

# **Working paper on the eLAC 2018 Digital Agenda in consideration of Caribbean priorities for technology-supported development**

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## Executive Summary

eLAC 2018 will coordinate the implementation of programmes to support the use of information and communications technologies (ICTs) in achieving social and economic development goals for Latin America in the Caribbean during the 2015-2018 timeframe. The conceptual framework for this programme of work is described by the eLAC 2018 Digital Agenda, which is anticipated to be ratified by the fifth Ministerial Conference on the Information Society in Latin America and the Caribbean, to be held in August 2015 in Mexico City.

There is a need for broader input from Caribbean countries to the eLAC 2018 Digital Agenda. Accordingly, this working paper reviews the document's current draft, considering each of its objectives in the context of Caribbean development needs. Amendments are recommended to 12 of the objectives. Two additional objectives are also proposed, in the areas of regional coordination on universal service funds, and the establishment of a spatial data infrastructure to support the use of geographic information systems.

Representatives of Caribbean countries are invited to use the contents of this document as an input to the development of their own proposed amendments for inclusion in the final version of the eLAC 2018 Digital Agenda.



## I. Introduction

The eLAC 2018 Digital Agenda proposal is the outcome document of the preparatory meeting for the fifth Ministerial Conference on the Information Society in Latin America and the Caribbean, which was held in San José, Costa Rica in November 2014. That document is to be considered for ratification by the fifth Ministerial Conference, to be held in Mexico City in August, 2015. The document provides a conceptual framework for the eLAC 2018 programme of work. It will also be used as an input to the global process for the development of a new framework for the World Summit on the Information Society – the WSIS+10 process – to be undertaken as part of a planned High-level meeting of the United Nations General Assembly in late 2015.

While the draft document from the San José meeting provides a solid foundation on which the eLAC 2018 Digital Agenda can be built, there is a need for greater input to the agenda from the perspective of countries of the English-speaking Caribbean. Accordingly, the ECLAC subregional headquarters for the Caribbean has prepared this working paper for the purpose of providing a set of recommendations that representatives of Caribbean countries to the fifth Ministerial Conference may wish to introduce for consideration as part of the final draft of the eLAC 2018 Digital Agenda.

The current Digital Agenda proposal lists 24 objectives across five categories: access and infrastructure, digital economy, e-Government, social inclusion and sustainable development, and governance. This working paper considers each of these objectives in turn, providing brief commentary that considers the issues behind the objective in light of their relevance to Caribbean priorities, and provides a recommendation on potential changes that may be considered. In some cases, additional objectives are suggested for inclusion in the document.



## II. Access and infrastructure

**Objective 1:** *Scale up and provide universal access to digital services, taking advantage of the opportunities created by technological convergence and mobile technologies.*

**Commentary:** While improvements to network infrastructure are ongoing in the Caribbean, the cost of services is among the major barriers to universal access. The reduced cost of mobile technologies makes them an appealing avenue for broader expansion of access. However, there is a concern that those who access the Internet via “mobile only” will be short-changed, as mobile devices are better suited to the role of enabling consumption, rather than production of digital content. Moreover, many mobile device users will avoid purchasing data plans, or may opt for low-cost data plans that provide access to a small number of social media services, but not to the broader Internet. As a means of remediating this problem, there is a need to expand the number of community access points that provide wireless connectivity, such as libraries, internet cafés, and public Wi-Fi networks. Expanding these facilities should be considered a key part of the drive to provide affordable, universal access.

**Recommendation:** It is recommended that Objective 1 be amended to read “*Scale up and provide affordable, universal access to digital services, taking advantage of the opportunities created by technological convergence and mobile technologies.*”

**Objective 2:** *Promote regional coordination in the allocation and use of the radio spectrum in order to facilitate the development of telecommunications services and economies of scale.*

**Commentary:** The Caribbean Telecommunications Union (CTU) has taken the lead on this issue with the Harmonized Caribbean Spectrum Planning and Management Project. However, the effort may benefit from greater coordination with non-CTU member countries in the region, which can be facilitated through eLAC. Multi-lateral coordination on spectrum is especially important in areas where radio interference is likely to bleed across national borders, as in the example of Haiti and the Dominican Republic, where cross-border interference has caused interruptions in radio, television, and mobile telephone service.

**Recommendation:** It is recommended that Objective 2 be accepted without amendment. Moreover, the CTU should be encouraged to represent Caribbean interests by participating in any eLAC working group to be established pursuant to this objective.

