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**Submissions from entities in the United Nations system and elsewhere on their efforts in
2013 to implement the outcome of the WSIS**

Submission by

United Nations Economic Commission for Latin America and the Caribbean

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 17th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

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IMPLEMENTATION OF WSIS ACTION LINES IN LATIN AMERICA AND THE CARIBBEAN IN 2013

EXECUTIVE SUMMARY

The implementation of WSIS activities in Latin America and the Caribbean (LAC) region has continued at the national and regional levels. The LAC countries remain committed to the development of the Information Society, as they demonstrate during the Fourth Ministerial Conference on the Information Society in Latin America and the Caribbean, where they approved the [Montevideo Declaration](#) and [the sustainability and work plan of the eLAC process for 2013-2015](#). Countries continue to adopt the consecutive regional action plans as short-term milestones evolving towards the Millennium Development Goals (MDGs) and the World Summit on the Information Society (WSIS) targets. Also, the Montevideo Declaration shows a deeper commitment on the follow-up of the WSIS+10 process.

High-level decision-makers in the region support UNECLAC efforts on promoting broadband development through the Regional Dialogue on Broadband. Since its creation in 2010, its main contributions are: to strengthen the political dialogue with technical support, to foster integration through the development of regional infrastructure (submarine cables and IXPs), to highlight the need of a regulatory framework update, and the generation of indicators on access, affordability and quality of broadband to support public policies decisions. Currently, the countries members of this forum are exploring new ways to massify broadband, such as the use of the 450MHz frequency.

Studies produced by UNECLAC revealed the urgent need for Latin American and Caribbean countries to increase their efforts to reduce the digital divide in terms of access and quality of access, to facilitate the use of more sophisticated ICT applications based in cloud computing in order to take advantage of the potential benefits of these technologies for the economic performance and social inclusion. In this regard, in 2013 UNECLAC deepened its work in two very relevant topics for the region: the measurement of digital economy and its benefits for equality, and the promotion of ICT use to overcome the gender divide.

OVERVIEW OF TRENDS AND EXPERIENCES

UNECLAC contributed to achieving the WSIS targets through four action lines: **(1)** acting as Technical Secretariat of eLAC2015¹ and monitoring the Information Society progress in the region in several topics, particularly those prioritized in eLAC2015 (action line C1 and C11); **(2)** acting as Technical

¹ eLAC is a plan of action for Latin America and the Caribbean with a long-term vision -towards 2015, according to the Millennium Development Goals and the World Summit on the Information Society (WSIS) targets, which states that information and communication technologies (ICTs) are tools for economic development and social inclusion. In 2005, during the preparatory meetings for the second phase of WSIS, the countries of the region approved the Action Plan for the Information Society in Latin America and the Caribbean, known as eLAC2007. The continuity of the process was forged with the approval of the second plan, eLAC2010, and later with the eLAC2015, currently in implementation.

Secretariat of the Regional Dialogue on Broadband² (action line C2); **(3)** promoting and monitoring the development of ICTs applications (action line C7); and **(4)** providing technical assistance and capacity-building on selected issues for the development of the Information Society (action line C4 and C11).

1. TECHNICAL SECRETARIAT OF ELAC2015 AND MONITORING OF INFORMATION SOCIETY IN LATIN AMERICA AND THE CARIBBEAN

As the Technical Secretariat for eLAC, UNECLAC efforts focused on fostering the implementation of the Regional Plan of Action eLAC2015, by providing technical support to the regional follow-up mechanism, monitoring compliance with the plan's goals, elaborating specific studies on topics prioritized in the action plan, the generation of statistics and indicators for measuring progress, and the production of newsletters covering emerging and relevant trends for the region. Also, UNECLAC was responsible for coordinating the IV eLAC ministerial follow-up conference, which was held in April 2013 in Montevideo, Uruguay.

Those activities are related with WSIS action line C1, focused on the role of public governance authorities and all stakeholders in the promotion of ICTs for development. Given its continuity since 2005, eLAC has become a strategic guide for the digital development of Latin-American countries (LAC), which facilitates the definition of national digital agendas as it allows raising awareness on the role of ICTs for economic development and social inclusion.

According to the document [Digital economy for structural change and equality](#), UNECLAC presented at the Ministerial Conference held in Uruguay, Latin America and the Caribbean is progressing at two very different technological speeds: in some countries, ICTs are having a positive impact on economic growth, technological investment, production structure and business/consumer behaviour, while in other countries progress is slower (hence the need to strengthen institutions and public policies with a long-term strategic vision). For example, there is an asymmetrical development of critical infrastructure with mobile broadband penetration in the region: the three most advanced countries have 15 times as much development than the ones lagging the furthest behind. Furthermore, the digital divide between Latin America and countries of the Organization for Economic Co-operation and Development (OECD) in terms of mobile broadband is getting wider (11% versus 55% penetration in 2011). In addition, it was possible to quantify the economic impact of ICTs in the region, representing on average 3.2% of GDP in four countries in the region (Argentina, Brazil, Chile and Mexico), a significant figure given that the European Union reaches 5%, and have a positive impact on labor productivity. These actions also developed measurement capabilities in this area, which are a permanent asset.

