caribbean Summits, now EU-CELAC Summits, the first taking place in Rio de Janeiro (1999) and the last one in Brussels (2015).

To further deepen the bilateral relation, the EU-Brazil Strategic partnership was signed in 2007 during the first EU-Brazil Summit (Lisbon) and later, in 2008, the EU-Brazil Joint Action Plan (JAP) was adopted including a reinforced cooperation in S&T. As part of this process, the EU-Brazil Joint Steering Committee (JSCM) on Science, Technology and Innovation Cooperation is regularly held in order to evaluate the progress on the bilateral roadmap.

The 6th Joint Steering Committee Meeting was hosted by the European Commission in Brussels on 26 and 27 June 2013. During this meeting, it was agreed to step up cooperation in the following key areas:

- Marine research
- Food security, sustainable agriculture and bio-economy
- Energy
- Nanotechnologies

In addition, "Innovation" was reaffirmed as key aspect for cooperation between EU and Brazil. Specific Working Groups have been set up with the mandate to engage in a stock taking exercise so as to capitalize on what exists, identify joint actions and timelines for implementation, as well as to monitor and report on implementation.

More recently, at the occasion of the EU-Brazil Summit (24th of February, 2014), leaders of Brazil and the European Union met in Brussels to discuss the ways in which their strategic partnership could be best developed in key areas that are of vital interest to both areas' populations. In the Joint Statement, cooperation on research and innovation was proposed as a means of strengthening competitiveness, creating jobs, and addressing global challenges in areas such as sustainable development, climate change, environment, energy, human rights, and international cyber policy.

2.2.1 Roadmap for EU-Brazil cooperation

A new roadmap was established for cooperation under H2020. The text emphasizes the strong ties of the EU-Brazil cooperation in the field of S&T: "As of February 2014, Brazilian entities participated 211 times in FP7 signed grant agreements, receiving a total EU contribution of 31.3 million euro (...). There are presently about 15 on-going collaborative activities, involving 18 European research institutions and 14 Brazilian entities".

The text also stresses Brazil's progresses in the field of S&I and in international cooperation, especially thanks to its Science without Border (CsF) Programme. That is the reason why "Brazil has been targeted as an important partner for cooperation in the first Horizon 2020 work programme (2014-105), encouraging

² Source: BBICE+ <http://www.b-bice-plus.eu/eu-brazil-policy-dialogue-on-research-and-innovation/>

cooperation with Brazilian researchers included in key areas such as biofuels, ICT and marine research”.

B.BICE+ role is underlined as it has been “supporting the policy dialogue and durable partnerships between the EU and Brazil”. Priorities for the future of EU-Brazil cooperation

Following priorities have been jointly agreed for the future of EU-Brazil cooperation in R&I:

- Marine Research and bio-economy, food security, sustainable agriculture
- Energy
- Nanotechnology
- Information and Communication Technologies (ICT)

The European Commission published its roadmap for international cooperation as a part of the Report on the implementation strategy for international cooperation in research and innovation.

2.2.2 EU-Brazil ICT coordinated calls

Europe and Brazil share a strong background in ICT collaboration and since 2010 have been running joint calls for project proposals – known as “Co-ordinated Calls”. The 3rd Call was published in October 2014 with a deadline for submission April 2015. In parallel, a working group has prepared a report on themes and topics for the 4th call (2016) and other future calls to be presented to the European Commission and Ministry of Science, Technology and Innovation (MCTI), Brazil. This report, called “White Paper Shaping EU- Brazil ICT Future Priorities Oct 2014”³, includes the ideas and wishes of the stakeholders based on a short survey circulated to more than 500 contacts ranging from stakeholders from academia and industry working in ICT.

According to the results of that report, areas of interest for future co-ordinated calls can be grouped into 5 macro areas for those that are already collaborating: ICT services, Data Management, Industry & Business, cross-disciplinary and specific domain application areas.

During the Cloudscape Brazil event, organised by the EU Brazil Cloud Connect project in Rio on 20th October 2014, the main results and outcomes of the 2nd coordinated EU- Brazil were presented: different scientific problems in biodiversity, climate, medical informatics and genomics demand intensive compute and data. It is equally important to outline the role of the infrastructure and the importance on security and privacy.

2.3 Chile

Chile signed an Agreement on scientific and technological cooperation with the European Community in September 2002⁴. Both sides ratified it in the following year. The agreement has a validity of five years and is renewed tacitly for the following five years unless a change is suggested.

The agreement creates an institutional foundation for a wide variety of knowledge centred cooperation. Regular meetings of the Steering Committee offer opportunities for developing bilateral policy dialogue and promote, monitor and

³ Can be downloaded from <http://www.eubrazilcloudconnect.eu/content/eu-brazil-2016-coordinated-calls-ict-%E2%80%93-eu-brazil-2016-working-group-findings>

⁴ Sources: <http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=chile>, <http://www.internationales-buero.com/en/6095.php>

steer cooperation. The European Framework Programmes are a major instrument for implementation, and Chile's national mechanisms and research support schemes are also being used in pursuit of the objectives of international scientific cooperation. Many EU Member States are also actively engaged with Chile in S&T cooperation.

The main areas of cooperation under the Agreement have been in the thematic areas of Health; Food, Agriculture, Fisheries and Biotechnology; Environment; Nanotechnology; ICT and Energy.

During the first six years of the 7th Framework Programme (up to May 2013), 97 Chilean institutional partners have been supported in some 49 signed grant agreements for different projects, mainly under the "People" Specific Programme - Marie Curie Actions - (45 participations). Chilean institutions have participated in projects in the areas of ICT (10); Food, Agriculture and Biotechnology (9) and Environment (8). A total of 40 Chilean researchers have travelled to Europe with Marie Curie Fellowships. Almost 10 million EUR has been committed to the Chilean participants for all these different activities.

Chile is also very active within the context of regional cooperation between the EU and Latin America, notably in the EU and the Community of Latin American and Caribbean States (CELAC) Joint Initiative for Research and Innovation. Chile co-chairs, together with Finland, the Working Group dealing with ICT.

CEST+I

The bilateral CEST+I project (Chile-European Union STI Initiative) seeks to promote research collaboration and is based on two bilateral INCO projects – CHIEP and CHIEP II. It contributes to enhancing cooperation in science, technology and innovation between Chile and the EU. It also aims to heighten Chile's visibility among European research institutions. The project is intended to contribute to the implementation of the Joint Initiative for Research and Innovation (JIRI) between the EU and LAC.

Background

Chile's research and development structure is well-integrated in international collaborations. As was the case with the INCO successor projects, CEST+I helps bolster the existing cooperation between Chile and the EU Framework Programme. More than 150 research teams participated in the successor projects which were supported by the EU contact office. Along with its focus of bringing together the Chilean and European research landscapes, CEST+I concentrates on the aspect of innovation, particularly in terms of technology transfer and patents. It is designed to encourage European and Chilean technology platforms to form ties to one another.

Goals

This project seeks to:

- Help boost the participation of Chilean scientists and innovators from the private and public sector in FP7 and in European innovation networks.
- Enhance cooperation between European and Chilean researchers by creating stronger networks of researchers and projects. The objectives will be achieved through working visits, scientific seminars, brokerage events and joint participation in calls for proposals under Horizon 2020 und participation in NCP network meetings.
- Stimulate R&D dialogue between the EU and Chile through meetings, subject-specific workshops. Coordinate the bilateral activities of European countries with Chile.

- Identify potential synergies between EU activities with Chile that go beyond FP7 such as Horizon2020, EU-LA networks and Latin American Technology Platforms (LATPs). The projects will address three issues with particular relevance for society: high quality food, climate change and energy.
- Define the key collaborative issues. Several of the targeted areas are astronomy, agriculture/food sciences, research in Antarctica with respect to climate change and biotechnology.
- Promote innovation and knowledge transfer. Intensify the link between science and industry through research-based innovation. Bring together Chilean spin-offs at universities, companies with research departments and innovative industries with European actors. Disseminate European expertise in the international protection of innovative research (intellectual property rights, patenting und licensing) through training and capacity building.
- Establish links to other European Technology Platforms (ETPs), transfer offices at the universities and research centres in Chile and the EU and foster the transfer of knowledge between them.
- Improve the exchange of information and the collaboration between Chilean and European scientists to create better conditions for joint projects, making it possible for researchers to participate in NCPs (National Contact Points) and NIPs.

Activities

The individual work packages and tasks within CEST+1 cover a broad range of activities. In particular, the project will:

- Identify Chilean capacities in science and innovation and encourage their visibility, increase Chilean participation in EU funding programmes and intensify the dialogue between the EU and Chile.
- Promote bi-regional synergies between the EU and Chile, collaboration between the LACs and the INCO liaison office of the region and broaden dialogue with stakeholders.
- Strengthen participation in Chilean and European NCP networks.
- Foster cooperation between Chilean and European innovation projects particularly in technology transfer and patents. Bringing together European and Chilean technology platforms

Through a dissemination strategy using various channels (incl. website, newsletter, events), CONICYT communicates the capacities that already exist in science and innovation to actors domestically and internationally with support from all project partners.

2.4 Colombia

EU relations with Colombia are based on the Cooperation Framework Agreement between the EU and the Andean Community countries, which was signed in 1993 and came into force in 1998⁵. From then, EU has been a priority for Colombia in its S&T agenda.

By the end of 2007, COLCIENCIAS became a National Department of Science and Technology (Administrative Department of Science, Technology and Innovation) for promoting public policies to encourage ST&I in Colombia. Since that year, COLCIENCIAS is the INCO NCP for EU cooperation programmes.

The Colombian Policy of Science and Technology mainly focuses on the consolidation of research capacities in increasing number of qualified researchers (PhD), strengthening of research infrastructure, productive transformation, and

⁵ Source: http://europa.eu/rapid/press-release_IP-11-1287_en.htm?locale=en

social appropriation of the Science and Technology.

Bilateral agreements

Colombia, through its Administrative Department of Science, Technology and Innovation COLCIENCIAS, has bilateral agreements in the field of S&T with the following European Countries:⁶

Germany: bilateral agreements have been signed with the following institutions:

Agreement for Cooperation and Technical Assistance, Enterprise and Innovation between COLCIENCIAS and the Colombian-German Chamber of Commerce & Industry. The Agreement is aimed at strengthening scientific cooperation in technology, capacity building for technology management and innovation for the productive sector, and setting up of specific international cooperation activities. Letter of Intent for German-Colombian Academic Cooperation between Deutsche Forschungsgemeinschaft (DFG) of Germany and COLCIENCIAS. The objective is to support the following joint research and training activities: Joint Research Projects; Exchange of scientists, post-docs and PhD students in joint research projects; organisation of seminars and workshops; planning and coordination of joint activities.

Belgium: bilateral agreements have been signed with the following institutions:

Development of relations in the field of scientific and technological research and joint development of activities and actions in the following fields: biotechnology, Technological innovation, energy saving.

Agreement between the General Commissariat for International Relations of Belgium and French Community and COLCIENCIAS in the field of ICT.

Spain: a bilateral agreement has been signed with:

COLCIENCIAS ICT Agreement in the field of ICT between COLCIENCIAS and the Centre for Industrial Technological Development (CDTI), Spain for Staff Exchange.

France: bilateral agreements have been signed with the following institutions:

Agreement on Technical and Scientific Cooperation between Colombia and France in the Field of Academic Cooperation Agreement (ECOS-NORD) aimed at strengthening and developing cooperation between institutions of higher education and research in France and Colombia through the development of joint training and research and development of research projects.

Agreement on Technical and Scientific Cooperation between Colombia and France to create a fund to promote Colombian-French cooperation in the field of engineering studies (BOMPLAN Agreement). The purpose of the agreement is the creation of a joint financing fund of COLCIENCIAS and the Embassy of France in order to provide scholarships to students enrolled in a doctoral program in Engineering, to perform internships.