**Objective 3:** *Strengthen the regional and subregional telecommunications infrastructure by deploying fibre optics, wireless networks and deep sea cables, encourage the establishment of new Internet exchange points (IXPs) and promote the installation of content distribution networks (CDNs).*

**Commentary:** This objective reflects a common need to increase bandwidth throughout the region, and to build redundant systems that can protect the network from interruption. One omission in the objective is recognition of the role of satellite systems for delivering broadband. There are a number of commercial initiatives competing to launch a new generation of communications satellite networks that are anticipated to lower the cost of satellite-based broadband in coming years. These new satellite networks may prove to be attractive broadband solutions for small islands and particularly remote areas.

The objective also notes the importance of establishing IXPs, which has been a recent focus in the Caribbean region. Following the establishment IXPs in the region, the roll-out of CDNs represents the next logical step in the maturation of the region's infrastructure. This is important to the region because CDNs have the potential to significantly reduce the demand placed on the limited capacity of the region's undersea cable infrastructure, especially as bandwidth-intensive services such as streaming video become more popular.

**Recommendation:** It is recommended that Objective 3 be amended to read "*Strengthen the regional and subregional telecommunications infrastructure by deploying fibre optics, wireless networks, satellite systems, and deep sea cables, encourage the establishment of new Internet exchange points (IXPs) and promote the installation of content distribution networks (CDNs).*"

**Objective 4:** *Promote investment in next-generation broadband networks, achieving substantial improvements in service speed and quality, with a special emphasis on vulnerable and isolated rural areas.*

**Commentary:** The recent purchase of Columbus Communications by Cable & Wireless may have a detrimental effect on telecommunications competition – and hence on infrastructure investment and on the cost of service in Caribbean countries. Thus, there is a need to find other potential means of ensuring that investments in broadband infrastructure continue to be made. In the absence of competitive pressures to inspire private sector investment, a reconsideration of the role of the public sector in supporting telecommunications infrastructure may be warranted.

**Recommendation:** It is recommended that Objective 4 be amended to read "*Promote investment in next-generation broadband networks, achieving substantial improvements in service speed, quality, and cost, with a special emphasis on vulnerable and isolated rural areas.*"

**Objective 5:** *Review and support processes to adopt digital terrestrial television (DTT) in the region.*

**Commentary:** Caribbean countries now find themselves in a situation where they have not coordinated to adopt a single standard for DTT technology, but rather are each adopting one of three divergent international standards. This is likely to make the DTT switchover a somewhat more difficult and expensive process for both consumers and broadcasters than it may have otherwise been. It is possible that some countries will avoid a DTT switchover altogether, opting to shut down television broadcasting in favour of cable-based systems.

It should be noted that a global digital switchover from FM radio is also on the horizon. Caribbean countries would do well to coordinate on this process at an early date, so that a common standard can be adopted as to avoid a repeat of the DTT situation.

**Recommendation:** It is recommended that Objective 5 be amended to read "*Review and support processes to adopt digital terrestrial television (DTT) in the region and facilitate preliminary consideration of coordinated standards adoption for an eventual digital radio switchover.*"

**Suggested additional objective:** *Promote the use, and good governance, of universal service funds (USFs) as a sustainable funding mechanism for public investment in ICT infrastructure, the maintenance of community access points, and outreach and training initiatives designed to expand participation in the digital economy.*

**Commentary:** USFs, funded through small surtaxes on telecommunications services, are widely used within the region to fund public investment in projects aimed at expanding ICT access. There is a need to share best practices in management of these funds, to ensure that the money is well-spent, allocation processes are fair, projects are effectively monitored, and that their value is recognized so that political support can be maintained.



### III. Digital economy

**Objective 6:** *Develop and promote both the traditional ICT industry and emerging sectors, for the production of digital content, goods and services; and promote digital economy ecosystems and public-private coordination, with an emphasis on generating greater value-added, increasing skilled work and training human resources.*

**Commentary:** Regional growth in the Caribbean has been held back by the limited scale of the ICT industry and associated technology ecosystem. This objective importantly focuses on the role of Caribbean participants in the digital economy as producers of digital products, rather than merely as consumers.

