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25 November 2020

Mr. Sonji Myles
Acting Executive Director ICT
Utility Regulation and Competition Office
85 North Sound Rd
Alissta Towers, 3rd Floor
P.O Box 2502
Grand Cayman KY1-1104
Cayman Islands

Dear Mr. Myles,

Re: ICT 2020-1 - Consultation on Internet Exchange Points (IXP) Regulatory Framework

Cable and Wireless (Cayman Islands) Limited, dba "**Flow**", hereby submits our responses to the ten (10) consultation questions included in the Utility Regulation and Competition Office's ("**Ofreg**") ICT 2020-1 Consultation Document.

Ofreg Question 1: Do you agree that the IXPs established in the Cayman Islands should operate in a manner consistent with the 10 Basic Principles set out in APPENDIX 2 of this Consultation?

<u>Flow response to the Ofreg Question 1</u>: The 10 Basic Principles specified in Appendix 2 of the Consultation Document are verbatim to the 10 "guiding principles" previously agreed to by the industry in 2016. Our position on these principles is unchanged, and we have no material objections to them at this time.

Ofreg Question 2: Do you agree that all persons who hold Type 9 – Internet Service Provider ('ISP') ICT service licences must connect their ISP services networks to at least one common licensed IXP in the Cayman Islands and must be obligated to exchange Local IP traffic, whether on a bilateral or multilateral basis?

<u>Flow response Ofreg Question 2</u>: If an IXP is to provide the benefits enumerated by the Office in paragraphs 18-22 of the Consultation Document, then we believe local interconnection to a common IXP by each ISP is necessary. Therefore, we agree that all persons or entities that hold Type 9 licenses should be required to interconnect to a common IXP for the transmission of ISP traffic that is local to the Cayman Islands.

Ofreg Question 3: Do you agree that, persons other than ISPs should not be restricted from connecting to and providing services at an IXP, subject to compliance with such relevant laws,

regulations, rules or reasonable terms and conditions as may be established by the operator of the IXP for such non-ISP connections?

Flow response to Ofreg Question 3: We believe that all requests for access by non-ISP entities to a local IXP should be treated fairly and in a non-discriminatory manner. However, we also believe that access by a non-ISP to a local IXP should be contingent upon compliance to an equal set of obligations and standards. This includes equal requirements for cost recovery, security and resiliency, and compliance with local laws, regulations, applicable payments to government and/or regulators. We also wish to make clear that the IXP should not be used for through-traffic that is transiting the IXP. Therefore, we agree that access to an IXP by non-ISP entities should be allowed, but we do not believe the IXP should provide transit. So long as access to the IXP is provided in a fair, non-discriminatory manner that does no harm to competition--and the entities granted access are held to the same high standards and obligations—we support this proposal.

Ofreg Question 4: Do you agree that, the operator of an IXP must establish an advisory board consisting of representatives of each of the ISPs, and must give effect to the greatest extent practicable to the consensus of that board on any matters relating to the exchange of local Internet traffic, provided, however, that the operator of the IXP may submit for the Office's review and approval alternative methods of determining the consensus of the ISPs on matters relating to the exchange of local Internet traffic?

<u>Flow response to Ofreg Question 4</u>: We have no objections to requiring all IXPs to establish an advisory board as recommended and specified by the Office in the Consultation Document.

Ofreg Question 5: Do you agree that 'Local IP Traffic' should be determined to mean 'Internet traffic which originates in the Cayman Islands on a network operated by an ISP and terminates in the Cayman Islands on a network operated by another ISP, irrespective of whether the networks in question are fixed wireline, fixed wireless or mobile wireless networks.'?

<u>Flow response to Ofreg Question 5</u>: We agree with the proposed definition of 'Local IP Traffic' as IP/Internet traffic that originates in the Cayman Islands on one ISP network and terminates in the Cayman Islands on a separate ISP network. We also agree that the requirements to interconnect to a common IXP and transmit Local IP Traffic should be applicable to all ISPs, irrespective of whether they operate a fixed wireline, fixed wireless or mobile wireless network.

Ofreg Question 6: Do you agree that the IXP must be located in premises which are not owned or operated by an ISP or by an affiliate of an ISP. That ISPs must connect to the IXP equipment at Layer 2 of the ISO OSI stack; and that the IXP shall not access, interrupt or otherwise use the ISP's traffic for any purpose other than what is minimally necessary to facilitate delivery of IXP service?

<u>Flow response to Ofreg Question 6</u>: We believe that IXPs should be independent from connecting ISPs and non-ISPs content providers, and we agree that the stipulations set forth in this question (Ofreg Question 6) are sufficient to maintain an IXP's independence and integrity.

Ofreg Question 7: Do you agree that;

- 1. the operator of the IXP shall charge ISPs cost-based fees for connection to and use of the IXP for exchange of Local IP Traffic;
- 2. the ISPs shall be responsible for procuring, at their own expense, the necessary facilities to connect to the IXP;
- 3. the operator of the IXP may not make access to the IXP contingent upon the use of the services or facilities of any particular network or service provider; and
- 4. the ISPs may not charge each other for the exchange of local Internet traffic across the IXP?

<u>Flow response to Ofreg Question 7</u>: We agree with each of the four stipulations set forth in this question (Ofreg Question 7). We wish to clarify that transparency must be provided to ISPs regarding an IXPs calculation of cost-based fees, and ISPs be allowed to evaluate and challenge those calculations, as necessary. Finally, we agree that ISPs should be held responsible for securing access to a common IXP and exchange Local IP Traffic amongst each other on a bill-and-keep basis.