UK: bilateral institutional agreements

COLCIENCIAS recently signed on May 21, 2015 a new cooperation agreement with the Scientific Research Unit Policy (SPRU) at the University of Sussex in the UK, with the aim of strengthening the capabilities and policies of COLCIENCIAS in

⁶ Source: FORESTA Project <http://forestaproject.eu/results/ByCountry/Colombia/Doc41.htm>

Science , technology, and Innovation

International Cooperation in ICT⁷

Colombian ICT priority R&I areas have much in common with the European ones, defined by the EU Framework Programme for Research and Innovation Horizon 2020 (H2020), in particular with the H2020 pillar of societal challenges. Among Colombian ICT priority R&I areas framed within this pillar are: Inclusive, innovative and reflective Societies; Health, demographic change and wellbeing; and Secure, clean and efficient energy. This reflects a fertile ground for future cooperation between Europe and Colombia in ICT R&I.

In regards to LAC Digital Agendas, Colombia is guided by the "Vive Digital Plan 2" addressing the challenge of achieving prosperity through democratic ownership and the use of technology. It bets on Internet overcrowding as it is shown that there is a direct correlation between Internet penetration, ownership of ICT, employment generation and poverty reduction. The goals and action lines of the "Vive Digital Plan 2" are aligned with the Institutional Strategic Plan and with Government's policies that aim to position Colombia as a global leader in the development of social apps directed to the poorest as well as the most transparent and efficient government through ICT.

Concerning Colombian funding mechanisms, a total of 15 ICT funding programs were identified amounting US\$ 1,126.92 million. Of this funding, 97% (US\$ 1,091.85 million) has European eligibility. Government funding programs of ICT R&I in Colombia are centralized through the Administrative Department of Science, Technology and Innovation (COLCIENCIAS) responsible of the National System of Science, Technology and Innovation (SNCTI).

In the light of the Colombian ICT regulations to create appropriate conditions strengthening international cooperation, the following sectorial regulations have been detected as crucial: access and interconnection best practices, national regulatory authorities, and review of universal services conditions.

2.5 Mexico

Bilateral relations between the EU and Mexico are governed by the Economic Partnership, Political Co-operation and Co-operation Agreement (the Global Agreement signed in Brussels on 8 December 1997 and entered into force on 1st October 2000).

At the fifth EU-Mexico summit held on 16 May 2010, a Strategic Partnership between Mexico and the EU was agreed by the parties, reflecting the readiness of both players to strengthen coordination on matters of global importance and further intensify their political, economic and cooperation links.

Signed on 3 February 2004, the Bilateral Agreement for scientific and technological cooperation between the European Community and the United Mexican States, came into force on 13 June 2005. It was renewed for another five years in 2010. The science, technology and innovation cooperation is to be seen in the context of the broader EU-Mexico Strategic Partnership agreed in 2009. The objective of the S&T Agreement is to encourage, develop and facilitate cooperative activities in areas of common interest by carrying out and supporting scientific and technological research and development activities. The Joint Steering Committee

⁷ This section was sourced by the LEADERSHIP Project report: "Country brief on EU-LAC R&I cooperation in ICT: Colombia" http://www.leadershipproject.eu/wp-content/uploads/2015/05/LEADERSHIP_Country-brief_Colombia_FINAL.pdf

Meetings (JSCM) are normally held once a year. The participants are the Mexican National Council of Science and Technology (CONACYT) from the Mexican side, and from the EU side, Directorate General for Research and Innovation.

The main areas of cooperation are: environment; information and communication technologies; food, agriculture, fisheries, and biotechnology; health; nano-technologies, transport materials and new production technologies; energy; social sciences as well as infrastructures.

Mexico ranks twelfth among the International Partner Countries in terms of participation in the 7th Framework Programme for Research and Innovation. As with all our major partner countries, the dual approach was used over the lifetime of FP7 to stimulate international participation of Mexican entities in FP7. This is characterised by:

- The openness of FP7, where bottom up participation of Mexican public and private research performing organisations is promoted;
- Targeted actions, through which cooperation on particular pre-selected topics are stimulated.

The instruments for the targeted actions included coordinated calls as well as Specific International Cooperation Actions (SICAs). There are in total 85 research projects with some 100 Mexican participations, and the EU contribution to the Mexican partners is approximately €11 million.

The VI Mexico-EU Summit was held on 17 June 2012 in Los Cabos. The Leaders "... recognized the importance of the bilateral dialogue in Science, Technology and Innovation which has reached its 5th edition. They decided to continue harnessing the opportunities that the European Union offers in the field of research and development within the Framework Program and greater diffusion of the communication channels and the links between Mexico and the EU under the new Horizon 2020, especially those concerning research and innovation for the best use of the respective infrastructures of research and the joint creation of innovative products in fields such as the fight against climate change, food security and energy production, among others."

DG Education and Culture and the Ministry of Public Education of the United Mexican States are responsible for the policy dialogue on education. In October 2009, the Council approved a strategic partnership with Mexico, following the Communication on an EU-Mexico Strategic Partnership of July 2008. A Joint Executive Plan was consequently adopted at the EU-Mexico Summit of 16 May 2010 which underlines, inter alia, the importance of cooperation on education between the EU and Mexico. Stress is notably laid on academic cooperation and mobility. A Joint Declaration to enhance cooperation and dialogue on Education and Training was signed in June 2009. The Joint Declaration establishes the basis for regular exchanges of best practice on issues such as the efficiency and equity of education systems and the internationalisation and modernisation of higher education and training systems. A first EU-Mexico Higher Education Conference was held on 20-22 September 2010 which was followed up at political level by a Senior Officials' Meeting (SOM) in Mexico City on 23 November 2010. At the meeting, parties agreed to carry out joint activities to further facilitate mobility and academic cooperation between the EU and Mexico. A joint EU-Mexico study on internationalization and transparency tools has been finalised in October 2012.

An agreement on Scientific and Technological Cooperation was signed in 2004 between the European Commission's Directorate General for Research and Technological Development (RTD) and the Mexican Government, represented by

the Mexican Council for Science and Technology (CONACYT). It entered into force in July 2005. The partnership has the aim of evaluating, consolidating and better coordinating existing potentials.

During these years there have been remarkable advances in scientific, technological and innovation (ST&I) cooperation between the European Union (EU) and Mexico. The Agreement for Scientific and Technological Cooperation between the EU and Mexico (2005-2010) frames the collaborative work that has been encouraged by the National Council for Science and Technology (CONACYT) and the European Commission (EC), since the Agreement came into effect in June 2005. The Agreement was renewed in 2010 for a second period of 5 years, based on a positive evaluation of the specific activities developed and their value added to the EU-Mexico Science, Technology and Innovation (ST&I) cooperation. The actions developed during these years include the use of different type of instruments to support research, technological development and innovation, several thematic areas encouraged, the commitment of financial resources from the EU and Mexico and promising outcomes of the ST&I collaborative work developed by higher education institutions, research and technological centres, enterprises and individual experts.

EU-MEX INNOVA

The 1st stage of the bilateral cooperation with the EU (UEMEXCYT) established the Bureau for International Cooperation with the European Union, which enhanced the efficiency and effectiveness of resource use on issues of common interest, improved the knowledge on existing policies and instruments for the development of ST&I between Europe and Mexico. The 2nd stage (UEMEXCYT2), created a website with information about the cooperation opportunities in the FP7; developed a Mexican researchers database, and organized a series of events to promote the programme, to help build networks of researchers, and to direct them in the preparation of their proposals. The 3rd stage, the European Union – Mexico Bilateral Innovation Initiative (EU-MEX INNOVA), seeks to develop and strengthen collaborations between the two sides to cope societal challenges and industrial technologies through international cooperation, by making science, research and innovation proceed more rapidly and more cost effectively.

EU-MEX INNOVA takes into consideration the previous efforts between the EC and CONACYT (UEMEXCYT 1 & 2). The consortium considers strategic partners from France, Germany, Italy and Spain, that work with Mexico toward the objectives of the project seeking and important impact in the EU-Mexico ST&I cooperation.

*CONACYT announces its commitment to finance Mexican institutions and researchers participating in Horizon 2020 calls.*⁸

Aiming to encourage the participation of Mexican entities in the Horizon 2020 Program and in order to strengthen bilateral relations between the European Union and Mexico in Science, Technology and Innovation, the National Council of Science and Technology (CONACYT) launched the "CONACYT- H2020 call" on 25 February 2014. This new mechanism will fund the participation of Mexican researchers in all areas of Horizon 2020.⁹

⁸ <http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=mexico>

⁹ This decision was taken after Europe decided to declare Mexico as non eligible for funding in H2020 calls.

Mexican entities aiming to participate in a European consortium may apply to CONACYT for financial support. CONACYT will review the Mexican application and, if they approve it, will guarantee the financing of the Mexican partner, should the proposal subsequently be selected by the EU.

2.6 EU-LAC projects

2.6.1 ICT and e-Infrastructures projects

2.6.1.1 LEADERSHIP

[From 2012-03-01 to 2015-10-31]

LEADERSHIP¹⁰ proposes a new approach to engage more actively and strategically in supporting dialogues and partnership building for EU-LAC cooperation. At the core of the LEADERSHIP strategy is the establishment of the LAC-ICT Expert Group as a permanent and sustainable mechanism to support ICT dialogues in the region. The Expert Group collaborates closely with the EU-LAC Senior Officials Meeting (SOM) ICT Working Group, providing opinions and policy recommendations for EU-LAC dialogues and roadmaps for ICT R&I cooperation, based on high-level input from a wide range of sources and stakeholders. This top-down approach is combined with a bottom-up approach focused on promoting ICT enabling technologies in Horizon 2020 through well-targeted participatory events, like the LEADERSHIP Co-Innovation Lab, the Living Labs Spring School and the international cooperation projects Workshop. All these face to face events link ICT dialogues to the grassroots actors, i.e. the industry and ICT research and innovation communities, and stimulate innovation and engagement to identify ICT research priorities, explore new and sustainable models of open innovation, and thus supporting the definition and implementation of multi-annual roadmaps for EU-LAC cooperation under Horizon 2020.

The project covers all Latin American countries with bilateral S&T Agreements in place (Argentina, Chile, Brazil, Mexico) or involved in a regular S&T cooperation dialogue (Colombia); and extends to 11 additional countries under the umbrella of the regional partner CAF – Development Bank of Latin America (Bolivia, Costa Rica, Dominican Republic, Ecuador, Jamaica, Panamá, Paraguay, Peru, Trinidad & Tobago, Uruguay and Venezuela).

2.6.1.2 CONECTA2020

[From 2014-03-01 to 2016-02-29]

CONECTA 2020¹¹ aims at the implementation of the Technology Platforms (LATPs) of Uruguay, Costa Rica and Peru, as well as the development of an online community focused on the entailment of organizations dedicated to the use of ICT, to foster entrepreneurship and innovation in the European Union and Latin America.

CONECTA 2020 follows the work done for the FIRST Project that was able to create Latin American Technology Platforms (LATPs) in 5 countries: Argentina, Brazil, Chile, Colombia and Mexico. CONECTA 2020 is working to implement new LATPs in Costa Rica, Peru and Uruguay with the goal to maintain their sustainability in the following years. This will be done following the model of European Technology Platforms (ETPs) which are instruments that bring together industrial organizations (large industries and SMEs) and academic entities (Universities, Research and Technological centres) to develop joint visions, setting Strategic Research and

¹⁰ <http://www.leadershipproject.eu>

¹¹ <http://www.conecta2020.eu/index.html>

Innovation Agendas and to to the definition of the research priorities of the European Union (EC, 2014).

As "mirrors" of the ETPs, the LATPs are the instruments for the Latin American Region focusing on the international cooperation with Europe through the development of Research and Innovation projects. The consortium is convinced that innovation in Latin America can only be promoted through the cooperation and the union of entities interested in R&I, including the triple helix (Academy, Industry and Government).