Due that the eLAC process is a multi-stakeholder meeting space (public, private, academia and civil society); it constitutes a platform for high-level political dialogue and regional cooperation, in line with WSIS action line C11. eLAC2015 has successfully brought the governments of the region together in a political commitment to prioritize the universalization of broadband, achieve a transactional and participatory e-government, use information and communication technology (ICT) to ensure access, security and continuity of health care for users of health services, achieve access to ICT for all microenterprises and SMEs, promote the use of ICT for regional integration and provide

² The Regional Dialogue on Broadband emerged in 2010 as an initiative fostered by UNECLAC and the Undersecretary of Telecommunications of Chile (SUBTEL), to promote the integration of the regional demand for broadband, in order to achieve better prices for the Internet international traffic.

universal access to ICTs for education and expand their use in this field. In the Montevideo Declaration signed at the [Fourth Ministerial Conference on the Information Society in Latin America and the Caribbean](#), the region's countries reaffirmed their commitment to continue making progress towards achieving the targets set out in the [Plan of Action for the Knowledge and Information Society in Latin America and the Caribbean, eLAC2015](#), in line with WSIS action lines, and their clear determination to strengthen regional collaboration in this sphere. Countries also underscored the importance of expanding the digital economy as a key part of productive transformation, as well as the need to have more in-depth policies for structural change that would make it possible to incorporate more knowledge and innovation in production activities, while promoting sustainable growth with social equality.

Similarly, Latin American and Caribbean countries also resolved to "reject any attempt to appropriate, without the due consent of the region's countries, the names Amazonia and Patagonia in any language, as well as any other top level domains (gTLD) referring to geographical, historical, cultural or natural names, which must be preserved as part of their cultural identity and heritage" (action line C8 and C10).

The eLAC process has always considered among its targets to overcome the gender digital divide, contributing to sensitize the governments about this issue. In the 12th session of the Regional Conference on Women in Latin America and the Caribbean held in Santo Domingo, Dominican Republic, from 14 to 18 October 2013, the key theme was the economic empowerment of women and ICTs. In order to make a substantive contribution, UNECLAC is presented the document [Women in the digital economy: breaking through the equality threshold](#). According to the document, in several Latin American and Caribbean countries, women equal men in terms of Internet access, but are at a clear disadvantage when it comes to using it. This limits the personal and professional development of women, as well as the growth with equality of the region's countries as part of a new technological paradigm. Representatives of Member States and associate members of UNECLAC who took part in the regional conference undertook to help the information and knowledge society promote women's economic autonomy and their full and equal participation in all spheres of society and all decision-making processes. This commitment is part of the [Santo Domingo Consensus](#). Among other statements, delegates suggested developing policies to realize the commitments and targets of WSIS and eLAC2015. Countries also felt the need to support the inclusion of the issue of gender equality and women's empowerment in the post-2015 development agenda.

The Observatory for the Information Society in Latin America and the Caribbean (OSILAC) has continued to support the ICT measurement in the region. The data on ICT access and use represent an important input for formulating, monitoring and evaluating public policies which guarantee a more inclusive access and usage of ICT in the region.³ OSILAC maintains updated an online [Statistical Information System on ICT](#) which gathers available databases of household surveys from the countries of the region, allowing the calculation and analysis of ICT and socioeconomic indicators over time, among the countries, within the countries of the region, and in relation to other countries and regions of the world.

³ For example, data generated for the 12th session of the Regional Conference on Women in Latin America and the Caribbean shows that the gap widened in several countries. The difference between men and women is almost 5% (39.3% versus 44%) in Chile - which has one of the highest Internet usage rates overall. In Peru, 26% of women and 34.1% of men report using the Internet. This digital gender gap is more common in urban than rural areas, and mainly affects older women of all levels of education. The prevalence of Internet usage increases in proportion with the household level of income, although the gender gap is narrower in those groups where the technology is less accessible. For instance, Uruguay is the most unequal country in this regard, and 34.5% of women in the first quintile report using the Internet compared with 63% from the fifth quintile.

The Regional Broadband Observatory continues to produce indicators on diffusion and access to broadband, tariffs and service speed. The specific data is an important input for defining and formulating broadband national plans. Data shows a significant progress in the broadband services offered in the region: a reduction in the fixed broadband service tariffs by 67% between 2010 and 2012, and the improvement in the quality of broadband connections. Between 2010 and 2012 download speeds increased by 150% (4.5 Mbps), while upload speeds increased 195% (1.6 Mbps).