**Recommendation:** It is recommended that Objective 6 be accepted without amendment.

**Objective 7:** *Increase the productivity, growth and innovation in the productive sectors through the use of ICTs and propel the digital transformation of microenterprises and small and medium-sized enterprises (SMEs), taking into account technological and productive trajectories, and capacity-building.*

**Commentary:** Increased use of ICTs has important potential to increase the productivity of Caribbean SMEs. One area where this is particularly true is in the tourism sector, where many locally-owned small hotels and tour operators are not effectively using the Internet to market their services to global audiences, finding themselves disadvantaged in comparison to larger, foreign-owned competitors.

Caribbean SMEs will also need guidance as they consider engaging new innovative financing and revenue models that are emerging as part of the information society. These include crowd funding, the use of intellectual property as a form of loan collateral, and participation in the so-called “sharing economy.”

**Recommendation:** It is recommended that Objective 7 be amended to read “*Increase the productivity, growth and innovation in the productive sectors through the use of ICTs and propel the digital transformation of microenterprises and small and medium-sized enterprises (SMEs), taking into account technological and productive trajectories, **innovative financing and revenue models**, and capacity-building.*”

**Objective 8:** *Strengthen e-commerce at the national and regional levels, adapting consumer protection regulations to the digital environment and coordinating aspects related to taxes, logistics and transportation, electronic payment mechanisms and personal data protection.*

**Commentary:** e-commerce development in the Caribbean is challenged by small markets and logistical difficulties. In some countries this includes a lack of a national addressing system of street names and house numbers to facilitate direct delivery. A further problem is that, due to in part to stringent anti-money laundering regulations, banking institutions in some countries have been unable to provide e-commerce SMEs with appropriate means of accepting electronic payment options. As a result, there is a reliance on overseas payment processors that can be a drain on national economies and lead to difficulty in repatriating funds. Expansion of mobile phone-based payment systems are one potential means of improving prospects in facilitating Business to Consumer (B2C) e-commerce. However more robust payment systems are also needed to support Business to Business (B2B) transactions, especially in terms of supporting the efficient and low cost settlement of international transactions.

**Recommendation:** It is recommended that Objective 8 be amended to read “*Strengthen e-commerce at the national and regional levels, adapting consumer protection regulations to the digital environment and coordinating aspects related to taxes, logistics and transportation, electronic payment mechanisms, **systems for international settlement** and personal data protection.*”

**Objective 9:** *Incentivize the adoption and development of new technology trends in the public and private sectors, promoting in particular big data analytics, capacity-building and access options.*

**Commentary:** One might question why big data analytics, which is but one of many “new technology trends,” has been singled out for specific emphasis in this objective. The reason it is highlighted in the Digital Agenda Proposal is, in part, as a response to the UN Global Pulse initiative, which is a global effort to study how big data analytics can be used to support development goals. Thus, the inclusion of a big data-specific objective will provide a specific avenue for participants in eLAC 2018 to take advantage of outputs from UN Global Pulse.

**Recommendation:** It is recommended that Objective 9 be accepted without amendment.

**Objective 10:** *Promote public policies to strengthen the region’s digital entrepreneurship ecosystem and its international integration, advancing ICT innovation in the public and private sectors and spurring technology transfer, university-business linkages and applied research in digital technologies.*

**Commentary:** A viable digital entrepreneurship ecosystem can be an important engine for growth, though Caribbean efforts in this area are limited by small domestic markets and labour pools. Thus, there is a need for small island developing States (SIDS) to find areas of ICT in which they can specialize, while selling services to customers at a regional level.

**Recommendation:** It is recommended that Objective 10 be amended to read “*Promote public policies to strengthen the region’s digital entrepreneurship ecosystem and its international integration, **encouraging the development of regional and subregional markets for ICT services**, advancing ICT innovation in the public and private sectors and spurring technology transfer, university-business linkages and applied research in digital technologies.*”

## IV. e-Government

**Objective 11:** *Make interoperable online procedures and services widely available through multiple channels and promote, at all levels of government, innovation and the proactive delivery of public services.*

**Commentary:** To the extent that systems could be made interoperable across borders, the improved level of standardization would help to increase the availability of compatible software packages, reduce costs, and promote the ability of local and regionally-based companies to offer technical support and associated services. Within individual governments, a number of countries in the region have established e-Government Interoperability Standards (e-GIS). However, there would be value in coordinating these standards at a regional level.

