

CANTO Policy Paper 2014/2

OTT Services – Balancing Innovation, Investment and Competition

Executive Summary

CANTO has, in this document, provided a context for understanding the current development where some Caribbean network operators have blocked the use of some Over-The-Top (OTT) services in their domestic markets.

CANTO is a trade association representing Caribbean network operators, service providers and vendor partners in the region. CANTO's has over one hundred and twenty-three (123) members from thirty-two (32) countries spanning four (4) continents. CANTO partners with regional and international institutions such as ITU, CTU, ECTEL, Caricom, IDB, UWI, ECLAC and others to meet shared objectives.

CANTO proposes the following Call to Action to address at least the current issues in domestic markets:

CANTO's Call to Action to Caribbean Regulators and Ministers on OTT Providers & Services:

- i. licence OTT providers;
- ii. licence conditions must include interconnection where services will be terminating on or originating from a domestic telephone number, however configured;
- iii. payment of relevant taxes, fees and Contributions by OTT providers;
- iv. recognition of right of network operators to block any OTT service that harms its network, or causes the network to be vulnerable to viruses or denial of service attacks;
- v. cease discriminatory application of regulation to domestic telecommunications providers and broadcasters and also apply these regulations to OTT providers, and

vi. in the alternative Caribbean regulators / policymakers should relieve Caribbean operators from paying fees and Contributions for services similar to those provided by OTT providers.

Caribbean operators call upon Ministers of Government and ICT regulators to find paths to balancing innovation, investment and competition. Each must bear its fair share of costs.

1. What are OTT Services?

- 1.1 Over-the-top (OTT) is a general term used for services that a customer may use which rides on top of a network to which the customer is connected. These services are referred to as "over-the-top" because they ride on top of the service that customers already have from their providers. Many of these OTT providers have not entered into any agreements with the customers' service provider to provide the services to the customer, notwithstanding that they must use a network that they did not build. Some examples of OTT services are Skype, Viber, Whats App, Netflix.
- 1.2 Throughout the Caribbean, operators are making huge investments in providing networks that will be data intensive. OTT services ride on these networks without making any contribution to the sustainability of the network operators have invested in.
- 1.3 In the Caribbean, voice and message apps usage is large. Rather than pay for an SMS message or a phone call, people may use Skype, WhatsApp, Viber, Voxer or some other OTT service to send messages and videos or make VOIP calls for nothing. A data charge may still be incurred but with Wi-Fi access even those charges may be avoided. In the case of one (1) domestic network operator the number of minutes of traffic for a relatively new OTT voice service grew almost 300% in a three (3) month period.

2. Characteristic of OTT Providers in Caribbean Markets:

- i. do not pay, for the most part, to terminate traffic on a mobile or fixed network, where the service is actually terminated on the local network of the fixed or mobile provider. That is they make no contribution to the sustainability of the network on which they must rely;
- ii. are providing services in markets in which they are not licensed to provide the services;

- iii. do not pay taxes to any Caribbean governments or contribute to any Universal Service Funds, which funds are used to develop the ICT infrastructure in the countries;
- iv. provide services which deplete the Quality of Service on both mobile and fixed networks because such services use increasing amounts of network capacity and bandwidth and in particular for mobile wireless networks data radio uplink network resources;
- v. some OTT service by nature of their architecture, like Viber, can result in Denial of Service attacks on domestic networks;
- vi. who provide video services spec their traffic so that most video traffic adapts to network congestion by shifting to lower bitrates and quality, which impacts the subscriber experience on broadband. When capacity is increased, adaptive video simply upshifts to a higher fidelity and fills the new capacity. Therefore no network operators will ever be able to build enough capacity to satisfy bandwidth hungry video. The alternative is to force network operators to augment their networks to keep-up with the growth in video traffic on which they earn very little. This is unsustainable; and
- vii. artificially cheap, albeit innovative services.
- 2.1 The impact of OTT on local domestic networks and economies have reached crisis proportions.