2. TECHNICAL SECRETARIAT OF THE REGIONAL DIALOGUE ON BROADBAND

In order to address the problematic of the universal access to broadband and the digital gap in access and deployment of this technology, in 2010 the Regional Dialogue on Broadband was established as a political forum to exchange knowledge and different approaches to developing policies for massifying broadband. In 2013, this dialogue has continued and grown, and is made up of 11 countries: Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Mexico, Paraguay, Peru and Uruguay.

In October 2013, took place the seventh meeting where Latin American countries taking part in the Regional Dialogue on Broadband asked UNECLAC to carry out a new study on the benefits of using the 450 MHz frequency for the mass use of mobile broadband in the region. UNECLAC previously produced a document on using this frequency to provide mobile broadband in rural areas. That document explained its advantages, particularly in terms of reducing service costs. The new study will estimate the investment costs needed to roll out the necessary infrastructure for using this frequency of the electromagnetic spectrum in order to roll out the use of mobile broadband in areas with low coverage. At the meeting, participants also discussed the steps to follow in installing a new submarine cable between Europe and Latin America to improve the connectivity of the region.

All these activities are in accordance with the C1, C2 and C11 WSIS action lines.

3. ICTS APPLICATIONS

Some of the activities undertaken by UNECLAC during 2013 are listed below, by thematic areas:

E-Agriculture

In 2013, UNECLAC continued the sectoral analysis started in 2012 with studies on the effects of the incorporation of ICTs in regional agriculture, including the identification of best practices in different areas: information systems, production management, systemic risk analysis, environmental management, among others. In Latin America, social inclusion and environmental sustainability in agriculture are especially relevant issues, in light of the great structural heterogeneity within the sector and, more recently, the stepped-up pressures on natural resources resulting from the boom in international commodity markets. Yet, the adoption of ICTs in agriculture cannot be expected by itself to reduce production asymmetries and enhance social inclusion. On the contrary, the dissemination of ICTs could indeed produce new gaps by replicating the sector's historic disparities.

Workshops and seminars

- Organization with the Government of Costa Rica of the "International Seminar: ICTs for competitiveness, social inclusion and sustainable development in Costa Rican agriculture" held on 16 and 17 April 2013 in San José de Costa Rica. On this occasion, continuing the activities initiated in 2012, the possibility to develop and present a tri-national project

(Bolivia, Ecuador and Costa Rica) to promote the adoption and development of ICT applications for agriculture was analyzed.

Publications

- March, 2013: "[Information and communication technologies for agricultural development in Latin America: trends, barriers and policies.](#)" Taking advantage of ICTs for reversing patterns of unequal development and promoting environmental sustainability in the region's agriculture will require policies for overcoming barriers to their adoption in those segments that are lagging furthest behind. One way to pursue this goal is to identify successful policies and projects in neighboring countries and in other continents with similar patterns of economic and social diversity and adapt them to countries of the region. This publication is intended to contribute to the identification of successful experiments in fostering the use of ICTs in agriculture.

As a result, awareness was raised among decision makers in the sector to take advantage of ICTs to reverse the uneven development of regional agriculture. They identified as a useful mechanism, to transfer best practices among countries in the region, which share similar realities regarding the inclusion of agriculture in the economy and the origin of sectoral asymmetries.

E-Education

UNECLAC has focused the work in this area in the Identification of critical factors for its development in LAC: teacher training in ICTs, digital educational contents, integration of ICTs in the curriculum, and use of ICTs for teaching and school management.

Publications

- March, 2013: "[La integración de las tecnologías digitales en las escuelas de América Latina y el Caribe. Una mirada multidimensional](#)". This book gives account of the status of the integration of ICTs into the education system in Latin America and the Caribbean. To this end, policies and components -access, use, content, ownership and educational management- for the integration of these technologies are analyzed. The aim is to contribute to knowledge, reflection and decision-making process on policies for the integration of ICTs in education.
- April, 2013: "[Principales determinantes de la integración de las TIC en el uso educativo. El caso del Plan CEIBAL de Uruguay](#)". The paper analyzes the process of implementing the Plan Ceibal, which emerged as an integral and universal policy for incorporating digital technology through the education system, but trespassing the borders of the educational establishment. The main objective of the investigation was the identification and analysis of intermediate CEIBAL achievements and aspects that facilitate and difficult the processes of appropriation of this technology among the various beneficiaries.

