



## Document on the Joint Initiative for Research and Innovation

EU-LAC SOM of Science and Technology

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### Political challenges and background

The promotion of the “*EU-LAC Knowledge Area*”, first mentioned in the Guadalajara Declaration of 2004 and the present global challenges for the cooperation on science, technology and innovation, with focus on sustainable development and social inclusion, will be addressed in the EU-LAC Summit in 2010. This bi-regional partnership concerns all countries of the European Union and the Commission on the one hand, and all Latin American and Caribbean countries, on the other.

Both regions recognize that “*science and technology, innovation and higher education are vital for all societies regardless the size of the country or the income level of their inhabitants*”. Advances in these three elements of the so-called “knowledge triangle” are also deeply related to the issues addressed in the last EU-LAC Summit in Lima on 16<sup>th</sup>-17<sup>th</sup> of May 2008, both from the poverty, social inclusion and sustainable development perspectives. The next Summit in 2010 offers the opportunity to address these topics again taking into account the socio-economic level of each region, country and productive sector, thus complementing the capabilities of both regions in view of the economic globalization process.

With the entry into force of the Lisbon Treaty, the European Research Area (ERA) becomes a major political objective. In this new context, the strategy of the EU for 2020 identifies science, technology, and innovation, along with education, as key areas to develop Europe into knowledge-based society, more ecological, smarter, and more inclusive in the future. In order to achieve these objectives, international ST&I Cooperation becomes an important tool for the third country participation in the EU 7<sup>th</sup> Framework Program for RTD (7FP), the most important funding instrument for research at the European Community level.

Besides, a number of bilateral cooperation agreements have been signed (or are under negotiation) between the EU and third countries to stimulate better and more stable cooperation in science, technology and innovation.

In addition to the FP7, regional cooperation schemes provide funding, such as the ALFA program based on the cooperation between higher education institutions of the European Union and Latin America, and @LIS2, which promotes the Information Society, boosting the interconnections between research networks and communities in the EU and Latin American countries, e.g. RedClara. It also promotes bi-regional collaborative research and supports the Latin American Forum of Telecommunications Regulating Authorities.

Since the Rio Summit of 1999, continuous efforts have been undertaken to define and implement joint ST&I programmes. The Guadalajara Declaration in 2004 explicitly referred for the first time to the desirability of building the “EU-LAC Knowledge Area”. Later, the SOM Declaration issued in Salzburg in 2006 reflected the interest of both regions to promote this biregional Area by means of the design, implementation and follow-up of joint research and development, mobility and innovation in areas of mutual interest.

This Knowledge Area was a further step to facilitate the exchange of knowledge, technology transfer and mobility of students, professors and researchers. In practical terms, the implementation has been more difficult and slower than initially foreseen by both parties. Time is right to mobilize political will to significantly strengthen the links between political declarations and follow-up actions, by cooperation in science, technology and innovation, both quantitatively and qualitatively.

In parallel, there is a growing interest and a common need of consolidating institutional science, technology and innovation links between both regions. More specifically, it is important to ensure continuity in the implementation and follow-up of decisions taken at Ministerial Conferences or EU-LAC Summits and enhance the efficiency and quality of the bi-regional cooperation taking into account the heterogeneity of the existing capacities in Latin America and Caribbean. Thus, there is a need to improve the regional and bilateral dialogue with the support of the appropriate operational structures and to adapt and diversify the cooperation instruments to the different realities, optimizing the efforts devoted to human resources training and the benefit for the countries of both regions.

It is for some time now that the European Union and Latin America and the Caribbean have started to move towards the development of joint actions addressed to ensure a better use of the existing capacities in science, technology and innovation, not only as a basis of competitiveness, but also to complement their economies, new sources of employment and to guarantee a sustainable economic growth at a long-term.

Likewise, LAC countries have made progress, albeit more modestly, in a similar direction, through science and technology programs and networks supported by international organizations such as the OAS, IICA, UNESCO, FAO and MERCOSUR, and by countries themselves such as the CYTED, CEPAL, CABBIO, PROCISUR, PROCIANDINO, CATIE, CARDI, CTCAP, and CARISCIENCE.

Within this context, the EU and LAC share four main priorities for the forthcoming 2010 Ministerial Conference:

1. To reinforce the role of the EU-LAC Ministerial Conference as part of the on-going process of opening ERA to the rest of the world, with a particular focus on the Latin America and Caribbean region in the priorities set forth by the Summit.
2. To frame the activities within the context of the “knowledge triangle” where research policy should have the maximum synergy with higher education and innovation policies, promoting at the same time a closer relationship with other sectorial policies,
3. To guarantee that the results of the research activity and the availability of highly trained human resources enable the social appropriation of integral knowledge and improve their impact on the productive net.
4. To consolidate the necessary structures in order to ensure a permanent bi-lateral dialogue for periodical up-dating of joint priorities, topics and instruments taking into account the interest of each Region.