Ofreg Question 8: Do you agree that, IXPs should be allowed to obtain necessary licences to operate International Cable Landing Stations (ICLS) and that persons licensed and operating Type D2 International Fibre Optic Networks and Type 11a Provision of Dark Fibre Services, or otherwise authorised to operate a ICLS, must provide International Fibre cross-connects and ICLS co-location to IXPs?

<u>Flow response to Ofreg Question 8</u>: We do not understand several of the stipulations set forth in this question (Ofreg Question 8) or discussed in Section C.6 of the Consultation Document. Based on what we can understand, we do not agree that it is necessary or appropriate for an IXP to collocate in an ICLS, nor do we believe it is warranted to establish new regulations to achieve this outcome.

First, the discussion in Section C.6 makes several declarative statements that we believe require explanation and substantiation. For instance, in the opening paragraph of the section (par. 71), Ofreg declares that IXP co-location in an ICLS "would enrich the universe of potential IXP members," and in the subsequent paragraph (par. 72), Ofreg declares that direct access to an ICLS is "an important factor for ISPs success in accessing Content Delivery Networks to facilitate the provision of internet service locally." Both declarations are used to support Ofreg's co-location proposal, but are not explained or substantiated. Ofreg does not enumerate *how* an IXP co-location arrangement would impact, let alone enrich, the peering experience of operators connected to that IXP, nor does Ofreg explain *why* direct access to an ICLS is important for an ISPs success. It is interesting that a leading ISP in the Cayman Islands and Flow's primary competitor is not co-located in or have direct access to a Flow ICLS, nor has this ISP requested such access from Flow.

Second, but for this opaque discussion in Section C.6, nowhere else in the Consultation Document does Ofreg support or intimate how CLS collocation is relevant to an IXP's operations. To the contrary, the entirety of the discussion up to this point intentionally excludes international transmission from the IXP proposal. The schematic diagram describing the IXP proposal (Diagram 3) does not attribute any international transmission facility or ICLS collocation to the IXP, and the stated purpose of the IXP is to avoid utilizing international transmission and ICLS resources; i.e., the IXP is intended to enable

ISPs to keep local IP traffic (with an origin and terminus in the Cayman Islands) from leaving the country and unnecessarily utilizing international transmission facilities.

Third, even if international transmission is somehow within the IXP's remit, it is also unclear what private or public purpose is achieved by ensuring that an IXP self-provide international transmission facilities and services. If an IXP were to require international transmission, there already exist diverse and redundant international transport options available to the IXP that it could purchase on a wholesale-discount basis from any existing ICT Licensee. It is unclear why this available supply of international transmission services is insufficient or inferior to self-supply by an IXP.

Fourth, the requirement that an IXP co-locate on the premises of an interconnecting ISP would appear to directly contradict a separate requirement that IXPs be "physically located in a space independent of any of the competing ISPs," in order to instill "confidence in the IXP."

Fifth, should ICLS co-location or a direct connection to submarine cables ("without third-party intermediation") somehow be deemed necessary, it is important to note that these opportunities already exist under *The Interconnection and Infrastructure Sharing Regulations*. The IIS Regulations already include detailed instructions to Licensees on the requirements for sharing infrastructure with other Licensees. They have been in place for over 15 years, since Liberalization in 2003. And they are widely understood and extensively utilized by Licensees to secure ICT infrastructure.

Sixth, as the owner of ICLS in the Cayman Islands, Flow already offers in-span connections directly to the submarine capacity in its stations and has made clear it will provide co-location within an ICLS to any Licensed operator where space is available and appropriate security exists. Where available space and/or appropriate security do not already exist, Flow has indicated it is willing to evaluate constructing a secure co-location facility, so long as the costs of this evaluation, construction and security are borne by the requesting party.

For all of these reasons, we object to Ofreg's proposal to mandate IXP co-location within ICLS.

Ofreg Question 9: Do you agree that,

- a. IXP licensees should pay their share of Regulatory Fees;
- b. IXP licensees should be exempt from paying Royalty Fees for services related to the exchange of Local IP Traffic;
- c. The Application Fee for grant of Type 16 Internet Peering Service licence should be \$1500.00; and
- d. No application fee should be applied to applications for Type G IXP network licence applications?

<u>Flow response to Ofreg Question 9</u>: We disagree with stipulations (a) and (c), and agree with stipulations (b) and (d) to this question (Ofreg Question 9).

If the IXP's function and purpose is limited to providing a common peering point for local Internet traffic to Licensed ISPs and the costs of the IXP's creation and operation are to be funded directly from the connection payments by ISPs to the IXP, then any duty or fee (Regulatory and Royalty) paid by the IXP is in effect an additional fee or duty assessed to the funding ISPs. Licensed ISPs already pay an excessive amount in duties and fees, and adding to this burden will only exacerbate that problem.

With regard to an IXP paying a Regulatory Fee (stipulation a), as this fee is assessed on a proportionate basis, this would in effect result in connecting ISPs paying a disproportionate share of the Regulatory Fee, relative to other (non-ISP) ICT Licensees. Therefore, Ofreg should not impose a Regulatory Fee on IXPs, but if it does impose a Regulatory Fee on IXPs, then connecting ISPs should be allowed to deduct the payments they make to the IXP from their Regulatory Fee.

Ofreg Question 10: Do you agree with the proposed Draft IXP Regulatory Framework? If not, why?

Flow response to Ofreg Question 10: Please see our response to Ofreg Questions 1-9, above.

Yours sincerely,

Cable and Wireless (Cayman Islands) Limited, trading as FLOW

David Burnstein

Sr. Manager, Regulatory Finance