2.6.1.3 TUCAN3G

[From 2013-02-01 to 2015-07-31]

TUCAN3G¹² is a Specific Targeted Research Project (STREP) of FP7. The goals of TUCAN3G are aligned with objective ICT-2011 10.3 "International Partnership building and support to dialogues". TUCAN3G is a consortium of 11 partners managed by UPC and technically coordinated by URJC.

The main objective of TUCAN3G is to provide affordable and profitable connectivity in rural areas by means of deploying multiple femtocells with a wireless backhaul. Specifically, TUCAN3G proposes a scenario where the wireless access network consists of distributing multiple UMTS/HSPA (3G) femtocells (HNB) with a wireless backhaul over given rural areas. Provided a reliable transport network, femtocells guarantee all the requirements of rural communications deployments: being inexpensive, sustainable, energy efficient, self-organized and long-term self-sufficient.

2.6.1.4 CHAIN-REDS

[From 2012-12-01 to 2015-05-31]

CHAIN-REDS¹³ is a FP7 project co-funded by the European Commission (DG CONNECT) aiming at promoting and supporting technological and scientific collaboration across different e-Infrastructures established and operated in various continents, in order to define a path towards a global e-Infrastructure ecosystem that will allow Virtual Research Communities (VRCs), research groups and even single researchers to access and efficiently use worldwide distributed resources (i.e., computing, storage, data, services, tools, applications).

The core objective of CHAIN-REDS project is to promote, coordinate and support the effort of a critical mass of non-European eInfrastructures for Research and Education to collaborate with Europe addressing interoperability and interoperation of Grids and other Distributed Computing Infrastructures. From this perspective, CHAIN-REDS will optimise the interoperation of European infrastructures with those present in other 6 regions of the world, both from development and use point of view, and catering to different communities

2.6.1.5 MARINET

[From 2011-04-01 to 2015-09-30]

MARINET¹⁴, the Marine Renewables Infrastructure Network, is a network of research centres and organisations that are working together to accelerate the development of marine renewable energy technologies - wave, tidal & offshore-

¹² <http://www.ict-tucan3g.eu/>

¹³ <https://www.chain-project.eu/>

¹⁴ <http://www.fp7-marinet.eu/>

wind. The network of 29 partners with 45 specialist marine research facilities is spread across 11 EU countries and 1 FP7 partner-country, Brazil.

It is co-financed by the European Commission specifically to enhance integration and utilisation of European marine renewable energy research infrastructures and expertise. MARINET offers periods of free-of-charge access to world-class R&D facilities & expertise and conducts joint activities in parallel to standardise testing, improve testing capabilities and enhance training & networking.

A number of companies and research groups have availed of free-of-charge access to European marine renewable energy infrastructures via the MARINET Transnational Access programme. To read profiles of some of the completed Transnational Access projects and details on what they have achieved, click on the links below: wave energy, tidal energy, offshore-wind energy, and cross-cutting areas (electrical, PTO, materials, etc.)

2.6.1.6 NMP-DELA

[From 2013-09-01 to 2015-08-31]

NMP-DeLA¹⁵ project is a support action funded by the EU under FP7 for two years from 1st September 2013. It aims to facilitate the deployment of advanced and enabling technologies in areas of major social challenge in Latin America through the following strategies:

1) Mapping, strategy development and recommendations

A main project focus is the pooling of knowledge on the deployment of advanced materials to meet social challenges of specific regions (in water, clean energy and healthcare). Local and regional expertise will be brought together for further analysis. A scheme will be developed to evaluate projects and initiatives that have the described objectives and to assess those projects' impacts on social indicator developments.

2) EU-LAC Networking, Consultation dialogue and Open Innovation Platform

The project will also mobilize, set-up and engage the NMP-DELA community. The aim is to engage international experts and stakeholders in real and virtual hearings and collaborative workshops on the continuous elaboration and assessment of the innovation strategy and roadmap; these experts/stakeholders will offer a full coverage of the entire value-chain, including R&D organizations, educational organization, industrial stakeholders, policy makers and government, civil-society.

3) Education, training and skills provision

Finally, the project will coordinate and organise two Summer Schools. The aim of this action is to put together training materials and educational events to increase the knowledge base of the scientific communities in Latin America and the EU. The project partners will ensure that the training materials will be wide-spread and transferred to as many R&D organizations as possible. The main focus of the training sessions will address barriers to the deployment of nano- and/or materials technologies in societally beneficial applications in Latin America and EU, coordinating the networking and knowledge activities, and covering both educational and entrepreneurial aspects. There will also be a number of side events such as free webinars and webcasts.

4) Communication and dissemination

¹⁵ <http://www.nmp-dela.eu/>

Communication activities will ensure the dissemination of information about all activities performed during the project, including all workshops, summer schools and online events, as well as the results achieved. Through the establishment of communication and dissemination tools, stakeholders in LAC and Europe will be able to keep abreast of the latest developments, partnering and collaboration opportunities, possible synergies and exploitable openings in the NMP innovation chain, and interested parties can make themselves known to the community. Information will be disseminated via a project website, regular e-newsletters, interaction and collaboration with other innovation initiatives, outreach activities complementary projects, professional networks, and stakeholder entities.

2.6.2 INCO projects

2.6.2.1 ALCUE-NET

The ALCUE NET¹⁶ project, funded by FP7, started on December 1st, 2012. It proposed an initiative to support the political dialogue for Research and Innovation in order to establish a platform for EU-LAC that brings together the actors involved in R&D information, funding and implementation, as well as other relevant stakeholders in the public, private sectors and the civil society. The project aims at supporting bi-regional political dialogue EU-LAC Joint Initiative for Research and Innovation (JIRI) during 2013-2016 (technical support structure) to reflect the suggestions and recommendations of the SOM working groups. For the first time a Latin American institution is the coordinator of a project dedicated to supporting INCO Net bi-regional dialogue. The Ministry of Science, Technology and Productive Innovation is the coordinator of a consortium of 19 institutions, 11 from Latin America and the Caribbean and 8 from Europe.

To achieve its overall objective, ALCUE NET is built both on the basis of previous experience and results and of ongoing FP7 projects as well. These initiatives will be considered to complement the activities carried out under other EU programs, in particular those related to foreign policy. In particular, the progress made by both regions that participate in the FP7 EULARINET joint project (Research and Innovation Network between LAC and EU) whose activities were designed to identify views on specific issues, coordinate activities and identify priorities for common interest will be taken into account.

2.6.3 ERANET-LAC

In order to strengthen the bi-regional partnership in Science, Technology and Innovation, ERANet-LAC's¹⁷ goal is to implement two joint calls seeking to coordinate and cluster research programmes. Furthermore, the project is aimed to mutually open research infrastructures and coordinate open innovation programmes.

ERANet-LAC lays a special focus on the innovation dimension. It seeks to involve European and Latin American innovation agencies in the joint activities as well as in trust-building actions.

The joint activities carried out are evaluated and function as a basis for a road map to be incorporated in a so-called EU-CELAC Platform for Funding Agencies. This funding platform will serve as information and communication platform and offer substantial guidelines as well as online working space to facilitate the development

¹⁶ <http://alcuenet.eu/>

¹⁷ <http://eragnet-lac.eu/about-eragnet-lac.php>

Benchmarking on best practices EU-LAC cooperation

of future concrete bi-regional joint initiatives.

The main activities of ERANet-LAC are:

- Promotion of mutual opening and coordination of existing programmes, infrastructures and cooperation.
- Implementation of 2 Joint Calls: The first one was launched in September 2014 and the second one will be launched in the end of 2015.
- Coordination of a consultation process to inform funding agencies and research institutions from both regions about the joint actions.
- Building a platform for EU and CELAC funding agencies.

The beneficiaries of ERANet-LAC:

In concrete terms, the project fosters the involvement of numerous national and international research and innovation funding organizations from Europe, Latin-America and the Caribbean countries. The specific initiatives will be demand-driven through a bottom-up approach, guaranteeing a real interest from both sides. This means that researchers from both regions will have the opportunity to actively participate in bi-regional R&I projects initiated by ERANet-LAC.

1st Joint Call: Participating countries/regions and Call Topics

In total, 20 national/regional funding organizations agreed to participate in the first ERANet-LAC Joint Call for funding research projects.

- Argentina: Ministerio de Ciencia, Tecnología e Innovación Productiva, MINCYT
- Belgium: Belgian Science Policy, BELSPO
- Fonds de la Recherche Scientifique, F.R.S.-FNRS
- Brazil: Conselho Nacional de Desenvolvimento Científico e Tecnológico, CNPq
- Chile: Comisión Nacional de Investigación Científica y Tecnológica, CONICYT
- Colombia: Departamento Administrativo de Ciencia, Tecnología e Innovación, COLCIENCIAS
- Dominican Republic: Ministerio de Educación Superior, Ciencia y Tecnología, MESCyT
- France: Bpifrance
- Ministère de l'Éducation Nationale, de l'Enseignement Supérieur et de la Recherche - Ministère des Affaires Étrangères et de Développement International, MENESR-MAEDI
- Germany: Bundesministerium für Bildung und Forschung, BMBF
- Mexico: Consejo Nacional de Ciencia y Tecnología, CONACYT
- Norway: Norges Forskningsrad, RCN
- Panama: Secretaría Nacional de Ciencia, Tecnología e Innovación, SENACYT
- Peru: Consejo Nacional de Ciencia Tecnología e Innovación Tecnológica, CONCYTEC
- Portugal: Fundação para a Ciência e a Tecnologia, FCT
- Romania: Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii, UEFISCDI
- Spain: Instituto de Salud Carlos III, ISCIII
- Ministerio de Economía y Competitividad, MINECO
- Turkey: Türkiye Bilimsel ve Teknolojik Araştırma Kurumu, TÜBİTAK
- Uruguay: Ministerio de Educación y Cultura, MEC

The following list shows the list of topics and the countries that fund each of the topics mentioned. The thematic fields included were Biodiversity/Climate Change, Bio-economy, Energy and Health:

- Biodiversity assessment and monitoring - Improving baseline distribution data and compatibility with climate datasets.
- Participating countries: Argentina, Belgium, Chile, Colombia, Dominican

- Republic, France, Norway, Panama, Peru, Portugal, Romania, Uruguay.
- Screening for new bioactive metabolites and enzymes from terrestrial and marine microorganisms for industrial use, based on market demand.
- Participating countries: Argentina, Belgium, Chile, Dominican Republic, France, Norway, Panama, Peru, Romania.
- Small-scale self-sustainable bio refineries for multi-feedstock processing of agro-industrial and urban wastes for advanced biofuels, bio based chemicals and biomaterials.
- Participating countries: Argentina, Belgium, Chile, Colombia, Dominican Republic, France, Germany, Mexico, Norway, Panama, Peru, Portugal, Romania, Spain, Uruguay.
- Towards Zero Carbon Energy Systems for heating and cooling in industrial processes by means of solar technologies including the envelopes of the buildings.
- Participating countries: Argentina, Chile, Dominican Republic, France, Mexico, Norway, Panama, Peru, Portugal, Romania, Spain, Turkey, Uruguay.
- Evaluation of low-threshold interventions to tackle chronic metabolic disorders and their associated cardiovascular diseases in EU and LAC countries.
- Participating countries: Argentina, Belgium, Brazil, Chile, Dominican Republic, France, Panama, Peru, Romania, Spain, Turkey.
- Research in prevention of infectious diseases and promotion of well-being.
- Participating countries: Argentina, Belgium, Brazil, Chile, Dominican Republic, Germany, France, Panama, Peru, Romania, Spain, Uruguay

It can be seen that, although there were two ICT topics proposed by the EU-LAC SOM ICT WG (e-Health and Smart Cities), none was selected for this call.