Within this framework, the SOM on Science and Technology recommends to the Ministerial Conference to be held in Spain in May 2010 to examine and make progress on the implementation of the **“Joint Initiative for Research and Innovation EU-LAC”** based on a set of principles and strategic issues including the elaboration and approval of a series of actions considering the interests, capabilities and social needs of each region.

#### 1. Priorities of the EU-LAC collaboration

##### Cooperation for the strengthening of successful previous experiences.

There has been much progress in this sense, both at the individual and group relations. At a specific level, the participation of LAC research groups in the 7<sup>th</sup> Framework Program (FP7) has increased considerably compared to previous FPs. Noteworthy, both regions participate in joint and specific FP7 projects aiming at facilitating priority setting and policy dialogue, such as EULARINET, - EU-LAC research and Innovation Networks between LAC and EU, PRO-IDEAL- on information and communication technologies, ALCUE-FOOD -on Food, Agriculture and Biotechnology, whose activities are intended to bring common visions on specific issues, coordinate activities and identify priorities of shared interest.

Currently new initiatives are underway for co-financing activities and projects between the EU and LAC countries such as Argentina, Brazil and Mexico (FONCICYT).

The EU-LAC Summit of Heads of State and Government held in May 2008 in Lima agreed to develop the communication infrastructure needed to reduce the digital gap, under such programmes as @lis, and widen the interconnectivity between research networks CLARA, GEANT and CKLN.

Likewise, some experiences such as the Iberoamerican Programme in Science and Technology for Development “CYTED” should be mentioned here. Since its start in 1984 it has demonstrated high added value in ST&I cooperation and the CEPAL (UN) that promoted the generation of a new culture of science, technology and innovation as

a key basic element for the economic and social development of the LAC region countries.

Based on the accumulated experience, other funding instruments could be launched to enhance the cooperation level. The use of “*coordinated calls*” in topics of common interest or the “*twinning*” of funded projects, as explored in the past, could be promoted again. Here, multi-lateral and bi-lateral actions should complement each other.

The majority of experiences were focused on public entities and programs. Private sector participation has received lower attention and/or success until now. In this context, innovation should be considered as a major driving force through the definition and development of a specific cooperation program in this area, recognizing the role of the State in the design of national policies for science, technology and innovation development.

Therefore, innovation should be precisely included in the definition and development of a Joint Initiative for Research and Innovation.

The future role of the Competitiveness and Innovation Program (CIP) and the experience of Joint Technology Initiatives (JTI) with industrial leadership and public-private-partnerships (“PPP”) on the European side should be re-analyzed in relation to the role they could play within the EU-LAC context, promoting the participation of the private sector in the development of joint activities and stimulating the participation in coordinated calls.

The fruitful experience within EUREKA program and Biotec-SUR with stronger involvement of industrial partners and the use of a bottom-up approach in selected topics combined with national commitments for funding deserves specific attention.

Here and anticipating the possible effects of the current international financial crisis, progress in setting up an “EU-LAC Knowledge Area” becomes even more important. It is necessary to recognize that the concept goes beyond project-based cooperation and exchange of ideas as the core strategies. A “common space” shall be developed through shared vision with joint priorities, the right instruments, and the allocation of resources from both regions to for an effective implementation.

#### Political priorities

- a. To reinforce the effective role of EU-LAC Summits as a part of the “*opening ERA to the rest of the world*” and strengthen the bi-regional dialogue structures.
- b. To frame the R&D action plans in close coordination with higher education and innovation, actions to promote constructive relationships with other thematic and cross-cutting strategies like infrastructures, telecommunications, environment, health and energy.
- c. To further strengthen the cooperation of EU and LAC researchers and reinforce the reciprocal access to resources through the development of ICT infrastructures, widening the interconnectivity between existing academic networks.

- d. To support measures to attain knowledge access and dissemination.
- e. To promote human resource training in a balanced manner.
- f. To increase synergies with other EU policies and instruments, especially those managed by the European Commission (e.g. FP, CIP, external cooperation programs...).