To that end, as part of eLAC 2007, a document was published called the *White Book of e-Government Interoperability for Latin America and the Caribbean*, which set out best practices for e-government interoperability. It may be time to update this document to reflect recent changes in systems architecture, such as the widespread use of cloud computing, the broader use of virtualization and containerization as a means of application hosting, and move toward a more mobile-centric device ecosystem. An update to the *White Book* would be useful in modernising existing e-GIS documents, and can help to promote their development in countries where they have not yet been established.

**Recommendation:** It is recommended that Objective 11 be accepted without amendment. It is further recommended that the working group on this issue consider compiling an update to the *White Book of e-Government Interoperability for Latin America and the Caribbean*.

**Objective 12:** *Create opportunities for government institutions in the region to share experiences and collaborate, in order to build capacity and share developments in applications and software.*

**Commentary:** Caribbean countries in particular could benefit from intergovernmental collaboration and sharing of technical expertise. However, it can be difficult to discover what resources are available, and there is a need to better publicise and maintain this type of information. eLAC itself is an institutional means of enabling this type of knowledge exchange.

**Recommendation:** It is recommended that Objective 12 be accepted without amendment.

**Objective 13:** *Incentivize the adoption of cloud computing services by governments, with the objective of guaranteeing greater availability and quality of services.*

**Commentary:** It is not clear that the adoption of cloud computing services is something that should be “incentivized.” Rather, cloud computing comes with its own set of advantages and drawbacks, and governments should make the decision to use them based on these considerations. While the benefits to cloud computing are indeed substantial, they must be weighed against the technical, institutional, and legal difficulties inherent to the outsourcing of ICT services. For example, standards must be developed and adopted to ensure the security and sovereignty of data stored in offshore, cloud-based systems. However, as these types of difficulties are overcome, the adoption of cloud computing will incentivise itself – largely in the form of significant cost savings.

**Recommendation:** It is recommended that Objective 13 be amended to read “***Reduce the technical, institutional, and legal barriers to the adoption of cloud computing services by governments, with the objective of guaranteeing greater availability, reducing costs, and improving the quality of services.***”

**Objective 14:** *Promote open government data initiatives and the use of digital platforms to facilitate collaboration, citizen participation and public transparency.*

**Commentary:** There is a distinction between open government data and data systems that support open government. Both are important. Open government data – or rather, open data from government – is seen as the sharing of extensive datasets held by government as a means of enabling the private sector or civil society to use this information for the creation of value. This can include census data, administrative data, geographic data, historical prices, and institutional records. There are a number of potential commercial applications for this information.

Data systems to support open government, on the other hand, focus on automating the sharing of information on the workings of government with the public, for the purpose of increasing transparency, informing voters, and encouraging citizen participation. Digital platforms that bring visibility to the procurement process are particularly important as a means of reducing corruption among public officials. Beyond playing a purely informative role, there is also a need for two-way communications systems that collect public feedback on government initiatives, pending legislation, and administrative matters.

**Recommendation:** It is recommended that Objective 14 be accepted without amendment.

## V. Social inclusion and sustainable development

**Objective 15:** *Strengthen the institutional framework for ICT policies in education and promote the development of programmes that include teacher training, new pedagogical models, the generation, adaptation and exchange of open educational resources, the management of educational institutions and educational evaluation.*

**Commentary:** ICT has an important role to play in supporting education. Caribbean countries may especially benefit from the availability of high-quality open educational resources, which can be adapted to meet local needs. There is also a need to find an appropriate role for distance learning, especially in higher-level technical subjects for which there may be a local shortage of suitably-qualified teachers.

**Recommendation:** It is recommend that Objective 15 be amended to read “*Strengthen the institutional framework for ICT policies in education and promote the development of programmes that include teacher training, new pedagogical models, the generation, adaptation and exchange of open educational resources, **the integration of distance learning**, the management of educational institutions, and educational evaluation.*”

**Objective 16:** *Strengthen ICT policies in health and promote telehealth and telemedicine programmes and the exchange of good practices and interoperability in electronic medical records.*

**Commentary:** Among Caribbean countries, Barbados, Belize, Jamaica, Saint Lucia, and Saint Vincent and the Grenadines, have each established – or are in the process of establishing – national electronic Health Information Systems. Other countries in the region would do well to learn from their experiences.