As Chilean representative at the EU-LAC SOM ICT WG explained in Buenos Aires, at the LEADERSHIP Workshop on March 2015, all LAC funding agencies expressed interest in those topics, but there were very little interest on the European side. These topics will be proposed again for the 2nd Call, but in these case, new funding agencies will be invited to participate.

Eligibility and allowable costs

Applicants must be eligible for funding according to the regulations of their respective national Funding Parties. They can represent public and private scientific, research, technological and innovation institutions on national, federal or EU-LAC regional level, research active industry and NGOs and other institutions involved in research activities, as long as they are eligible for funding according to the respective national regulations.

Each consortium submitting a proposal must involve a minimum of four eligible partners from four different countries with at least two countries from each region, and the consortium may not exceed a maximum of two partners per country.

Since funding will be administered according to the terms and conditions of the responsible funding organizations the concrete costs that can be financed through the project may vary for individual partners in a given project consortium. The national rules of the Funding Parties can be found in the ERANet-LAC website (http://eranet-lac.eu/Joint_Calls.php).

The ERANet-LAC Joint Call follows the “juste retour principle”. It means that the national and regional financial contributions to a virtual common pot will be assigned to project partners of the respective country and region only, in accordance with national and regional regulations. Cross-border funding is not

envisaged.

2.6.4 EU-BR projects

2.6.4.1 IMPRESS

[From 2011-10-01 to 2015-09-30]

The IMPReSS project¹⁸ is a joint EU-Brazil project. The aim of the project is to provide a Systems Development Platform which enables rapid and cost effective development of mixed criticality complex systems involving Internet of Things and Services (IoTS) and at the same time facilitates the interplay with users and external systems.

The IMPReSS development platform will be usable for any system intended to embrace a smarter society. The demonstration and evaluation of the IMPReSS platform will focus on energy efficiency systems addressing the reduction of energy usage and CO2 footprint in public buildings, enhancing the intelligence of monitoring and control systems as well as stimulating user energy awareness.

The IMPReSS platform will thus aim at solving the complexity of system development by providing a holistic approach that includes an Integrated Development Environment (IDE), middleware components, and a deployment tool.

2.6.4.2 RESCUER

[From 2013-10-01 to 2016-03-31]

The RESCUER project¹⁹ aims at developing an interoperable computer-based solution to support command centres in quickly handling emergencies and managing crisis based on reliable and intelligent analysis of crowdsourcing information mashed up with open data. The special focus is on incidents in industrial areas and at large-scale events.

The European-Brazilian consortia bring together industry partners with technological demands that go beyond the scope of the RESCUER project, and research institutes and universities capable of addressing those demands. During the project, it is expected that more synergies between Brazilian and European partners, and between research institutes or universities and industry partners will be identified. Moreover, the established network has great potential for expanding itself through the contacts of the consortia members.

In fact, the new market trend of smart solutions for emergency and crisis management to be triggered by the RESCUER project will make business in this domain flourish worldwide, especially in the light of, but also independently from, the upcoming large events. Another important aspect is that the RESCUER project outcomes will significantly reduce the risk of adverse consequences in case of incidents in industrial areas or in large-scale events.

2.6.4.3 EUBRAZILCC

EUBrazil Cloud Connect²⁰ is a project funded under the second EU-Brazil coordinated call under the topic a) Cloud computing for Science. Its aim is to create an intercontinental federated e-Infrastructure for scientific usage. This e-Infrastructure will join resources from different frameworks, like private clouds, supercomputing and opportunistic desktop resources to offer the community high level scientific gateways and programming models.

¹⁸ <http://impressproject.eu/news.php>

¹⁹ <http://www.rescuer-project.org/>

²⁰ <http://www.eubrazilcloudconnect.eu/>

2.6.4.4 GLOBAL ITV

[From 2013-12-01 to 2015-11-30]

The scope of this project²¹ is the development of an interoperability scheme for the co-existence of multiple interactivity and Connected TV solutions on different Digital TV platforms (such as ISDB-Tb, DVB-S/-T/-C and IPTV). This includes exchanging and using the same information as well as gaining access to the same content sources, by creating solutions to decrease the efforts for adapting services to multiple platforms and to ease access to a global market for all, allowing the reuse of interactive content worldwide.

Main objectives of the GLOBAL ITV project are: Coexistence, Interoperability, and Convergence. Project's goal is to lay the foundation for a global interoperable TV platform which covers integrated broadcast and broadband services. In this joint Brazilian-European endeavour, we will define and showcase a reliable migration path and a coexistence scenario towards a next-generation hybrid TV platform based on established web standards.

2.6.5 BILAT projects

2.6.5.1 ABEST III²²

[From 2012-10-01 to 2015-09-30]

The Liaison Office Argentina-European Union in Science, Technology and Innovation (ABEST) operates within the Ministry of Science, Technology and Productive Innovation (MINCYT), through its National Directorate of International Relations. The Ministry was created in December 2007 and is the first Ministry in Latin America to associate productive innovation with science and technology. Its mandate is to harness science, technology and innovation to strengthen a new productive model that generates greater social inclusion and improves the competitiveness of the economy in Argentina, under a new paradigm of knowledge as a cornerstone of development.

ABEST was created in October 2005 with partial funding from the Sixth Framework Programme (FP6) of the European Union (ABEST/ A-EU, project No. 518090). In October 2009 the second phase was approved (ABESTII, project No. 244327) with partial budget from the Seventh Framework Programme (FP7) and on October 1st 2012, the third phase of the 36- month project started (ABEST III, Project No. 311952).

The goal of this office is to set in Argentina a platform to enhance and expand technical cooperation activities in science, technology and innovation both the EU and in the member countries. One of the main financing instruments promoted by the Liaison Office is the Framework Programme (FP) managed by the Directorate for Research and Development of the European Commission, in which Argentina participates since 1986.

ABEST III aims to increase EU-Argentina cooperation in Science, Technology and Innovation (STI) through the following specific objectives:

- Reinforce bilateral STI policy dialogue and contribute to the implementation of the Roadmap defined by the Joint S&T Cooperation Committee;
- Improve the participation of Argentinean research and innovation relevant actors from both public and private sectors, particularly SMEs, in FP7 and

²¹ <http://www.globalitv.eu/>

²² http://cordis.europa.eu/project/rcn/105129_en.html

European innovation networks by increasing awareness and dissemination actions;

- Monitor and analyse the evolution of the Argentinean participation in FPs in both a quantitative and qualitative perspective;
- Identify and promote awareness in Europe of opportunities for European researchers to participate in Argentinean research and innovation programmes involving NCPs;
- Support the coordination of national research policies and programmes vis-à-vis those from MS and AC, defining joint activities and facilitating innovative approaches and appropriate funding modalities;
- Promote the twinning of research organizations/laboratories between on one hand MS and AC, and on the other hand the Argentineans, through exchange of staff, sharing of good practices, and identification of future joint actions;
- Identify synergies and activities likely be jointly undertaken between EU policies and programmes addressing Argentina and also in the framework of other STI cooperation programmes and instruments beyond FP7, such as Horizon 2020, Enterprise Europe Network (EEN), EU-LA research networks, European Technology Platforms (ETPs) and Latin American Technology Platforms (LATPs), and NCP networks;
- Organize and support the participation of research and innovation actors in brokerage and other networking events to facilitate the preparation of collaborative activities and the dissemination and use of results;
- Improve the implemented service approach to disseminate news about the FPs, training local thematic NCPs and ABEST-NET members and encouraging their participation in specific networks when appropriate
- Ensure effective planning, implementation, co-ordination and achievement of the project activities, quality-control of project deliverables (through an external review panel), including timing schedules for achieving deliverables and successful completion of the tasks;
- Encourage activities with other LAC Liaison Offices, LAC Platforms and other LAC countries and EU-Cooperation Units for sharing knowledge and good practices towards ALCUE-Joint Initiative for Research & Innovation Implementation.

ABEST III has a structure of national and international support:

- Partners: CIRAD (France), APRE (Italy), DLR (Germany), and MADRI+D (Spain).
- Advisory Board: UIA (Argentina), ANPCyT (Argentina), European Union Delegation in Buenos Aires, CDTI (Spain), CNRS-IRD (France), IRELAC (Belgium).

Thematic National Contact Points (NCPs) report on opportunities for cooperation in priority areas for the country and give advice to achieve success by participating in the Horizon 2020 proposals.

2.6.5.2 *BB.BICE+*

B.BICE+²³ is an International Cooperation (INCO) project funded by the European Commission whose aim is to enhance bilateral cooperation and to support political dialogue in Science, Technology and Innovation among the European Commission, EU Member States, Associated Countries and Brazil.

The principal objectives and activities of B.BICE+ are:

²³ <http://www.b-bice-plus.eu/>

- To contribute to the ongoing ST&I policy dialogue between the EU and Brazil;
- To promote enduring partnerships between EU and Brazilian actors in the whole research-to-innovation chain;
- To facilitate the coordination of EU Member States' cooperation in research with Brazil on the "program level";
- To disseminate information on programs encouraging cooperation in research and innovation between the EU and Brazil;
- To promote an approach to innovation as an overarching policy objective for EU-Brazil bilateral cooperation;
- To establish a Joint Action Taskforce (JAT) constituted of several European and Brazilian research and innovation institutions, tasked with defining a roadmap for coordination and implementation of joint action with participation of EU Member States and Brazilian institutions;
- Carrying out meetings and workshops to foster the participation of state-level institutions in Brazil (FAPs, SECTIs, etc.) into EU-Brazil cooperation as well as raise awareness of current programs and initiatives.

2.6.5.3 CEST+I²⁴

[From 2013-01-01 to 2015-12-31]

The CEST+I project (Chile-European Union STI Initiative) is a continuation of the CHIEP II project funded by the European Commission's 7th Framework Programme (FP7). CEST+I is also funded by the European Commission through its Seventh Framework Programme and by the National Commission for Scientific and Technological Research of the Government of Chile (CONICYT). CONICYT's partner institutions in this project are DLR (Germany), IDOM (Spain) and IRD (France).

The goal of the CEST+I project is to support the enhancement of science, technology and innovation cooperation between the European Union, member states, associated countries and Chile

For this purpose, the CEST+I project has defined 5 working packages for the period 2013-2015:

- Support to the political dialogue
- Creating networks between Chilean and European researchers
- Knowledge to innovation
- Dissemination and awareness rising
- Management

Current priority areas are: polar science and climate change, sustainable mining and renewable energy.

The members of the Steering Committee for the CEST+I project are: Eurochile, InnovaChile CORFO, Centre for Industrial Technological Development (CDTI), Instituto Nacional de Propiedad Industrial (INAPI) and Embassy of France in Chile.

2.6.5.4 EU-MEX INNOVA²⁵

[From 2013-09-01 to 2016-08-31]

The 3rd. stage the European Union – Mexico Bilateral Innovation Initiative (EU-MEX-INNOVA) seeks to develop and strengthen collaborations between the two sides to cope societal challenges and industrial technologies through international cooperation, by making science, research and innovation proceed more rapidly and more cost effectively.

²⁴ http://cordis.europa.eu/project/rcn/105221_en.html

²⁵ http://cordis.europa.eu/project/rcn/109862_en.html

EU-MEX INNOVA takes into consideration the previous efforts between the EC and CONACYT (UEMEXCYT 1 & 2). The consortium considers strategic partners from France, Germany, Italy and Spain, that work with Mexico toward the objectives of the project seeking and important impact in the EU-Mexico ST&I cooperation.

2.6.6 Thematic projects

2.6.6.1 EU-LAC HEALTH

[From 2011-10-01 to 2016-09-30]

EU-LAC Health²⁶ is a project promoted by the European Commission. Its main goal is to define a detailed roadmap to guide policy-makers and other stakeholders on future actions to support cooperative health research between European (EU) and Latin America and Caribbean (LAC) countries.

