21 June 2016

Intervention by the Internet Society Canadian Chapter re:
Telecom Notice of Consultation CRTC 2016-192 —
Examination of differential pricing practices related to Internet data plans

1011-NOC-2016-0192

Summary

1. The Internet Society Canada Chapter (ISCC) submits that the Canadian Radio-television and Telecommunications Commission (CRTC) must examine the practice of monthly volume limits or "data caps" which have given rise to differential pricing practices. We believe that this is implicit in paragraph 5 of Telecom Notice CRTC 2016-192, which acknowledges: "If a monthly data plan has unlimited volume, by definition, there can be no differential pricing based on the zero-rating of specifications." Variations on zero-rating have, indeed, been the most common differential pricing practice implemented by Canadian ISPs.

2. ISCC considers that the differential pricing practices under review in this proceeding are, in effect, marketing solutions or "work-arounds" to data caps, which are a self-generated problem for ISPs. As has been demonstrated by interventions and evidence filed in the CRTC's proceeding on usage based billing* (Telecom Notice 2011-77) data caps are neither technically nor economically efficient or effective means to address either network capacity constraints or congestion —which are their purported objectives. Accordingly, if differential pricing work-arounds are to be examined, with the idea of finding some legitimacy in them, the examination must also consider the legitimacy of the underlying caps themselves.

3. In Canada, the differential pricing practices under review have been developed and implemented primarily by dominant, vertically-integrated, carrier/ISP/BDU/broadcasters. Examples cited in Public Notice 2016-192 include offerings from Bell, Rogers and Videotron. Vertical integration at the scale documented by the CRTC in its annual monitoring reports creates both market incentives and the financial and technical capacity to extract competitive advantage

not achievable by competitors in any of their various lines of business. With respect to vertically-integrated carrier/ISPs, ISCC believes that, on its face, the implementation of economically and technically inefficient and ineffective usage caps, together with differential pricing work-arounds to those caps, gives rise to concerns for the interests both of end-users and of online service providers.

4. ISCC was struck by the juxtaposition of the first sentence of paragraph 5 in Public Notice 2016-192, which reads:

> *"5. One such practice is differential pricing, which, in general terms, occurs when the same or a similar product or service is sold to customers at different prices."*

and subsection 27(2) of the *Telecommunications Act (*the Act):

> *2) No Canadian carrier shall, in relation to the provision of a telecommunications service or the charging of a rate for it, unjustly discriminate or give an undue or unreasonable preference toward any person, including itself, or subject any person to an undue or unreasonable disadvantage.*

ISCC is of the view that the latter should be the CRTC's guiding light in this proceeding.

5. The vision of the global Internet Society is that the Internet is for everyone and that everyone should have access to an open Internet with global reach and with no permanent favourites. ISCC respectfully submits that the CRTC should recognize that long-standing common carriage principles are the bedrock of "net neutrality", which has enabled an unprecedented pace of innovation, competition, consumer choice and economic growth. This explosion of economic welfare has come overwhelmingly from the edges of the network. "Edges of the network" means, in effect, "not invented by carriers". This progress has been the result of open access, open standards and the ability to innovate without centralized control or permission. The framework developed as a result of this proceeding should serve to ensure that Canadians continue to have the most open possible access to the Internet at competitive prices, and to online service providers of their choice, unimpeded by dominant vertically-integrated carrier/ISP pricing practices that cannot be demonstrably justified under subsection 27(2) of the Act.

* See Report by Bill St. Arnaud, "Myths and Fallacies about Usage Based Billing" attached

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Responses to specific questions raised in Public Notice 2016-192

Defining differential pricing practices

Q.1: What types of billing practices constitute differential pricing practices for the purpose of developing a regulatory framework to govern such practices?

6. Consistent with paragraph 5 of Public Notice 2016-192, ISCC considers that any pricing practice that proposes to offer the same or a substantially similar product or service to customers at different prices would be subject to the regulatory framework contemplated by this proceeding. For greater certainty, this would include zero-rating offerings. These occur where an ISP exempts data traffic stemming from a particular application or a set of applications from a monthly data plan (usage limit). As well, ISCC believes that sponsored data plans as described in paragraph 6 of the Public Notice should also be captured. Such plans substitute a commercial arrangement for a payment to the carrier. Accordingly, these arrangements raise questions about transparency in determining whether they give rise to undue preference or disadvantage. In ISCC's view, concerns arise primarily when these practices are implemented by dominant vertically-integrated carrier/ISPs.

Q.2: To what extent do these practices exist in Canada's Internet access service market? Provide specific examples.

7. ISSC is of the view that the examples of these practices cited in Public Notice 2016-192 are sufficient to demonstrate both that these practices exist in Canada's Internet access services market and that, by the CRTC's own determination in *Broadcasting and Telecom Decision 2015-26,* they can result in undue preference and disadvantage.

Q.3: Are there Internet access differential pricing practices that may not raise regulatory concerns (for example, applications that enable consumers to monitor their data usage that may not count towards a data plan, or plans that zero-rate data traffic during a particular time period)? If so, please explain.

8. ISCC considers that, having imposed data caps, ISPs should, as a matter of good customer relations and business practice, supply and exempt from those caps applications that enable customers to monitor and manage their usage of data.

