

DRAFT QUESTIONS FOR MINISTERS, REGULATORS and OPERATORS AT CANTO 2015
Hyatt Regency Miami 26-29 July 2016

1. According to the European Commission, Telco's are currently being forced to compete with OTT services "without being subject to the same regulatory regime", and that it intends to create a "fair and future-proof regulatory environment for all services". Will Caribbean governments take a similar approach?
2. With declining industry revenues caused by increasing competition from unlicensed and unregulated OTT services, will governments support the local industry by reducing spectrum fees and general regulatory cost?
3. Obtaining suitable spectrum allocations is very important for the continued rollout of mobile broadband in the Caribbean. CANTO has written to Caribbean governments about World Radiocommunication Conference 2015 (WRC-15) at which decisions will be made about allocating more spectrum to mobile services. CANTO has asked that Caribbean governments support the allocation of 470MHz – 698MHz which is very important to the Caribbean as a mostly mobile region. Is there any further support that governments need from CANTO and Caribbean operators?
4. Will your government send a delegation to the final CITEL meeting in Canada, in August, 2015 where the proposal from the Americas region for additional mobile spectrum will be finalized for submission at WRC-15?
5. Are there any specific government plans to stimulate broadband rollout to rural areas in your country?
6. How can we have more effective cooperation between Governments, Regulators, Operators and other Caribbean organizations involved in ICTs – CANTO, CTU, OOCUR, CARICOM, CDEMA, CBU, CTO, UWI, CITEL?
7. What in your opinion are some of the most important aspects of the Single ICT Space in the Caribbean and what is your vision for the role of operators in the Space?
8. Do you think the Mobile Money Wallet in the Caribbean will have true success in terms of the number of Caribbean persons who use it and the transaction values, given that

some Caribbean countries are not taking the cue to liberalize this space? Other markets in South America have seen the benefit of liberalizing the space and allowing non-banks, as long as they adhere to certain guidelines. Africa already did this; M-PESA is seeing transaction values of more than USD22m annually through its system. The US and Europe allows non-banks to conduct remittance business as long as they adhere to remittance guidelines.

9. What investments/incentives and programmes are being put in place to foster youth entrepreneurship and innovators in the Caribbean?

10. Where do you see the ICT sector in your country and the Caribbean in 2020?

Background Information on Caribbean Broadband Development and Spectrum Requirements

Broadband rollout in the Caribbean has become one of the most important Information and Communication Technology (ICT) issues in the Caribbean. This is a subject that is high on the agenda of CANTO as well as Caribbean service providers, governments, regulators and consumers. Broadband is seen as being critical to the economic and social development of the Caribbean region. This is however, not only important for the Caribbean region but the entire global community. Broadband is seen as a cross-cutting issue which is important for the development of all sectors of society.

The ITU/UNESCO Broadband Commission for Digital Development in its 2014 report on the State of Broadband stated that “*High-speed, affordable broadband connectivity to the Internet is a foundation stone of modern society, offering widely recognized economic and social benefits. High-speed broadband is no longer just cutting-edge technology for an elite few; instead, the steady march of connectivity among the broader population is slowly but surely transforming our society*”. This provides a clear endorsement of the approach by global ICT stakeholders to not only continue, but accelerate the rollout of broadband. However, for this to happen requires the collaboration and cooperation of all ICT stakeholders.

Service providers in the Caribbean have been making great strides in rolling out broadband across the countries they serve. However, this rollout is still not at the level that is required and efforts are being made by all ICT stakeholders to ensure that this important aspect of Caribbean development is treated as a priority issue. As Caribbean ICT stakeholders strive to promote increased broadband penetration, they now need to work together to ensure the best possible outcome for the people of the region.

The objectives and goals of the World Summit on the Information Society (WSIS) and the Millennium Development Goals (MDGs) will be assessed during 2015. The results of these

evaluations will be a major factor in the development of the post-2015 development agenda. Following these evaluations, Caribbean countries will be able to see what progress they have made in terms of ICT development as well as overall sustainable development. There will also be an indication of how their development compares with other countries. In the Caribbean there have been great efforts to provide broadband connectivity to all sectors of society. The influence of the WSIS and the MDGs has seen cooperation between governments and service providers in providing connectivity to governments, schools, colleges, post offices, hospitals and civil society, among others.

There is still some uncertainty about the definition of broadband. Broadband was defined by the Organisation of Economic Cooperation and Development (OECD) in 2001 as transmissions at a minimum speed of 256 Kilobits per second (Kbps). This may seem rather low but it is the accepted starting point for many organizations, including the Inter-American Development Bank (IDB). At the time of the definition, 256 Kbps was the most basic speed offered by Digital Subscriber Lines (DSL) service providers in OECD countries. The definition has remained, but it should be noted that at the present time, in no OECD country is the minimum speed less than 10 (Megabits per second (Mbps)). Caribbean countries can therefore follow a similar approach, starting at 256 Kbps as a bare minimum, but ensuring that there are greater speeds for various applications.