3. Characteristics of Domestic Caribbean Networks - Fixed, Mobile and Broadband:

- i. are licensed to provide all the services that they provide;
- ii. pay taxes to the governments in the Caribbean;
- iii. pay regulatory fees;
- iv. contribute to Universal Service;
- v. invest in their networks;
- vi. pay for all the resources, including spectrum, that are required to make networks operational; and
- vii. provide services at increasingly competitive prices
- 3.1 The further result is that there is a troubling disparity between the costs incurred by domestic, Caribbean network operators and those incurred by OTT providers. Much of these costs are driven by regulatory rules which apply only to domestic telecommunications providers and broadcasters. Caribbean domestic network operators incur all the costs imposed by

regulations. OTTs incur none of these costs. Accordingly OTT services are cheaper because they are not subject to the regulatory costs which are being borne by the domestic operators – resulting in domestic operators being less competitive than OTT providers.

3.2 Ultimately Caribbean operators invest in networks that they will struggle to maintain and upgrade because significant portions of revenues are being siphoned off by OTT operators. This is an unsustainable position for any commercial operator. Caribbean operators reject any notion that they should exert no control over their networks, have no rights, no responsibilities and no claim on how their networks are used.

4. Fallacious Arguments

- 4.1 OTT services are embraced because they are perceived as innovative and cheap. However this perception is not reality as the cost of the service has been shifted to Caribbean network operators and to Caribbean governments. Just as OTTs avoid bearing their fair share of legitimate costs for using domestic networks so it is they avoid paying taxes to Caribbean governments and hurt the ability of the poorest citizens' access to technology because they also avoid contributing to Universal Service Funds. The Caribbean telecommunications industry simply ask that policymakers apply regulations equally to OTT providers and require OTT providers to embrace the legitimate costs of operating in Caribbean markets including requiring such providers to enter into commercial interconnection agreements, where their services terminate on a telephone number on a domestic network.
- 4.2 Caribbean operators have been told that they must become more competitive and offer OTT type services. Yet Caribbean operators do offer OTT type services, however even on these OTT type services Caribbean Operators have to pay licence fees, taxes and Universal Service Contribution. This commercial approach to what is a fundamental issue of discriminatory application of regulations is not effective. As long as OTT operators are not regulated and do not bear their fair share of costs, Caribbean operators will not be able to effectively compete with OTTs, nor will Universal Service Funds (USF) generate the amounts of revenue that they could, as there will be less and less tax funding from local telecommunications revenue as larger and larger portions of these revenues will migrate to OTTs who make no investment in Caribbean economies.

- 4.3 Regulators and policy makers tend to tout the innovation that OTTs bring while, at the same time, are slow to recognize that revenues to domestic operators are shrinking and affecting taxation revenues and Universal Service Funding.
- 4.4 Caribbean operators embrace OTT services, provided that they are not harmful to domestic networks and bear their fair share of costs. Operators are happy that customers are purchasing smartphones and using data services to play games, watch videos and relate on social networks, as well as to make calls and send text messages.

5. Response of Caribbean Operator to OTT Providers since June 2014

Not all Caribbean operators have blocked OTT services on their network. Those who have blocked have:

- i. blocked select OTT services that evade payment of Universal Service Levy;
- ii. blocked OTT services that are harmful to the network, in that their architecture allows them to function in a Denial of Service Mode:
- iii. blocked OTT providers who do not have any interconnection agreement with domestic service providers or who refuse to honour such agreements; and
- iv. blocked OTT providers who are not licensed to provide service in the domestic market.

6. Response of Regulators to Blocking

In dialogue with Network Operators:

- i. raised the issue of the breadth of action being taken by Caribbean network operators and impact on technology industry;
- ii. raised issue of anti-competitive and discriminatory behavior; and
- iii. referenced the concept of Network Neutrality.

7. CANTO's Call to Action to Caribbean Regulators and Ministers

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- vi. in the alternative Caribbean regulators / policymakers should relieve Caribbean operators from paying fees and contributions for services similar to those provided by OTT providers.
- 7.1 Caribbean operators call upon Ministers of Government and ICT regulators to find paths to balancing innovation, investment and competition. Each must bear its fair share of costs.

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