This consensus roadmap will be developed using a policy oriented approach and taking into account the new political framework for EU-LAC collaboration in Science and Technology, in particular the new EU-CELAC (European Union – Community of Latin-American and Caribbean States) Joint Initiative for Research and Innovation. The aim of the roadmap is to provide policy-makers and Research and Development (R&D) funding bodies with new insights on how to best coordinate and fund cooperative health research between the two regions.

2.6.6.2 ENSOCIO-LA

The ENSOCIO-LA project²⁷ is a Coordination & Support Action funded under ENV.2013.6.5-4 Knowledge platforms, networking and uptake of research results for more strategic international R&I cooperation.

As a Coordination Action, the ENSOCIO-LA project aims at establishing sustainable and integrated research and innovation cooperation between the EU and Latin American Countries in the environmental field, namely in climate change, resource efficiency and raw materials; ENSOCIO-LA will also help improve dissemination and the exploitation of research results in this area by different user groups. This will be achieved through networking and twinning of existing multilateral and bilateral projects funded by different sources, through the development of efficient interaction schemes between science, industry and users and the joint elaboration of future research priorities and joint activities. ENSOCIO-LA will provide a network of networks.

2.7 EU strategy for EU-LAC cooperation

In March 2015, the European Commission has increased its focus to strengthening International Cooperation in Research and Innovation with Latin American countries²⁸. With the EU-CELAC Summit planned on 10-11 June and the EU-Chile, EU-Mexico and EU-Brazil Summits to follow later this year, International Cooperation in R&I is standing out once more as a major element of the EU relations with the region. In this context, Cristina Russo, Director for International Cooperation at DG Research and Innovation visited Argentina, Uruguay and Brazil, to increase the scale and scope of Cooperation in R&I with Latin American countries, continuing to promote Horizon 2020 which is the largest R&I EU

²⁶ <http://eulachealth.eu/es/>

²⁷ <http://www.ensocio-la.eu/>

²⁸ "EU-Latin America: R&I Cooperation growing", International Research newsletter, Issue 55 (April 2015) http://ec.europa.eu/research/iscp/pdf/newsletter/international-research-update_55_%20april-2015.pdf#view=fit&pagemode=none

Programme fully open to the world. In addition to bilateral cooperation in R&I between European countries and Latin American countries, there is also an important regional cooperation through the EU-CELAC Joint Initiative on Research and Innovation.

2.7.1 Argentina

On Friday 13 March, the Ministry of Science, Technology and Productive Innovation organised a conference to celebrate the 10th Anniversary of the Argentinean-EU Liaison Office for Science, Technology and Innovation. Director Cristina Russo spoke at the conference where, accompanied by the Head of the EU Delegation to Argentina, Alfonso Diez Torres, she met the Argentinian Minister for Science, Technology and Productive Innovation (MINCYT) Mr Lino Baraao. An Implementing Arrangement under the EU-Argentina Science and Technology Agreement was signed by Director Russo and Minister Baraao, launching a new initiative to encourage top Argentine scientists to come to Europe as members of research teams lead by European Research Council (ERC) grant holders.

On Friday 13 March, Director Russo co-chaired the 8th Steering Committee of the Agreement on Cooperation in Science, Technology and Innovation, together with Agueda Menvielle, National Director of International Relations at MINCYT. The agenda included cooperation in the priority areas of common interest, including health, bio-economy, renewable energy, marine research and transport. The Committee reviewed the EU-Argentina cooperation process and agreed to focus future cooperation on renewable energy, bio-economy, marine research, greening cities, and health, including the EU-led multilateral initiatives such as GLOPID-R on preparedness and response to infectious diseases. While in Argentina, Ms Russo also met Ambassadors and other representatives accredited in Argentina from EU Member States and from countries associated to H2020 to discuss how to enhance synergies amongst H2020 and their bilateral initiatives with Argentina.

2.7.2 Uruguay

After visiting Argentina, Director Russo travelled to Uruguay on 15-16 March. Together with the Head of the EU Delegation to Uruguay, Juan Manuel Trigo, she met several government representatives, interested in stepping up R&I cooperation with the EU, namely Carolina Cosse, Minister of Industry, Energy and Mining; Alvaro Garcia Rodriguez, Director of the Office of Planning and Budget; Fernando Figueira Gabriel, Undersecretary of State for Industry, Energy and Mining; and Gabriel Aintablian, Director for Science, Technology and Innovation at the Ministry of Education and Culture. Director Russo delivered a speech on EU-Uruguay R&I Cooperation at a forum with around 100 participants from the country's top universities and research institutions. They were highly interested in the possibilities offered by H2020. At the forum, the government representatives confirmed Uruguay's willingness to strengthen its cooperation in R&I with the EU, particularly in the area of Excellent Science and in relation to R&I as a tool to foster the country's competitiveness. In Montevideo, Ms Russo also visited the Pasteur Institute, which is an interesting example of synergies between bilateral Member State cooperation, a DEVCO funded programme, and two FP7 projects.

2.7.3 Brazil

After a fruitful visit to Argentina and Uruguay, Director Cristina Russo moved to Brazil, where she started a very intensive programme of meetings in Brasilia and So Paulo from 17 to 19 March 2015. The meetings included the Brazilian Parliament, federal government institutions and representatives of State Foundations that are very active in International Cooperation in R&I.

On 17 March 2015, in Brasilia, Director Russo delivered a speech at the XXII EU-Brazil Parliamentary Forum, held in the Brazilian National Congress, on «The EU and Brazil – bridging the world through cooperation in Research and Innovation». At the Forum, two Members of the European Parliament (MEPs) gave speeches in different panels: Paulo Rangel, Chair of the EP Delegation for relations with the Federative Republic of Brazil and Francisco Assis, Chair of the EP Delegation for relations with Mercosur. At the Congress, Director Russo had a meeting with Senator Buarque, Chair of the Senate's Science and Technology Committee, who expressed a strong interest in exchanging ideas with EU representatives on methods to attract private investment in R&I.

The following day, Director Russo visited the Foundation for Research of the State of São Paulo (FAPESP) together with the Head of the EU Delegation to Brazil, Ambassador Ana-Paula Zacarias. A letter of Intent with FAPESP was signed, fostering EU-Brazilian Cooperation in R&I. In São Paulo, Director Russo also met a delegation from the University of São Paulo (USP) which is the largest university in Brazil and a long-standing partner in several joint research FP7 projects. The USP showed particular interest in cooperating with Europe in Marine Research. Finally, Director Russo visited the Butantan Institute, internationally renowned for its excellence in anti-poison serums, vaccines and cancer-fighting studies. On the same day, she discussed, with the president and the vice-president of the Confederation of National State Foundations (CONFAP), how to enhance cooperation by mobilising the resources of State Foundations to support the participation of Brazilian Researchers in Horizon 2020.

On 19 March, the Committee was hosted by the Brazilian Ministry of Foreign Affairs and took place at the Itamaraty Palace, in Brasilia. Director Russo co-chaired the meeting together with Ambassador Benedicto Fonseca of the Brazilian Ministry of Foreign Affairs and Executive Secretary Armando Milioni, of the Ministry of Science, Technology and Innovation. The discussions covered bilateral scientific cooperation in priority areas such as Food Security and Sustainable Agriculture, Marine Research, Renewable Energies, including the coordinated call on Biofuels, Nanotechnology, Fusion Energy and Information and Communication Technology (TICs). In addition, other important areas were discussed such as Health, Sustainable Urbanisation & Renaturing Cities and Innovation. The Committee also discussed the important issue of mobilising Brazilian federal and state level financial resources to ensure participation of Brazilian researchers in Horizon 2020, along with respecting other framework conditions for R&I.

Liliana Pasecinic, Head of Sector for International Relations in the Commission's Joint Research Centre (JRC) attended the 7th EU-Brazil Steering Committee Meeting on 19 March in Brasilia, discussing new opportunities in the framework of the ongoing cooperation. The JRC representative also met with Embrapa, the Ministry of Science, Technology and Innovation and the National Council for Scientific and Technological Development (CNPq). The JRC has started several cooperation initiatives with Brazilian institutions in Life Cycle Analysis, Smart Grids, Water Management under Climate Change, Nanotechnologies and Disaster Risk Reduction. In addition, under its cooperation with CNPq on the Science without Borders programme, the JRC will host Brazilian grant holders. The first fellows should reach Europe in summer 2015.

2.7.4 EU-CELAC update

The EU-CELAC Summit took place on 10-11 June 2015 in Brussels. R&I was an important element of the event and the Science & Technology Joint Initiative for R&I has already held four Senior Official Meetings. In the context of the EU-CELAC Summit of the Head of State and Government, the Second Academic Summit Latin America and Caribbean – European²⁹ Union took place on 8-9 June 2015 in Brussels as a permanent space for dialogue between EU institutions and the Ministers of Education, Science, Research and Technology of both regions. From the Academic Summit a synthetic Declaration was issued highlighting the following points that are linked to international RDI cooperation: 1) commitment to work and contribute, on common grounds, on a wide base of the academic world of both regions, through the convergence and the articulation of academics, researchers, institutions and networks, public and private, national and international, to a progressive formation of a “Euro – Latin American and Caribbean space of higher education, science, technology and innovation”; 2) in order to promote the convergence of research, technology and innovation systems, they propose creating a bi-regional agency of innovation management and the creation of a bi-regional fund that encourages joint research and mutual innovation projects; 3) to enhance legally and financially the higher education systems of both regions, incorporating the mechanisms and actions that lead to bi-regional agencies of evaluation, accreditation and financing; 4) to promote the cooperation of the research, technology and innovation systems, through interregional programs that define the priority areas for social and productive development and defence of biodiversity of the EU-CELAC space and enhance the relation between the Academic Summit and the Joint Initiative for Research and Innovation (JIRI).

In this context, the evaluation of the proposals submitted under the 1st Joint ERANet-LAC Call was finalised at a meeting of the participating funding agencies scheduled for 28-29 April 2015 in Bonn, Germany. According to the third press release³⁰ “as a result of the first ERANet-LAC joint call, 20 funding organizations from Europe, Latin America and the Caribbean countries will fund 13 transnational research and innovation projects”.

On 9 and 10 March 2015 an EU-CELAC Environment Seminar took place in Buenos Aires, organised by the EU-CELAC support project ALCUE-NET. The seminar “Exchanging Bi-regional Experiences on Climate Services to Identify Joint Activities - Bi-regional meeting on Climate Services and Brokerage event” gathered some 40 programme managers from the EU and CELAC. The objectives of the event were to raise awareness of the open calls in Horizon 2020 Societal Challenge 5 related to Climate Services, to share knowledge on International Cooperation opportunities and to promote consortium building for collaborative projects. Another objective was to improve ALCUE NET project activities related to the work package on Biodiversity and Climate Change. The discussions identified future strategic R&I priorities for H2020 on climate services and explored other possible synergies and joint activities (i.e. ALCUE NET, ERANet-LAC 2nd joint call).

Next CELAC ‘Senior Officials’ Meeting (SOM) will be held in Brussels, tentatively in November 2015.

²⁹ This event is coordinated by a Belgian Local Organizing Committee and the Executive Secretariat Permanent Academic Forum EU-LAC, with the support of the EU-LAC Foundation.

³⁰ http://www.conacyt.mx/pci/images/pdfs/3rd_Press_Release_First_Call.pdf

3 LESSONS LEARNT FROM EU-LAC COOPERATION

3.1 *EU-Brazil coordinated calls*

An analysis of the Coordinated Calls between Brazil and the European Commission assumes great importance in the context of Horizon 2020 Program and the future of international cooperation in ST&I between Brazil and the European Union, especially taking into account that H2020 establishes that the countries belonging to the so-called block of BRICS, which includes Brazil, will no longer be eligible to receive the resources of donation (grants) of the European Commission.