Caribbean countries need to decide as a matter of some urgency on the national targets for broadband to communities, businesses, schools and other users. This target would be reviewed on a regular basis. Service providers need to be made aware of the requirements of the region and endeavor to satisfy these needs. In addition, it should be possible to verify the broadband speeds available in each country.

The US regulator, the Federal Communications Commission (FCC) has recently updated its definition of broadband in the United States. The FCC broadband benchmark speeds are now defined as 25 Mbps for downloads and 3 Mbps for uploads. The agency has now stated that the 4Mbps/1Mbps standard set in 2010 is dated and inadequate for evaluating whether advanced broadband is being deployed to all Americans in a timely way.

It may be necessary to define major uses of broadband in the region, examine required speed and make decisions on the speeds of transmission that should be provided – are we asking to be regulated? Have the providers agreed on a minimum speed/ same for fixed and mobile? In this regard it is clear that there will be a range of values since the requirement of businesses and educational institutions will be different from those of private users. Provide service to various rural communities may also pose challenges. Countries of the Caribbean will therefore need to start with the minimum recognized speed and work with telephone companies and regulators to

achieve greater, verifiable broadband speeds. At the moment there is some uncertainty about broadband speeds and once 256Kbps is provided, that could be classified as broadband. Service providers will be able to say they are providing broadband since they can show that there is a minimum of 256Kbps in some areas and greater speeds elsewhere.

With respect to ICT infrastructure development, including broadband, it is now clear that most service providers are somewhat reluctant to establish terrestrial networks and are therefore developing mobile networks. Given the present focus of establishing 4th Generation (4G) networks and also to prepare for the advent of 5G, there is an urgent need for additional spectrum which will facilitate the rollout of broadband services.

ITU World Radiocommunication Conference 2015 (WRC-2015)

From 2 to 27 November 2015, the International Telecommunication Union (ITU) will be convening the 2015 World Radiocommunication Conference in Geneva. This conference will examine global frequency requirements according to the agenda set by WRC-12, which includes making more radio frequency spectrum available to mobile..

Given the importance of this conference, especially for mobile services, CANTO has already written to Caribbean governments and other stakeholders, indicating its desire to cooperate with them in ensuring that the needs of CANTO's members as well as the entire Caribbean ICT sector are met. It is of utmost importance that Caribbean governments, regulators, operators, organizations and other stakeholders commit the necessary resources to participate in this conference.

Changing Caribbean ICT Landscape

Since the last CANTO Annual Conference and Trade Show in 2014, the telecommunications landscape in the Caribbean has changed. This is the result of the acquisition of Columbus International Inc. (operating as Flow) by Cable and Wireless Communications PLC. The number of service providers in the region has now been reduced by one. There have been mixed reactions to this development and the governments and regulators in the Caribbean were required to examine the matter and decide on the way forward. After undertaking the necessary studies and evaluations, a majority of regulators have so far given their approval to the acquisition and in most cases specific conditions were laid down. Consumers in the region have been questioning

whether or not there will still be competition but Caribbean regulators have indicated that they will ensure that a competitive environment is maintained.

Caribbean Regulatory Environment

The roles of regulators globally, including those in the Caribbean, have been changing, ever since the liberalization of the telecommunication sector some 20 years ago. Regulating ICTs is one of the very important tasks in ensuring that there is orderly development of the sector and the needs of all parties are considered. This is not always an easy task and it is clear regulators are under tremendous pressure to ensure that telecommunications service providers are provided with adequate spectrum resources, to ensure that there is competition, to ensure that consumer interests are taken into consideration, to ensure that government interests are always considered and to ensure that there is an environment that will favour investment and growth.

The 2014 Edition of the ITU publication “Trends in Telecommunication Reform 4th Generation Regulation: Driving Digital Communications Ahead” describes the major regulatory changes that have taken place as follows:

First Generation: Characterized by monopoly (public or private) utilities which were closely managed with the intent to encourage improvements in efficiency and service.

Second Generation: Characterized by partial privatization and licensing of competing infrastructure providers. This phase focused on balancing the goal of opening access to the incumbents’ networks while also protecting the incumbents’ investment.