#### Thematic priorities

- a. A joint approach through a so-called “*Joint Initiative for Research and Innovation*” should be agreed between both regions LAC EU in a stepwise refinement process. Thematic priorities should be addressed in a flexible manner to facilitate its periodical update.
- b. At this moment, the following broad thematic priority areas have been identified:
  - 1. Energy
  - 2. Environment and climate change
  - 3. Agro-food
  - 4. Health
  - 5. Information and Communications technology
  - 6. Horizontal activities on S&T policy with emphasis on human and institutional capacity building

Special focus should be given to the ICT-based Research Infrastructures (e-Infrastructures for short) along two main axes:

- 1. Connectivity between EU and LAC in order to enable science and R&D cooperation through the improvement of the interconnection of academic networks and the enhancement of transatlantic links, through including new optic fibre cables.
- 2. E-Infrastructures supporting collaboration in specific research/application domains (energy, environment and climate change, agro-food and health services) by enhancing the access to and use of simulation and supercomputing facilities.

Specific priorities within these broad thematic areas will be identified by both regions at a later stage through the appropriate mechanisms to be defined by the Ministerial Conference. In this process, special consideration will be given to the priorities defined in previous Summits regarding food security, renewable energies and climate change.

Fighting against poverty and striving for social inclusion will become a transversal activity to be considered in all thematic priorities. A true impact on the population should be assured.

## 2. Instruments for cooperation

The thematic priorities should be implemented in the framework of the “*Joint Initiative for Research and Innovation*”, to be discussed at the Ministerial Conference on the basis of the proposals submitted by the SOM. The general principles of the “*Joint Initiative for Research and Innovation*” (*hereinafter called “The Initiative*) should be further discussed for adoption EU-LAC Summit.

The Initiative will be based on a set of pre-existing and new actions which combine targeted and horizontal instruments (cross-cutting ones). Different objectives may require different instruments or a combination of these to be achieved. The principal ones are as follows:

- a. The creation of a “*Joint Cooperation Fund*” (JCF) is proposed as a new instrument for EU-LAC cooperation under *the Initiative*.
  - i. It would permit the launching of variable geometry-based actions within the thematic priorities agreed by countries of both regions.
  - ii. It will support a broad range of activities and, apart from research, innovation and research infrastructures should also be considered. This option needs further clarification.
- b. Instruments aiming to the following complementary objectives:
  - i. To improve the coordination and cooperation of national research activities. The Era-Net scheme of the EU could be used as an example.
  - ii. To facilitate the participation in the Framework Programs (FPs) or multilateral programs of LAC countries with low involvement by providing cooperation and support to science and technology capacity building.
  - iii. To publish calls for proposals targeting the LAC region and focused on areas of common interest that had been previously agreed upon.
  - iv. To continue with the “twinning” of ongoing projects in order to coordinate activities and exploit results.
  - v. To support measures aimed to strengthening scientific capabilities and facilitating access to cooperation opportunities.
  - vi. To create conditions for better interaction and cooperation between public and private research actors in joint proposals and technology transfer activities in order to increase the participation of industry with emphasis on SMEs.

- vii. To support initiatives to promote LAC research potential and a more balanced mobility of researchers by a combination of instruments including ERASMUS mundus and Marie Curie Actions.

The EU RTD Framework Program should be envisaged as one of the key instruments to facilitate the participation of LAC countries. The strengthening of FP7 contact points and raising visibility of LAC researchers and their institutions in Europe is a useful mechanism to increase the participation and success rate. Promoting targeted calls in future Work Programs should be a priority.

### **3. Funding commitments**

Shared costs (in kind and/or in cash) taking into account mutual interests and capacities between LAC and EU countries should be the basis for launching new actions under variable geometry schemes in addition to the European Union support, when appropriate.

- a. The use of existing platforms for identifying priorities seems especially attractive to identify those areas in which EU and LAC countries wish to commit additional national resources, complementing the Joint Cooperation Fund.
- b. At the present moment, a new financial instrument, LAIF (Latin America Investment Facility), seems particularly attractive. The future use of this new instrument to support research infrastructures in the region could be explored.

### **4. Bi-regional Policy dialogue**

In order to ease the implementation process and to secure the continuity of approved agreements, a technical support and follow-up scheme seems necessary. This scheme could be based on two complementary levels: a permanent Senior Officers Meeting (SOM) with LAC and EU representatives meetings annually and a more technical support structure. The system has been fruitfully used in other geographical areas.

The EU-LAC specific SOMs should support the exchange of information and good practices; identification of common priorities and means for future cooperation. They should operate on a permanent basis and may be supported by a more technical structure to provide statistical information, impact assessments, and organizational work in order to facilitate the launching of joint activities. The creation of a new ad-hoc structure or the use of existing ones may be examined for this purpose.

Each region may use the appropriate specific structures to identify its priorities and strategies. In the case of EU, the Strategic Forum for International Cooperation (SFIC) may undertake this task by contributing with the strategic orientation and principles of the new Joint Initiative for Research and Innovation.