An assessment of the two first calls can be found in the AMERICAS Feasibility Study³¹. As already pointed out, the mechanism of Coordinated Calls was a proposal submitted by the European Commission to Brazil in October 2007, when the visit of the then Commissioner Potocnik of DG Science and Research (currently DG Research and Innovation). The great advantage that the Coordinated Calls feature is a more precise definition of the theme of cooperation, i.e which areas are considered as priorities between Brazil and the European Commission for the development of cooperation activities in ST&I. A call is launched simultaneously in Europe and in Brazil, being that each side provides an amount of resources that will be available for projects that will be approved.

Having by reference this call, Brazilian and European institutions articulate with the purpose of creating a consortium that will submit the proposal for a research project. Closed the consortium and the project coordinator of the European side of the consortium forwards the proposal to the European Commission and the coordinator of the Brazilian side of the consortium forwards the proposal to the Brazilian Agency for financing selected to participate in the coordinated call, that in the case of three Calls coordinated until the moment made in Brazil was the National Council for Scientific and Technological Development (CNPq).

The evaluation of the proposals has been carried out by the procedure adopted by the European Commission, which happens through an evaluation in three steps. The first step of the assessment is the choice of advisors, which in the case of the European Commission is made by choice on a basis of evaluators constructed through registration of curricula (work as an expert³²).

In the case of the CNPq, the choice was an internal decision of the Council. The second stage of the assessment is carried out by means of analysis by the evaluators selected proposals, through remote procedure, that is, the proposals are sent by electronic mail to evaluators, that they analyse them according to a model of assessment agreed between the parties. It is worth pointing out that in the case of Coordinated Calls assessment model adopted was that of the European Commission. Completed the remote step, the third stage of the evaluation is made-to-face, where proposals are judged in consensus meetings with the participation of the evaluators selected in the first step of the evaluation process.

Upon completion of the assessment phase, the proposals selected pass for the contracting phase, which in the case of the European team is made by DG Research and Innovation of the European Commission and in the case of the Brazilian team by CNPq.

³¹ http://leadershipproject.eu/wp-content/uploads/2013/11/D4-2_Feasibility-Study-on-joint-strategies_final.pdf

³² <http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html>

There is a consensus of part of the Brazilian institutions of research that the Coordinated Calls is a suitable mechanism for the development of cooperation activities between Brazil and the European Commission, since that made some modifications to the procedure adopted for the solution of problems encountered in its implementation.

The first problem to be solved is to make the Coordinated Calls more attractive to the Brazilian companies. The issue to be solved here is the asymmetry that happens between the financing mechanism of the European Commission and that of the CNPq. The European Commission financing mechanism (grants) can finance both universities and private companies, and there are many different eligible costs (e.g., staff, costing, capital). The same is not true with the CNPq, which has restrictions imposed by the Brazilian legislation on its financial mechanisms; especially with regard to financing private companies and regarding the payment of staff. This asymmetry between the financial mechanism of the European Commission and the CNPq resulted in lack of interest by many Brazilian private companies in participating in the projects of the Coordinated Calls launched by the Council.

However, taking into account that this restriction to CNPq is imposed by Brazilian legislation related to the federal budget, its solution can take a long time to be implemented. A possible solution is a combined effort between the CNPq and FINEP for future coordinated call. As FINEP has mechanisms and financial instruments more adjusted to companies, its association to CNPq for the next coordinated calls between Brazil and the European Commission can facilitate the participation of Brazilian companies in consortia that will submit proposals for research projects.

The second problem concerns the availability of federal Brazilian financial resources support for Coordinated Calls. This problem was the main reason for the delay that has occurred in the launch of Brazil Second Coordinated Call in ICTs.

A third problem to be solved is the establishment between Brazil and the European Commission of clear rules to be adopted in the process of launching, evaluation, negotiation and implementation of research projects resulting from the Coordinated Calls. As pointed out by Brazilian researchers interviewed, the difference between these rules resulted in difficulties, mainly for the Brazilian participants. An example, which has already been solved in the second coordinated call of ICTs, was the requirement made by the CNPq for the proposal to be presented in English and in Portuguese.

Good Practices:

- The themes and the areas to be included in Coordinated Calls are established by common agreement between Brazil and the European Commission
- The common interest is the basis for successful joint implementation and evaluation of Coordinated Calls, as shown by the EU-Brazil Coordinated Calls
- High interest from Brazilian and European institutions to articulate consortia for research projects
- Willingness to solve the problems that appeared while the different calls were launched

3.2 ERANet-LAC 1st joint call

As was previously stated, a total of 20 national/regional funding organizations agreed to participate in the first ERANet-LAC Joint Call for funding research projects. The thematic fields included were Biodiversity/Climate Change, Bio-economy, Energy and Health.

Although there were two ICT topics proposed by the EU-LAC SOM ICT WG (e-Health and Smart Cities), none was selected for this call.

As the Chilean representative at the EU-LAC SOM ICT WG explained in Buenos Aires, at the LEADERSHIP Workshop on March 2015, all LAC funding agencies expressed interest in those topics, but there was very little interest on the European side. These topics will be proposed again for the 2nd Call, but in this case, new funding agencies will be invited to participate.

This issue raised the question on how to reach consensus on topic selection. This question was explored in the Benchmarking Questionnaire, and will be addressed further in this chapter.

Good Practices:

- Mobilisation of resources from different countries to joint initiatives in R&I.
- High impact on the dissemination of the call, according to the number of proposals received

3.3 FIWARE Mexican Initiative

The FIWARE³³ platform, part of the EU Public-Private Partnership on the Future Internet, and the startup Europe initiative, will enable Mexican organisations to develop advanced Internet applications and services on top of innovative technologies, supported by local digital infrastructures. FIWARE aims at developing a huge range of applications, from Smart Cities to eHealth, and from transport to disaster management. Many applications have already been built using FIWARE – earthquake warning system, food waste prevention, and Smartaxi apps, to name just a few.

The two FIWARE Lab sites, Aguas Calientes and Mexico City, will increase their computing capacity, and external parties, like SMEs, start-ups and cities, are encouraged to develop innovative Internet applications and services. Students can also explore the latest Internet technologies, advanced research and innovation. Applications developed on the Mexican FIWARE sites could be easily used in Europe and vice versa.

Three major cities, Tijuana, Queretaro and Guadalajara, have already signed up to lead a larger deployment of new FIWARE-based applications and services for their citizens and businesses. Tijuana is looking to FIWARE to identify new solutions for better traffic management while Queretaro aims at developing new environmental services to improve the quality of life for citizens in this densely industrialised city.

Good Practices:

- The FIWARE platform offers great potential for development of applications and services (enhancement their computing capacity, and external parties).
- Expansion of an European platform to the LAC region

³³ Source: <https://ec.europa.eu/digital-agenda/en/blog/fiware-technology-crosses-atlantic-event-mexico>

3.4 The EUREKA initiative

EUREKA³⁴ is an European initiative committed to the 'bottom-up' principle: ensuring that any R&D project with a good business plan receives the support it deserves, independent of the technological nature of the research project, or the type of organisations involved. It fosters cross-border collaboration in order for European industry to be able to compete effectively on world markets in advanced technologies. Its mission is to raise the productivity and competitiveness of European businesses through technology while boosting national economies on the international market.

It is a decentralised structure, meaning that applicants for EUREKA support are guided and funded at national level by their local project coordinators (NPCs): they are the first point of contact for organisations wishing to expand their activities internationally. For those companies, institutes and universities, EUREKA is a catalyst for public funding. To innovation agencies, EUREKA is an ideal platform for the coordination of international R&D projects, while accommodating their local rules and priorities.

At the LEADERSHIP Workshop on March 2015 in Buenos Aires, Eureka Senior International Cooperation Advisor Susanne Madders presented the programme, and explained the 2+1 rule for participation: the project must involve at least two Eureka member countries. Once this criterion is met, other partners may come from other countries, provided there are funding mechanisms in their countries that will fund their part of the project. This initiative appears as a viable alternative for collaboration with Europe.

Good Practices:

- EUREKA programme is planning to expand its network in Latin America, some countries such as Argentina have applied to be considered as an associated country
- Latin America and the Caribbean would take the advantage of fostering cross-border collaboration through EUREKA. At the same time, Europe would be able to broad its industries in world markets

3.5 The Enterprise Europe Network (EEN)

The Enterprise Europe Network (EEN)³⁵ is a flagship program of the European Union designed to provide support for small and medium enterprises (SMEs) and research centers in the area of innovation, in European countries and other major markets of international growth regions.

So far the EEN is the world's most important network of enterprise to support innovation. It currently consists of 600 member organizations spread across 54 countries. More than 4,500 experts in internationalization and technology transfer professionals offer a wide range of business services and support for innovation companies. EEN partners are chambers of commerce, regional development organizations, SMEs, research institutes, universities, technology centers and innovation centers. Their specialized local knowledge and regional business environment ensures the excellence of services provided to its users. There are five

³⁴ Sources: http://www.eurekanetwork.org/c/document_library/get_file?uuid=c14763dd-4dba-4824-903b-508226de764d&groupId=10137, [http://www.abest.mincyt.gob.ar/files/LEADERSHIP/2015_March_11_ICT_Workshop_BuenosAires\(3\).pptx](http://www.abest.mincyt.gob.ar/files/LEADERSHIP/2015_March_11_ICT_Workshop_BuenosAires(3).pptx)

³⁵ Sources: <http://een.ec.europa.eu/about/mission>,

LAC countries within the EEN (Argentina, Brazil, Mexico, Chile, and Peru).

Good Practice:

Latin American nodes of the EEN (located in Chile, Mexico, Brazil, Peru and Argentina) are becoming a driver for innovation in Latin America, as they support public and private entities (SMEs and research institutions) for their participation in processes of innovation, cooperation, internationalization and knowledge transfer with international networks of science and technology including stakeholders of the EU.

3.6 Insights from participants in EU-LAC projects

A total of 16 coordinators and partners of EU-LAC R&I cooperation were interviewed by LEADERSHIP partners, 9 from Latin America and 7 from Europe, in order to analyse the current status of EU-LAC R&I cooperation, leading to the identification of main challenges and barriers as well as main measures and mechanisms to strengthen the bi-regional cooperation.

The questionnaire (Annex 1) was sent to participants in EU-LAC R&I cooperation projects. The answers to the questionnaire were categorised using qualitative analysis techniques and are shown in the following sections. Annex II summarises the responses of the questionnaire.

Participants in the Workshop on ICT International Cooperation held in Buenos Aires were urged to discuss the findings of interviews carried out with EU-LAC project coordinators and partners, and to add their own opinions. There was a very interesting debate in which the participants validated the initial findings, and pointed out that they were a very thorough description of the current EU-LAC cooperation situation. They also noted that in the countries where a Liaison Office is in place, the governmental support is quite effective.

Overall, there was an agreement that main barriers and challenges for EU-LAC cooperation in ICT are related to the lack of experience of LAC organisations at participating in EU funded projects, countries' bureaucracy as well as difficulties to conform competitive consortiums. On the other hand, critical factors to establish a successful EU-LAC cooperation were to establish priorities of common interest for both EU and LAC, reach critical mass of researchers and R&D institutions in LAC, as well as to have a country strategic vision for international cooperation in ICT. The need for a unified framework to map bi-regional funding mechanisms was also highlighted as a critical success factor.

Finally, among participants suggestions to explore synergies and promote international cooperation opportunities in H2020 and the EUREKA initiative were: to organise brokerage events for partnership building as well as networking events, and to promote funding opportunities both in Europe and Latin America.

3.6.1 Main barriers/challenges for LAC organisations

Barriers and challenges identified from EU-LAC project participants are associated to the following main themes:

- **Experience.** Overall, participants recognise there is lack of experience in EU-LAC cooperation among LAC organisations. As a result, they experience complexity dealing with EC administrative procedures, access to the proper information in a timely manner as well as participating at targeted European

events (e.g. info days, proposers days).