**Recommendation:** It is recommended that Objective 16 be accepted without amendment.

**Objective 17:** *Promote policies for emergency and natural disaster prevention and response, incentivizing the development of digital applications for environmental observation, analysis and planning, and develop national plans for the management of waste from electronic and electrical equipment.*

**Commentary:** An ECLAC study has recognized that one of the major limitations to the use of ICT in disaster prevention and response is a shortage of specialised ICT skills in the relevant offices. Broader training and skills exchange is needed. Moreover, there is much cross over between the area of disaster risk management and that of climate change adaptation – including perhaps broader funding opportunities for disaster management projects carried out as part of a climate change adaptation agenda.

Management of electronic wastes is an important and under-recognised issue – especially to fragile island ecosystems. Moreover, e-waste management represents a substantially different type of ecological concern than disaster prevention, or even climate change adaptation. Therefore, it merits inclusion in a separate Objective that considers means of reducing the negative environmental impact of expanded ICT usage.

**Recommendation:** It is recommended that Objective 17 be divided to reflect the separation of its concerns. One of the Objectives could read *“Promote policies to increase the use of ICT systems to support emergency and natural disaster prevention, mitigation and response, climate change adaptation, and environmental observation, analysis and planning by incentivising digital applications development and expanding ICT skills training in the relevant national offices.”*

The second Objective is proposed to be *“Develop national plans for minimizing the environmental footprint of ICTs through the institution of green standards for data centres and consumer electronics and the management of waste from electronic and electrical equipment.”*

**Objective 18:** *Promote the development of regulatory frameworks for telework and incentivize the exchange of experiences and actions for monitoring and evaluation.*

**Commentary:** With the advent of widespread broadband, more powerful mobile devices, and new business models for Internet-based outsourcing, telework is now going through a period of rapid expansion. This represents a valuable opportunity to diversify the economic base of Caribbean countries. However, these new opportunities bring with them a need for the development of regulatory frameworks to ensure the fair treatment of workers. A specific concern is the need to prevent the manipulation of labour markets on the part of companies working as intermediaries between customers and contracted workers, which has emerged as a problem in some developed economies.

**Recommendation:** It is recommended that Objective 18 be accepted without amendment.

**Objective 19:** *Promote an integrated gender equality perspective in public policies on digital development, ensuring full ICT access and use for women and advancing their participation and leadership in public and private spaces where decisions are made on digital matters.*

**Commentary:** With some exceptions, there does not appear to be a significant gender disparity in access to ICTs in Caribbean countries. However, there is a disparity in the number of women taking up technical careers in the ICT field. This should be seen not only as a problem for women, but also as a problem for the ICT industry, which itself is weaker for the lack of contributions from a female perspective.

**Recommendation:** It is recommended that Objective 19 be amended to read *“Promote an integrated gender equality perspective in public policies on digital development, ensuring full ICT access and use for women, advancing their participation and leadership in public and private spaces where decisions are made on digital matters, and facilitating expanded female employment in ICT-related fields.”*

**Objective 20:** *Ensure ICT access for vulnerable groups, in order to improve their social, educational, cultural and economic integration.*

**Commentary:** Vulnerable groups – including the elderly, the disabled, ethnic minorities, those living in remote areas, and the economically disadvantaged – not only need better access to ICTs, they also need ICT skills training to go along with it. Care must be taken to mitigate the negative impacts of ICTs on communities, especially in terms of protecting new ICT users from predatory online behaviour.

Additionally, it must be recognized that those who lack ICT skills are themselves becoming a vulnerable group. For example, older workers who lack ICT skills are at a disadvantage when competing for jobs with younger workers who received ICT training in school. Others may lose their jobs to increasing automation, and may have difficulty finding new positions.

**Recommendation:** It is recommended that Objective 20 be amended to read “*Ensure equitable ICT access for vulnerable groups, together with appropriate training and skills development initiatives, in order to improve their social, educational, cultural and economic integration.*”



## VI. Governance

**Objective 21:** *Promote the security of and confidence in Internet use, guaranteeing the right to privacy and the protection of personal data.*

**Commentary:** Caribbean countries are in need of support in this area, in part because signatories to the CARIFORUM-EU Economic Partnership Agreement are obligated, per the terms of Article 197 of that agreement, to pass legislation on personal data protection by December of 2015. Though the International Telecommunications Union's *Harmonization of ICT Projects and Legislation across the Caribbean* (HIPCAR) initiative has produced some model legislation concerning privacy and data protection, only a few countries have passed statutes on the issue.

