

Facing Challenges Together: Collaboration between Europe and Latin America on Cloud Computing

Background

The ICT sector is among the most international and globalized markets worldwide. Main technologies and services are provided on a global-scale, particularly regarding developments in the Internet-based field. The basis for the economic success of many ICT technologies is to operate internationally.

Recent progresses made in virtualization, storage, broadband connectivity and processing have come together to enable a new model of ICT provision services: cloud computing. The result is a new paradigm, extremely attractive from an economic perspective due to its capacity to combine cost-saving with increased flexibility in the management of the IT needs of firms and governments.

Essentially, cloud computing enables the lowering of barriers of entry to markets and allowing the emergence of new players. Moreover, public administrations can deliver services to citizens where it was impossible before. It enables innovation and the creation of new business models. It also reduces costs and changes the landscape of all economic sectors that require ICT services. However, to fully achieve its benefits, cloud computing needs the appropriate global environment; the adequate sharing of knowledge and technical cooperation among countries is the best approach to address essential questions like interoperability, standards, security, data protection, ownership or sovereignty of data.

Considering the importance of ICT for social inclusion and economic growth, in particular the competitiveness of SMEs, as well as the European and Latin American potential in this area, it is in the interest of both regions to favour policies that help to fully reap its benefits.

Latin America

The share of Latin America in public cloud services is about 5% of the world total, less than its share of global GDP. Nevertheless, its projected annual growth rate, approximately 26%, would

imply that such services will be adopted at a faster rate than in other regions. Despite this positive trend, the expansion of cloud computing in most Latin American countries, as in other middle-income economies, still faces constraints:

- Low connectivity rates and limited broadband infrastructure to support services and applications which demand high bandwidth.
- Inconsistent legal and regulatory frameworks; uncertainty about institutions and applicable laws regulating the cloud market.
- Fragmentation of standards which hinder data and application portability from one provider to another and interoperability among platforms and services.
- Inconsistent legal and regulatory frameworks, which cause lack of trust in the technology such as data protection and security and service level agreements.
- Lack of public policies and resources to foster development private/public cloud platforms.

Europe

- Following the launch of the European Cloud Strategy in September 2012, the Commission is currently pursuing the implementation of key actions: (i) cutting through the jungle of standards; (ii) ensuring safe and fair contract terms and conditions, and (iii) establishing a European Cloud Partnership (ECP) that brings together industry and public organizations to work on common procurement requirements.
- As recommended by the Heads of State and Government, the European Commission and the Member States, with the support of the European Cloud Partnership should continue to make every effort to put Europe at the forefront of cloud adoption. In this context, the recommendations of the European Cloud Partnership Steering Board are welcome.
- On standardization, the Commission engaged ETSI (the European Telecommunications Standards Institute) to coordinate a joint effort on mapping of existing standards that are necessary for security, interoperability, data portability and reversibility. In December 2013, ETSI has concluded the mapping exercise and presented the report.
- On certification, the Commission has been working with European Network and Security Agency (ENISA) to support the development of EU-wide voluntary schemes and to make a list of such schemes by 2014.

- The work is also ongoing regarding Key Action 2 – Ensuring safe and fair contract terms in conditions in respect to cloud computing.
- The Commission has established two expert groups within the Cloud Select Industry Group (C-SIG) with representatives from a number of cloud service providers and other industry stakeholders: the C-SIG Subgroup on Code of Conduct on data protection and the C-SIG Subgroup on Service Level Agreements.
- In the first half of 2014, C-SIG Subgroup on Code of Conduct on data protection will present the data protection Code of Conduct for cloud services providers to the Article 29 Working Party.
- The Key Action 2 - The ECP Steering Board and the Cloud-for-Europe (C4E) pre-commercial procurement should provide concrete and tangible recommendations for road mapping, for policy and implementation actions to stimulate cloud adoption in the public sector and for strengthening the position of SMEs either as cloud service providers or users of cloud-based services.

EU - Latin America common approach

In order to seize the opportunities offered by cloud computing, governments and industry must face challenges involving political, legal and regulatory issues: protection of users' interests, especially SMEs and the provision of sufficient network access and capacity. Meanwhile, each country of both regions is developing different national strategies, facing the lack of international consensus regarding legal, standard or certification aspects. The main challenge is approaching these aspects regionally or globally.

It is no longer viable for governments to adopt policies and strategies that are not harmonized with their neighbours, or based on best practices. A regional political dialogue is needed to promote an environment which enables the development of cloud computing as an instrument of economic growth and social inclusion.

EU-ECLAC working group on cloud computing

Based on the aforementioned considerations, the creation of an EU-ECLAC working group is proposed in order for cloud computing to serve as an engine for sustainable economic growth, innovation and cost-efficient public services. The EU-ECLAC working group will consist of representatives of participating governments and the industry from both regions as well as the representatives from the European Commission and ECLAC. The EU-ECLAC working group`s main objectives are:

1. To establish a regular collaboration between Europe and Latin American, strongly based on knowledge sharing between countries related to the development of cloud computing initiatives.
2. To boost the knowledge about the effects of cloud computing and to strengthen citizen rights and freedoms.
3. To build a cluster market for European and Latin American companies.
4. To generate a base of evidence on the impact of cloud computing for economic growth and social, inclusion and the best practices that could foster cloud deployment in both regions, particularly for SMEs.
5. To promote interoperability, transparency and strengthen confidence in the use of cloud services. To promote alternative dispute resolutions between SMEs and cloud providers.

The following topics are suggested as a means of reaching the proposed objectives.

To be led by ECLAC:

- **Cloud Infrastructure.** Incentives to fixed and mobile broadband deployment, as well as the attraction of large regional data centres. To build joint actions on infrastructure, such as networks and computing systems.
- **Promotion of new policies and financing schemes** to foster cloud development and the take-up of cloud services, creating opportunities to develop joint projects and partnerships to boost up cloud computing platforms, sharing best practices and local solutions.

To be led by EC:

- ***Building trust and common standards.*** Work towards a common understanding of data protection and security aspects, and common cloud standards for service level agreements, portability of data and interoperability / federation of services and cloud.
- ***SMEs.*** Public policies to motivate SMEs to start using or offering cloud computing services. Training and information to help SMEs to understand the opportunities, risks and challenges of cloud computing

ECLAC and the European Commission will, as soon as possible, present to the participant of the meeting a proposal of composition, governance, guiding principles and work programme of the Working Group.

ECLAC would serve as the technical secretariat of the aforementioned working group in Latin America. Its main role would be to facilitate and coordinate the activities of the partnership. Within this context, the European Commission would serve as a strategic partner in this endeavour.

The long term goal of the EU-ECLAC working group will be to work on the common principles and to prepare EU-ECLAC Memorandum of Understanding (autumn 2014). The Working Group and the Memorandum of Understanding should be assumed as a first step towards a wider and deeper cooperation between European and Latin America countries.