In addition, participants identified there is lack of experience in promoting networking activities among LAC organisations, especially with international partners. As a consequence, once an organisation has identified opportunities for cooperation and has progressed through the stages required to apply for funding, it still faces the challenging task to find partners.

Finally, participants mentioned there is lack of coordination between organisations from Europe and LAC (e.g. timing, language, rules of participation) and there is also lack of coordination between organisations of the LAC region, especially in understanding of legal & financial rules at local level as well as different conditions to participate in targeted regions.

- **Governmental support.** Another barrier identified by participants was the constant variations faced by LAC's governmental organisations such as changes in the administration, employee turnover as well as changes in regulations from national and international organisations. In addition, and in line with these issues, participants mentioned that the lack of LAC's governments strategies for international R&I cooperation with the EU is a barrier for organisations.
- **Euro-centrism.** Participants mentioned that LAC organisations have difficulty finding topics related to national interests since topics for EU-LAC cooperation are very EU focused. According to participants, these may be caused by the low involvement of LAC organisations in setting-up proposals and also by the fact that LAC organisations cannot coordinate H2020 projects. Participants also identified a lack of more flexible and diverse options for joint funding mechanisms.
- **Highly competitive calls.** Another challenge identified is the numerous applicants that each call receives, decreasing LAC organisation's chances to get EU funding. Since LAC organisations are able to access internal mechanisms to fund research projects, some of them may prefer to apply for internal R&D funding combined with multiple bilateral mobility funds.
- **Travel expenses.** Participants also identified as a challenge the lack of organisational or institutional support to cover travel expenses. Despite we are living in a digital era, relationships are established face-to-face, therefore there is needed for LAC organisations to travel to Europe and vice-versa, in order to keep abreast with EU-LAC cooperation opportunities.

3.6.1.1 *The Proposal phase*

During the proposal phase, the main challenge identified was related to the lack of experience in EU-LAC cooperation initiatives among LAC organisations. Thus, LAC organisations face challenges following EU rules and formats, understanding funding and cooperation schemes, calculating the total cost of the project according to EU guidelines. Despite there is a great amount of information on research framework programmes under the EU's participant portal, to follow rules, recommendations and formats represents a challenge for newcomers.

Other barriers mentioned by participants was the difficulty in finding the right partners to cover calls' requirements as well as in getting invited to join a consortium.

3.6.1.2 *The Grant Agreement preparation*

During the Grant Agreement preparation, main challenges also derive from the lack of experience in EU-LAC cooperation initiatives among LAC organisations such as difficulties in understanding financial and administrative guidelines and managing internal issues faced by organisations that do not usually participate in international projects (e.g. opposition from legal/financial departments, bureaucracy).

3.6.1.3 *The Project implementation phase*

During the Project implementation phase, main challenges identified by questionnaire participants are related to lack of coordination among partners and also to lack of experience. Due to their lack of experience, there is a need to provide training to LAC organisations on how to report progress and financial costs following EU guidelines.

In addition, it is also difficult to coordinate the work among partners in a timely manner as well as to coordinate the communication having different native languages, cultures, and time zones. In this context, the role of an experienced coordinator is essential for the good progress of the projects.

3.6.2 **Barriers implementing joint initiatives**

When asked about the implementation of joint initiatives, participants identified as a main barrier the existence of different bureaucracies and national rules among the two regions. This mainly refers to different:

- Funding mechanisms and national regulations regarding IPR and resource allocation
- Funding availability and fiscal years (different time plans)
- Topics of interest

When addressing EU-Brazil coordinated calls, questionnaire participants mentioned there is a lack of synchronisation and harmonisation which leads to different conditions of eligibility (e.g. in Brazil, the industry is not funded) as well as different evaluation criteria for applicants. This generates uncertainty among applicants during the proposal preparation.

In addition, they mentioned that even though EU funding mechanisms (in FP7 and H2020) are well defined, the availability of financial resources in Brazil is not always guaranteed.

3.6.3 **Critical factors for a successful EU-LAC cooperation**

Questionnaire participants listed the following factors as critical to a successful EU-LAC cooperation:

- Definition of priorities of common interest for both regions, based on national thematic priorities
- Cooperation based on trust and transparency of information
- Reach critical mass of researchers and R&I institutes on both regions
- Definition of a strategic vision towards EU-LAC cooperation within participant organisations
- Good communication and team engagement among participants of the two regions
- Experienced project coordinator that consolidates a consistent DoW and keeps a balance between work plan progress and flexibility
- Networking to find good partners
- Coordination of bureaucracies to foster the same conditions for researchers on both regions (leverage funding internally)

3.6.4 **Main measures to enhance EU-LAC cooperation**

Among the main measures that would enhance EU-LAC cooperation, participants suggested to:

- **Establish a bi-regional agenda.** This would support cooperation on strategic issues of common interest and mutual benefit, joint definition of operational and financial mechanisms for implementation as well as joint

monitoring and evaluation to establish new goals and necessary adjustments for better implementation. In this context, participants have suggested to encourage the work of LAC-ICT regional groups and forums (e.g. REGULATEL, ALETI) as well as setting up efficient communication channels between the two regions in order to define strategic priorities towards EU-LAC cooperation – not only focusing on EU priorities.

- **Increase LAC participation on EU programmes.** Europe should consider Latin America among its strategic partners – and not only Brazil. Following this focus, it is suggested that the EU follows a capacity building approach to increase participation of LAC developing countries as well as enhancing the role of National Contact Points and Support actions. In addition, it is suggested to launch more frequent calls for proposals addressing the LAC region and supports the organisation of joint calls between EU and LAC funding agencies. Another measure that would enhance LAC participation on EU programmes would be to define common rules on key issues such as intellectual property, data protection, security and privacy.
- **Promote LAC researchers participation.** It is suggested that EU and LAC organisations/agencies continue to communicate available cooperation opportunities for LAC researchers, to support EU and LAC researchers' field trips and stays abroad on both regions and to foster networking tools to find partners within the two regions. In addition, it is suggested that LAC researchers are more active to take advantage of opportunities for international cooperation along more than 200 R&I areas included in the Horizon 2020 work programmes (from ICT to societal challenges).

3.6.5 Mechanisms to enhance EU-LAC cooperation

Questionnaire participants mentioned several mechanisms to enhance EU-LAC cooperation that can be categorised in the following topics:

- **Access to information.** Find relevant communication within liaison offices, National Contact Points' networks, s, info days and other awareness raising events.
- **Partnership building.** It is suggested to use institutional partner search tools (e.g. Ideal-ist), become member of EU-LAC expert and working groups (e.g. LAC-ICT Expert Group) as well as to prepare in advance the participation in networking and partnership building events. These events have no equivalents in Latin America, hence it is important for LAC organisations to prepare in advance to understand the dynamics and take full advantage of these events.
- **Selection of topics.** It is suggested to set-up mechanisms to identify national priority areas for international cooperation in order to find similarities with Europe's priority areas. For this purpose, it is suggested to continue carrying out consultations with relevant stakeholders from the government, industry and academia in order to enhance the implementation of initiatives that respond to national, regional and global trends. These consultation activities can be carried out through facilitated workshops and/or through surveys that identify ICT R&I priorities, such as the one that the LEADERSHIP project performed.

3.6.6 Measures to raise awareness of LAC funding programmes

As presented on the Input Paper Funding Mechanisms Working Group (D1.3)³⁶, a number of LAC funding programmes open to European researchers have been

³⁶ http://www.leadershipproject.eu/wp-content/uploads/2013/11/LEADERSHIP_D1.3-InputPaperFundingMechanismWG.pdf

identified. EU-LAC projects' participants interviewed suggested to continue fostering LAC funding programmes open to Europeans by:

- Supporting the opening of additional national funding programmes to European researchers
- Promoting current LAC funding programmes open to Europeans at info and proposers days in Europe.
- Raising awareness of LAC opportunities for European researchers through liaison offices newsletters and LAC – EU coordinated calls targeting main universities, companies and research institutions. It is also suggested to include links to LAC funding programmes in European programmes' websites.

3.6.7 Recommendations to improve EU-LAC cooperation in R&I

Finally, the interviewees concluded with the following overall recommendations to improve EU-LAC R&I cooperation in ICT:

- The European Strategic Forum for International Science and Technology Cooperation (SFIC) should consider LAC as a target region, and as such, negotiations towards an EU-LAC roadmap for H2020 should begin, including targeted calls to Latin America.
- To reinforce the strategic content of the SOM meetings in order to discuss and agree on new proposals needed to boost the bi-regional cooperation under H2020 and the new EC strategy in international cooperation addressing global challenges. In this context, it was also suggested to promote a cooperation environment through joint calls, mutual opening, and other mechanisms.
- To strengthen EU-LAC cooperation in R&I among key stakeholders with international potential by:
 - Organising networking events where organisations with previous international experience can mentor other non-experienced companies.
 - Performing capacity building in the distance through e-learning solutions or through short internships for both EU and LAC nationals
 - Enhancing the National Contact Points role and activities
 - Enhancing cooperation between LAC and European Technological Platforms
 - Promoting partnership building events with local institutional and governmental support
- To strengthen the inclusion of joint education opportunities into the research programs

Good Practices:

- Reciprocity is highly valued: a number of LAC funding programmes are open to European researchers to access ICT research and innovation funding mechanisms in Latin American countries
- The implementation of measures to enhance EU-LAC cooperation requires: the establishment of a bi-regional agenda; increasing LAC participation in EU programmes; and promotion of LAC researcher's participation.

Lessons learnt:

- National funding agencies should offer support funding instruments to better empower local institutions (in particular SMEs) in order to participate in international cooperation R&D consortia.
- The first ERANet-LAC call showed that in the case of joint calls, there must be a big number of funding agencies involved in order to find the countries interested in promoting each selected topic (or, on the other hand, discuss topics with agencies).
- Latin American and Caribbean funding agencies should be more active in bi-regional meetings in which European funding agencies participate in order to identify and select topics that would be of interest of the LAC region.
- Countries should take into account other internationalisation opportunities (FIWARE programme, Eureka initiative, EEN) that are easier to manage, and, in a sense, try to include procedures that their local groups are more used to deal with.
- LAC governments (and their NCP networks), should promote institutional and governmental support for networking activities, such as increasing funding to cover travel expenses to brokerage events in Europe, organising brokerage events, INFO Days, etc., in the LAC region, strengthening the NCP networks, inviting enterprises and organizations with previous international experience to mentor other non-experienced companies through sharing the benefits obtained based on their previous experience and possible recommendations (presentations, interviews, face to face meetings).
- LAC organisations (including researchers and innovators) should seek for assistance from the local governments in order to be able to participate in European projects, by using all networks and tools available: personal contacts as well as networking tools, find trustworthy European coordinators, and training in the European rules (legal, financial, etc.), and take into account that calls are highly competitive, and choose the right instrument.

4 CONCLUSIONS

Over the last fifteen years R&I cooperation between Latin America and Europe has increased significantly, in particular in the four LAC target countries with Liaison Offices (Argentina, Brazil, Chile and Mexico).

Our study has identified a number of good practices, related to the relationship between both regions, although there is still room for improvement. In this sense, a tentative list of topics that should be taken into account in order to improve EU-LAC ICT cooperation is included in the next chapter. Indeed, they are recommendations to be sent to the EU-CELAC Senior Officials through its Working Group on ICT.

4.1 *State of the art*

The four LAC target countries with Liaison Offices (Argentina, Brazil, Chile and Mexico) have developed a very productive relationship with Europe.

In the case of Mexico and Brazil, which are not automatically eligible for financing through the H2020 programme, different approaches were selected in order to continue their cooperation with Europe: Brazil was able to select specific topics to continue with EU-Brazil coordinated calls in ICT, whereas Mexico agreed to finance their nationals participating in funded H2020 projects through CONACYT.