Thanks to the work in this area, which emphasized the key role played by digital training of teachers in the adoption of ICTs in the education system, there was a refocusing of ICT policy in education to teacher training. Currently, 71% of countries in the region explicitly consider the professional development of teachers in their policy objectives.

E-Health

The main achievement in this area has been to position the topic among the decision makers, with the preparation of the [eHealth handbook for managers of healthcare services and systems in collaboration](#) with the Spanish Society of Health Informatics (SEIS) for the management and governance of e-Health in Latin America. The handbook discusses almost all the fields in which ICT can be applied, clarifying concepts, pointing out benefits and explaining requirements. It is intended to facilitate decision-making processes concerning the incorporation of ICT into public policies and strategies in the area of health and healthcare.

It was distributed to 208 decision makers from countries in the region. As an immediate impact, the Manual was adopted in university training programs in health and medical informatics in universities in Brazil (Federal University of Sao Paulo, Federal University of Minas Gerais, Federal University of Rio de Janeiro Federal University of Rio Grande do Sul), Colombia (Universidad de Caldas, National University and University of Antioquia), Ecuador (San Francisco University), Peru (Universidad Cayetano Heredia), Venezuela (Central University of Caracas), and the Hospital Italiano de Buenos Aires, Argentina. This is a contribution to the development of technical capabilities for the training of professionals in the field.

In addition, two country cases studies were conducted: one on telemedicine in [Venezuela](#) and one for e-Health in [Mexico](#), as well as [a regional one](#), that develops and shares public policy protocols necessary to promote the development of e-health in the region in the framework of the "Regional Public Policy Protocols Telehealth for Latin America."

ICTs and production

The line of action in this area aims to raise awareness about the need for greater adoption of ICT in the value chain as a tool for structural change and the development of Latin American countries. During 2013, this was done through the following publications:

- March, 2013: [“Entre mitos y realidades. TIC, políticas públicas y desarrollo productivo en América Latina”](#). The studies part of this publication identify a number of elements that influence and affect the possibilities of incorporating ICTs effectively. Such determinants are particularly important to define policies and instruments necessary for mass production use of ICTs and improve the efficiency of Latin American companies.
- March, 2013: [“Una iniciativa sectorial para la difusión de las TIC en las empresas. La experiencia del Uruguay”](#). This book presents the experience carried out in Uruguay, from a collaboration between the Ministry of Industry, Energy and Mining and UNECLAC, to design and implement a policy instrument that favors the incorporation of ICT needed to substantially improve the performance of firms, promoting rapprochement between demand and local supply.

5. TECHNICAL ASSISTANCE AND CAPACITY BUILDING

Additionally, UNECLAC carried out capacity building activities, among which stands out the following ones:

- Methodological workshop on measuring ICTs at firm level, organized by the National Statistical Office of Dominican Republic, the National Institute of Statistics and Census of Panama, and UNCTAD, on March 21 and 22, 2013 in Panama City. UNECLAC made a

presentation on new technologies and the need to redefine indicators due the technological advances. The workshop aimed to develop capabilities for measuring ICTs adoption at firm level in countries that do not perform this type of survey. As a result, a module for ICT business surveys to be applied regionally was agreed, and 32 experts were trained for its implementation.

- Workshop on Measuring ICT for health, 15 and 16 April 2013, Santiago de Chile. With the aim of promoting the creation of a measurement module access and use of ICT in the health sector in Latin America, UNECLAC, the National Statistical Office of Dominican Republic on behalf of the ICT Group of the Statistical Conference of the Americas, and the Pan American Health Organization (PAHO) organized a workshop to discuss a core indicators proposal. As a result a preliminary list of health ICT indicators was defined, in order to develop an ad-hoc survey that will measure the development of e-health in the region.
- Workshop on survey methodology for evaluating ICT policies, organized by the Regional Centre of Studies for the Development of the Information Society –under the auspices of UNESCO (CETIC.br) and UNECLAC. The objective of the workshop was to provide basic knowledge about the design, implementation and analysis of surveys on studies assessing the impact of ICT policies. The course reviewed the main approaches that have been used to address the challenges in planning and analysis of surveys, as well as basic techniques and methods for the application of probabilistic surveys.

FUTURE ACTIONS

- UNECLAC will continue to act as Technical Secretariat of the eLAC process. The main activity for 2014 will be the organization of preparatory meeting of the Fifth Ministerial Conference on Information Society for Latin America and the Caribbean in Costa Rica.
- The Broadband Regional Dialogue will continue to be supported as an important political forum to discuss massification policies that address the region needs in this matter. The eight meeting of the forum will be held in February 2014.
- New issues will be explored such as cloud computing and big data taking into account the regional dimension. A joint workshop with the European Commission on cloud computing will be held in February 2014.
- When requested, technical assistance activities will continue to be carried out, specially in less developed countries.