Third Generation: With full privatization/liberalization regulation shifted towards a focus on protecting competition in service delivery and content, bearing in mind the needs of the consumer;

Fourth Generation: The Fourth Generation involves regulators overseeing an increased range of services delivered over multiple broadband and converged networks that form the digital ecosystem. More than ever before, regulators are being asked to protect consumers from a range of problems including inappropriate content, faulty billing and fraudulent online activities, and anti-competitive activities.

The work of Caribbean regulators does not promise to get any easier, but it is an extremely important part of the ICT sector and it is critical to the objectives of regional governments to gain maximum benefits from this sector. Caribbean regulators have ensured cooperation through their umbrella organization the Organization of Caribbean Utility Regulators (OOCUR). This is very important for the region, especially in the light of CARICOM governments’ desire to have a

single ICT space. Going forward, it would help the cause of the region if important decisions are coordinated by regulators and applied in the same manner in different Caribbean countries. Consequently, decisions being made in terms of spectrum allocation should, wherever possible, be done on a regional basis, thereby helping to ensure that spectrum users in the Caribbean would have the same spectrum allocations wherever they go in the region.

CARICOM Single ICT Space (CSICTS)

Efforts to develop and implement sustainable actions in ICTs have long been on the CARICOM agenda starting with the CARICOM ICT Connectivity Agenda of 2003. In 2009 CARICOM developed its Regional Digital Development Strategy (RDDS) for the period 2010 to 2014, which has been subsequently revised. Key among the objectives is the need for a CARICOM single ICT space. Some of the targets have been met, including developing model laws and regulations, while others, such as development of methods for collecting and updating ICT statistics, have not been as successful. The result is that many Caribbean governments question the veracity of data collected and published by international organizations.

One important aspect of the CARICOM strategy is the need for cooperation in all aspects of ICTs in the region, including among agencies such as CANTO, Caribbean Telecommunications Union (CTU), Eastern Caribbean Telecommunications Authority ECTEL, OOCUR and CARICOM. The issue of spectrum management was also mentioned as one of the areas for cooperation. For this to happen, regulators should, among other things, try to have common spectrum allocation strategies thereby leading to more efficient spectrum usage. The CTU has been funded by the IDB to do a study on spectrum harmonization in the region.

At the March 2014 meeting of Heads of Government, CARICOM leaders agreed on the “establishment of a Single ICT Space to enhance the environment for investment and production”. The Heads also agreed that technology should be brought to the people who they wanted to see as digital citizens and digital entrepreneurs. All CARICOM member states were also asked to affirm ICTs as a national and regional priority. Furthermore, the implementation of a CARICOM Single ICT Space will be an important factor in the success of the CARICOM Single Market and Economy.

It is clear that there is every expectation that CARICOM will implement the CARICOM Single ICT Space. It is now an important part of the next steps to be taken by regional governments. However, for the desired results to be achieved there must be significant broadband development, without which many of the goals and objectives of governments will not be achieved.

As broadband connectivity accelerates, cybersecurity becomes more and more important. This is recognized, within the declaration by Heads on the CSICTS . Therefore, as the region strives to increase broadband development, concomitant with that must be the development of cybersecurity capabilities to deal with the threats that will arise. Many countries have started to address this matter, but activities in this regard should involve all countries.

CANTO 2015

CANTO's 31st Annual Conference and Trade Exhibition will be held from 26 to 29 July 2015 at the Hyatt Regency Hotel, Miami. This annual event continues to be the most important forum for Caribbean ICT stakeholders to discuss and obtain information on the status of ICT developments. Foremost among the subjects to be discussed will be the continued development of broadband, the CARICOM Single ICT Space, the ICT regulatory environment, the impact of Over-the-Top Operators and the views of governments, regulators and operators and other stakeholders.

Among the highlights of the CANTO Conference and Trade Exhibition will be:

- A Ministerial Roundtable that will look at various policy aspects of broadband including broadband innovation, the CARICOM Single ICT Space, Spectrum matters and Over-the-Top Operators;
- An Operators Roundtable which will deal with innovations in the mobile industry;
- A Regulators Forum dealing with innovations and challenges in regulating the ICT sector in the Caribbean;
- Caribbean Women in ICTs (CWIC) and the importance of empowering women through ICTs;
- A CANTO/DSS CODE1.0 Hackathon 'CODE IT, CRACK IT, HACK IT', involving computer programming and software development for Caribbean Programmers and Developers;
- Discussions and presentations on market trends, mobile innovations, importance of content;
- A Trade Exhibition which will be showcasing important aspects of ICT developments globally and in the Caribbean. The CANTO Exhibition will continue to be an important forum where ICT stakeholders are able to obtain first-hand information and have discussions with industry leaders on the latest developments and innovations in the ICT sector;
- The HR Forum and the Marketing Forum.