Two INCO projects (ALCUE NET and ERANet-LAC) support EU-LAC cooperation in R&I. ALCUE NET is coordinated by MINCYT (Argentina) and acts as a support for the EU-CELAC policy dialogue, while ERANet-LAC implements joint calls between different European and LAC countries. ERANet-LAC first call was not able to generate interest in ICT topics from the European side, but it is expected that, opening the second call to other funding agencies will result in finding European countries interested in these topics. In addition, two projects under the ICT research theme support policy dialogues on EU-LAC R&I cooperation in ICT: LEADERSHIP, by providing input to bilateral and bi-regional dialogues on Science, Technology and Innovation, and CONECTA2020, by promoting networking between European (ETPs) and Latin American and the Caribbean technology platforms (LATPs) in the form of innovative match-making tools around ICT and Future Internet areas.

The latest visit of the Director for International Cooperation at DG Research and Innovation to Argentina, Uruguay and Brazil, in order to increase the scale and scope of Cooperation in R&I with Latin American countries, shows that the European Commission has increased its focus to strengthening International Cooperation in Research and Innovation with Latin American countries. Anyway, no mention has been made on the possibility of international cooperation topics targeting the LAC region.

4.2 Good practices

A number of good practices have been identified through an evaluation of the state of the art, combined with LEADERSHIP Benchmark Study and Input Papers.

GP1: In the countries where a Liaison Office is in place, the governmental support is quite effective.

GP2: The themes and the areas to be included in Brazil-EU Coordinated Calls are established by common agreement between Brazil and the European Commission.

GP3: Both parties, Brazil and the EC, have shown a common interest to jointly implement and evaluate the Coordinated Calls.

GP4: High interest from Brazilian and European institutions to articulate consortia for research projects

GP5: Both Brazil and the EC showed willingness to solve the problems that appeared while the different calls were launched.

GP6: As Mexico is not automatically eligible for financing through the H2020 programme, its government quickly agreed to finance their nationals participating in funded H2020 projects through a specific programme managed by CONACYT.

GP7: ERANet-LAC showed the viability of implementing joint initiatives that involve several funding agencies from Europe and Latin America countries.

GP8: The high number of proposals received by ERANet-LAC showed that these initiatives have a high impact among researchers.

GP9: The Mexican FIWARE platform offers numerous opportunities to develop applications and services (enhancement their computing capacity, and external parties), and it shows a possible roadmap for the expansion of a European platform to the LAC region.

GP10: Latin American nodes of the EEN (located in Chile, Mexico, Brazil, Peru and Argentina) support public and private entities (SMEs and research institutions) to participate in processes of innovation, cooperation, internationalization and knowledge transfer with international networks of science and technology including stakeholders of the EU.

5 RECOMMENDATIONS

The following recommendations are a tentative list of topics that should be taken into account in order to improve EU-LAC ICT cooperation. Indeed, they should be sent as recommendations to the EU-CELAC Senior Officials through its Working Group on ICT. They have been elaborated taking into account the outcomes of the benchmarking study, and are grouped according to their addressee. The final objective is to provide inputs in view to a future bi-regional roadmap in ICT.

5.1 *Institutional Dialogue and Coordination*

The Institutional Coordination represents the intra and inter coordinating efforts within the Latin American and European regions, and at a bi-regional level, to promote ICT adoption and new rules to implement and enforce R&I policies.

The recommended actions that should be accomplished in order to provide a better context to create the conditions for the Institutional Coordination are:

- **Recommendation 1:** Promote the nomination of ICT country representatives to the EU-CELAC SOM Working Group on ICT wishing to reinforce cooperation between Latin America and Europe in ICT research areas of common interest, in order to advise for the ICT R&I Roadmap at national and regional level; to harness and to integrate the necessary resources and the combined efforts of various agencies towards the objective of this Roadmap.
- **Recommendation 2:** Reinforce the strategic content and agendas of the SOM meetings to discuss and agree on new proposals that the bi-regional cooperation needs to boost under the H2020 and the new strategy of the EC for international cooperation addressing global challenges.
- **Recommendation 3:** Disseminate the ICT priorities of common interest for both regions identified by LEADERSHIP, in order to establish a bi-regional agenda for cooperation on strategic issues of common interest and mutual benefit, This selection has been based on national thematic priorities and selection of topics from a critical mass of researchers, R&D institutions and companies on both regions.
- **Recommendation 4:** When implementing joint and coordinated calls, reconcile the different bureaucracies and national rules among the two regions, which mainly refers to different funding mechanisms and national regulations regarding IPR, conditions of eligibility and resource allocation; different funding availability and fiscal years (different time plans); as well as different topics of interest.
- **Recommendation 5:** Consider a stronger inclusion of joint education opportunities into the research and innovation programs.
- **Recommendation 6:** Capitalise on the Brazilian experience ups and downs:
 - Choose the right mechanisms to agree on topics that are interesting for both regions
 - Include the right institutional partners in order to fund evenly each region, and without delays.
 - Use same evaluation criteria in Latin America and in Europe.

- **Recommendation 7:** Definition of common rules on key issues such as intellectual property, data protection, security and privacy.
- **Recommendation 8:** In the case of joint calls, there should be a big number of funding agencies involved in order to find the countries interested in promoting each selected topic (or, on the other hand, discuss topics with agencies).

5.2 European Commission strategy

- **Recommendation 9:** The EC should consider Latin America among its priority and strategic partners (and not only Brazil and Mexico). For example, the European Strategic Forum for International Science and Technology Cooperation (SFIC) should consider LAC as a target region, and as such, negotiations towards an EU-LAC roadmap for H2020 should begin, including targeted calls to the LAC region.
- **Recommendation 10:** Support the organisation of joint calls between EU and LAC funding agencies.

5.3 LAC Governments

- **Recommendation 11:** National funding agencies should offer support funding instruments to better empower local institutions (in particular SMEs) in order to participate in international cooperation R&D consortia.
- **Recommendation 12:** Latin American and Caribbean funding agencies should be more active in bi-regional meetings in which European funding agencies participate in order to identify and select topics that would be of interest of the LAC region.
- **Recommendation 13:** LAC countries should take into account other internationalisation opportunities (FIWARE programme, Eureka initiative, EEN) that are easier to manage, and that in a sense, include procedures that their local groups are more used to deal with.
- **Recommendation 14:** LAC governments (and their NCP networks), should promote institutional and governmental support for networking activities, such as increasing funding to cover travel expenses to brokerage events in Europe, organising brokerage events, INFO Days among other initiatives in the LAC region. Governments should strengthen the NCP networks, inviting enterprises and organizations with previous international experience to mentor other non-experienced companies through sharing the benefits obtained based on their previous experience and possible recommendations (presentations, interviews, face to face meetings).
- **Recommendation 15:** LAC organisations (including researchers and innovators) should seek for assistance from their local governments in order to be able to participate in European projects, using networking and all tools available: personal contacts as well as networking tools, find trustworthy European coordinators, and training in the European rules (legal, financial, etc.), and take into account that calls are highly competitive, and choose the right instrument.

- **Recommendation 16:** Each country should consider several funding agencies to participate in joint initiatives, in order to be able to fund different actors.
- **Recommendation 17:** Europe expects reciprocity in terms of LAC funding programmes open to Europeans. The LAC governments should build a map of available funding mechanisms, as orientation both to regional stakeholders and to European stakeholders.

ANNEX 1: QUESTIONNAIRE ON GOOD PRACTICES FOR EU-LAC COOPERATION

According to your experience in EU-LAC cooperation projects, please answer the following questions:

1. Which would you say are the three main barriers/challenges that LAC organisations face to participate in EU-LAC cooperation projects?
2. Which are the main barriers/challenges you face during:
 - a. The Proposal phase
 - b. The Grant Agreement preparation
 - c. The Project implementation phase
3. Which barriers appeared for successfully implementing joint initiatives (e.g. coordinated calls)?
4. Which are the critical factors for a successful EU-LAC cooperation?
5. Which are the three main measures to enhance EU-LAC cooperation?
6. In your opinion, which have been the most effective communication mechanisms to deliver relevant information about programmes (e.g. Horizon 2020, others) to LAC organisations? (e.g. infodays in EU, infodays in LAC, EC proposers day)
7. Which would you say are the most successful ways to find partners for EU-LAC cooperation projects? (e.g. networking and partnership building events, partner search tools such as Ideal-ist...)
8. Which mechanisms should be implemented in order to select topics for a successful EU-LAC cooperation?
9. Which measures would you suggest to raise awareness of LAC funding programmes open to Europeans?
10. Do you have any other suggestions/recommendations to improve EU-LAC cooperation in R&I?

ANNEX 2: SUMMARY OF RESPONSES OF THE QUESTIONNAIRE

Question	Categories found
1. Barriers/challenges LAC organisations face to participate in EU-LAC cooperation projects.	<ul style="list-style-type: none"> • Lack of Experience • Need for governmental support • Eurocentrism • Highly competitive calls • Travel expenses
2a. Which are the main barriers/challenges you face during the proposal phase?	<ul style="list-style-type: none"> • Partners' profiles • Networking • Writing a proposal / Negotiating and calculating project participation
2b. Which are the main barriers/challenges you face during the Grant Agreement preparation?	<ul style="list-style-type: none"> • Support to partners • Differences among partners
2c. Which are the main barriers/challenges you face during the implementation phase?	<ul style="list-style-type: none"> • Support to partners • Uneven consortia • Good coordination
3. Which barriers appeared for successfully implementing joint initiatives (e.g. coordinated calls)?	<ul style="list-style-type: none"> • Different bureaucracies and different national rules • Unsynchronized timelines • Funding is not guaranteed • Different evaluation criteria.
4. Which are the critical factors for a successful EU-LAC cooperation?	<ul style="list-style-type: none"> • Priorities of common interest for both regions • Cooperation based on trust • Critical mass of researchers and R&D institutions • Organizational strategic vision towards EU-LAC cooperation • Coordination
5. Main measures to enhance EU-LAC cooperation.	<ul style="list-style-type: none"> • Bi-regional agenda / Joint definition of mechanisms / Monitoring • Latin America among European priorities and strategic partners / More joint calls / Funding • LAC researchers should be more active / Promotion of bi-regional mobility.
6. Most effective communication mechanisms to deliver relevant information about programs to LAC organisations.	<ul style="list-style-type: none"> • Brokerage events for partner searches • INFO Days and other awareness raising events / capacity building events. • NCP networks.
7. Most successful ways to find partners for EU-LAC cooperation projects.	<ul style="list-style-type: none"> • Networking (personal or institutional contacts) • Networking and partnership building events. • Networking tools.

<p>8. Which mechanisms should be implemented in order to select topics for a successful EU-LAC cooperation?</p>	<ul style="list-style-type: none"> • According to national priorities • Through mechanisms that identify similarities with other regions. • Consultations with stakeholders
<p>9. Which measures would you suggest to raise awareness of LAC funding programs open to Europeans?</p>	<ul style="list-style-type: none"> • Very few LAC programmes are open to foreign researchers • Should be presented in the info and proposers days in Europe. • Coordinated calls LAC – EU must rise awareness on LAC opportunities
<p>10. Any other suggestions/recommendations to improve EU-LAC cooperation in R&I.</p>	<ul style="list-style-type: none"> • The European Strategic Forum for International Science and Technology Cooperation (SFIC) should consider LAC as a target region, and as such, negotiations towards a EU-LAC roadmap for H2020 must begin, , including SICA calls and International Cooperation calls aimed a the LAC region. • Reinforce the strategic content of the SOM meetings to discuss and agree on new proposals. • Identify key stakeholders with international potential and organize events to raise awareness of the importance of strengthening EU-LAC cooperation in R&I. • Stronger inclusion of joint education opportunities into the research programs.