There is also a need for public information campaigns and educational initiatives to ensure that Internet users – especially the young – are informed about privacy-related issues, so they can make good decisions regarding whether and how to share personal information online.

**Recommendation:** It is recommended that Objective 21 be accepted without amendment.

**Objective 22:** *Promote efforts to prevent and fight cybercrime through the development of strategies to protect critical infrastructure and cybersecurity plans, and local and regional coordination between computer security incident response teams.*

**Commentary:** Computer Security Incident Response Teams (CSIRTs) have been established in Curaçao and Guyana, and several other countries have plans for CSIRTs underway. As this network of national institutions becomes established, it can form the basis for collaboration on cyber security at a subregional level.

There is also a need, within the Caribbean, to pass legislation on cybersecurity. However, it has been suggested that model laws on cybersecurity, developed for the region through HIPCAR and other initiatives, have significant shortcomings as regards their harmonization with internationally recognized norms, as represented by the Budapest Convention on Cybercrime<sup>1</sup>. There may be a need to rethink regional strategy in this area.

**Recommendation:** It is recommended that Objective 22 be accepted without amendment.

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<sup>1</sup> [http://www.coe.int/t/dghl/cooperation/economiccrime/Source/Cybercrime/TCY/2014/3021\\_model\\_law\\_study\\_v15.pdf](http://www.coe.int/t/dghl/cooperation/economiccrime/Source/Cybercrime/TCY/2014/3021_model_law_study_v15.pdf)

**Objective 23:** *Incentivize the coordinated participation of Latin America and the Caribbean in the governance of the Internet, reinforcing regional mechanisms and seeking synergies between them, and promote the development of opportunities for dialogue or national mechanisms in which all interested parties participate, and coordinate these at the regional and global levels.*

**Commentary:** Coordinating Caribbean participation on Internet governance issues is the primary purpose of the Caribbean Internet Governance Forum (CIGF), an annual meeting coordinated by the Caribbean Telecommunications Union. This is distinct from the Preparatory Meeting for the Internet Governance Forum (LACIGF) that covers the both Latin America and the Caribbean.

**Recommendation:** It is recommended that Objective 23 be accepted without amendment. However, as LACIGF is mentioned in paragraph 35 of the explanatory text of the document, it is recommended that CIGF be recognized in that space as well.

**Objective 24:** *Advance the institutional frameworks needed to coordinate, monitor and promote policies on digital matters.*

**Commentary:** The Caribbean has a number of institutions that work together for the promotion of ICT. However, coordination between institutions in CARICOM countries and Latin American institutions is limited, in large part due to the language barrier. To that end, while the efforts of Latin American institutions to accommodate English speakers is appreciated, Caribbean institutions would do well to identify staff with Spanish language abilities, and to use them as a resource to help drive closer engagement with institutions within the greater LAC region.

**Recommendation:** It is recommended that Objective 24 be accepted without amendment.

**Suggested additional objective:** *Promote the effective use of geographic information systems (GIS) through the establishment and coordination of national and regional spatial data infrastructures (SDIs) to ensure availability of high-quality geospatial data.*

**Commentary:** The effective use of GIS applications can provide valuable support to areas such as land use planning, disaster management, environmental monitoring, and agriculture. On both a national and regional level, there is a need to coordinate the collection and dissemination of high-quality geospatial data, including satellite imagery, official mappings of political boundaries, mappings of roads, pipes, cables, and other infrastructure, as well as maps of watersheds and soil conditions. To that end, geospatial experts in the Caribbean region have recommended the institution of a regional spatial data infrastructure coordinating body, which could provide institutional support for the governance of these resources<sup>2</sup>.

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<sup>2</sup> <http://www.esri.com/esri-news/arcnews/winter1415articles/gis-executives-meet-to-address-the-caribbeans-geospatial-challenges>

## **VII. Conclusion**

This working paper has reviewed the 24 Objectives of the eLAC 2018 Digital Agenda Proposal, and proposed amendments to 12 of them, including the division of Objective 17 into two separate Objectives. Two additional objectives have been proposed – one in the area of Access and Infrastructure, for the promotion of universal service funds, and one in the area of Governance, to provide institutional support for the coordination of geospatial data initiatives.

Representatives to the fifth Ministerial Conference on the Information Society in Latin America and the Caribbean are invited to adapt any or all of the recommendations herein as a part of their own interventions in proposing amendments for inclusion in the final document of that meeting.