

Response to URCA's consultation on a

Framework for Establishment of Internet Exchange Points ("IXPs") in The Bahamas

Public Consultation ECS 07/2019

Submitted to:

Utilities Regulation & Competition Authority

Introduction

Below please find Last Mile Communication Limited's response to URCA's consultation document on the framework for establishing IXP's, ECS 07/2019.

Answers to consultation questions

Consultation question 1: Context for the Consultation Do you agree with URCA's justification for publishing this consultation on the establishment of local IXPs in The Bahamas? Please detail your response in full.

Generally, we agree with URCA on the establishment of IXP's in the Bahamas. However, we do not believe that local internet traffic is significant on its own to justify the establishment of an IXP.

It is important to note that in order to directly participate in an IXP, the participant, must have an Autonomous System Number with allocated IP space from ARIN. Current there are only 8 ASN's assigned to the Bahamas thus limiting the initial participation in an IXP.

We believe that the value of establishing an IXP in the Bahamas lies outside of the "Local Internet Traffic" premise for the following reasons:

- <u>Caching Server access for IXP participants</u>. According to Sandvine's October 2018 "Global Internet Phenomenon" report in the America's Netflix accounts for 19.1% of total downstream traffic, followed by Amazon Prime, 7.7% and You Tube 7.5%. For smaller ISP's and other potential participants, such as, large Hotels and resorts, access to locally cached services could represent a significant savings in broadband internet cost. By pooling all of the media content type service demand in one location it would give an IXP the necessary volumes to deploy caching servers from the larger content providers.
- <u>Local Offsite Hosting and Backup Services</u>. For companies that backup and host services offsite at local facilities there could be significant savings due to the fact that a local loop service is less expensive per Mbps than broadband.
- <u>E-Government</u>. We believe that there is intrinsic value of keeping E-Government transactions that may have to cross multiple carriers local. When such transactions leave the jurisdiction, they are no longer covered by local Data Protection legislation.

Consultation question 2: Demand for Broadband Connectivity in The Bahamas Do you agree with URCA that there is high penetration of broadband access in The Bahamas? Please detail your response in full.

We agree that we have a high penetration of Broad Access

Consultation question 3: Consumer preferences for online content and services Do you agree URCA that there is increasing local preferences for web content that have high demand for bandwidth and high sensitivity to latency? Please detail your response in full. In support of your position, respondents are invited to provide relevant survey results and industry or specific company reports on the use of online content and services in The Bahamas.

We do not believe that local content demand will be large enough to support an IXP on its own.

Consultation question 4: Bandwidth Costs and Internet Traffic Do you agree that the practice of routing local Internet traffic outside The Bahamas adds costs to the operations of local ISPs? Please detail your response in full.

We do not believe that local traffic is significant enough to affect broadband cost. See response to question 1

Consultation Question 5: IXP Enabling Measures Do you agree with the supporting measures URCA proposes to adopt to stimulate entry of IXPs in The Bahamas? Please detail your response in full.

We generally prefer a market driven approach to establishing an IXP but do not see this as happening due to the small number of local providers and past experience in trying to establish peering agreements.

Consultation Question 6: Principles for Regulation and Other Measures Do you agree with URCA's assessment of the enabling measures discussed? Please detail your response in full.

Consultation question 7: Objectives for Establishing IXPs in The Bahamas Do you agree with URCA's objectives for the entry of IXPs in The Bahamas? Please detail your response in full.

Consultation question 8: Expected Benefits for IXPs in The Bahamas Do you agree with the benefits URCA has identified for IXPs in The Bahamas? Please detail your response in full.

As currently outlined by URCA we do not expect a reduction in network cost. We believe that the economic benefit would be direct access to media content caching services and local routing of offsite backup/hosting services that are locally domiciled.

We do however believe that all E-Government traffic should be locally routed.

Consultation question 9: IXP Policy Document What is URCA's role, if any, in the formation and/or approval of an IXP Policy document? Please detail your response in full.

We believe that URCA's role should be to ensure that there is fair, equitable and low cost access to the IXP.

Consultation question 10: IXP Location, Decision-making, Business Model and Funding Do you agree with URCA's recommendations regarding IXP location, governance and decision-making, participation, business model and funding? Please detail your response in full.

We agree in general with URCA's recommendations and would support a NON-Profit type model but not at the exclusion of other business model types.

Consultation question 11: Assessment of Implementation Options for Local IXPs Do you agree with URCA's preferred IXP model for The Bahamas? Please detail your response in full.

See question 10 response