9. With respect to time of day, the notion suggests that data caps can be demonstrated to serve an economic or technical purpose with respect to network congestion or capacity constraints. For example, that zero-rating traffic between midnight and 6 a.m. might encourage users to shift heavy usage to that time period. However, as demonstrated by Bill St. Arnaud's Report, this is a fallacy.

10. Differential billing practices implemented by non-dominant, independent ISPs do not raise regulatory concerns at this time because these ISPs are neither dominant nor vertically integrated. Therefore they do not have the same economic incentives, or financial or technical capacity, to extract anticompetitive or anti-consumer advantage from them.

Identifying any concerns with differential pricing practices

Q.4: What are the potential benefits to consumers, application providers, and ISPs associated with some or all Internet access differential pricing practices?

11. The vision of the Internet Society is that the Internet is for everyone and that everyone should have access to an open Internet with global reach and with no permanent favourites. In developing markets, zero-rating programs may serve to enable or encourage take-up and usage of the Internet, in particular where such programs are open to content, non-exclusive, time limited and transparent to both end users and online content and service providers. It is worth noting that zero-rating schemes for this purpose have been tried and officially rejected in India. However, in developed markets like Canada, zero-rating programs are unlikely to serve, and are clearly not intended for, that purpose. According to CRTC data, broadband Internet at 5 Mbps or higher is available to 94% of Canadians and 82% of Canadians subscribe to the Internet at some level of service. As well, according to data provided by the Canadian Internet Registration Authority (CIRA), Canadians are world leaders in accessing and using websites. (See: https://cira.ca/factbook/2014/the-canadian-internet.html).

12. While ISCC would not rule out the possibility that some differential pricing practices may have benefits in the Canadian context, the examples cited in Public Notice 2016-192 suggest that, to date, these practices would not meet the criteria mentioned in paragraph 11. On the contrary, zero-rating programs have not been fully open to content; they have served to exempt an exclusive sub-set of services or “walled-garden” from otherwise applicable data caps; and they have not been transparent to users, who might easily be unable to tell whether they are accessing a service within the zero-rated enclosure or the same service on the open public Internet where caps apply, or to online content and service providers. Accordingly, at this juncture, ISCC cannot identify differential pricing practices that might be beneficial in the Canadian context.

Q.5: What are the potential risks to consumers, application providers, and ISPs associated with some or all Internet access differential pricing practices?

13. ISCC considers that the differential pricing practices that have given rise to this proceeding are, in effect, marketing solutions or “work-arounds” to data caps, the latter being, for ISPs, a self-generated problem of artificial scarcity. As has been demonstrated by interventions in the CRTC’s proceeding on usage based billing* (Telecom Notice 2011-77) data caps are neither technically nor economically efficient or effective means to address either network capacity constraints or congestion — their

purported objectives — so it remains unclear what purpose they serve, beyond maximizing revenues. (* See Bill St.Arnaud report attached.)

14. As implemented to date in Canada, differential pricing or zero-rating has worked as follows: First, ISPs impose usage caps with incremental pricing based on volume of usage (usage-based billing), which is not demonstrably cost-based. Then, the ISPs develop and offer zero-rated, or "differentially-priced" walled-garden services, for which they charge an additional fee to access a sub-set of bandwidth-intensive applications, like streaming video, outside the otherwise applicable usage caps. The CRTC has previously determined in *Broadcasting and Telecom Decision 2015-26* that such programs confer both undue privilege and undue disadvantage, contrary to s. 27 (2) of the Telecommunications Act. ISCC notes that the Federal Court of Appeal has dismissed Bell's appeal of this decision.

15. T\he practice of zero-rating bandwidth-intensive applications like streaming video demonstrates how usage caps are unrelated to either capacity constraints or congestion. How could such zero-rating services be offered if capacity or congestion were real concerns? While it has traditionally been accepted that wireless networks are more capacity constrained than wireline networks, the services impugned by *Decision 2015-26* — mobile TV services — were being zero-rated on wireless mobile networks, thereby undermining that traditional view. (Indeed, it is common practice for integrated wireline/wireless carriers such as Canada's dominant carriers to offload wireless traffic to wireline networks as quickly as possible, which may explain this apparent lack of wireless network constraint.) Moreover, both cable and telephone company incumbents operate competing licensed broadcasting services comprised of streaming video over the same last mile infrastructure which is used for Internet access. These services are not priced based on usage, yet seem to avoid congestion, and are offered at a fraction of the price charged for accessing comparable video content over the Internet. Accordingly, zero-rated offerings can only be understood as supplementary revenue-maximizing strategies. They are a work-around designed to bypass a self-created constraint (artificial scarcity) to create new revenue streams, from end-users and/or from the service providers who benefit from unlimited access to those end-users.

16. As the CRTC determined in *Decision 2015-26*, this revenue-maximizing strategy is particularly problematic when the zero-rated walled-garden consists of the carrier's own affiliated package of services such as Mobile TV. This results in undue preference to the carrier itself and to subscribers of its zero-rated service, and an undue disadvantage to other subscribers, network users and service providers. It is a clear infringement of common-carrier obligations, with significant anti-competitive consequences.

17. When the zero-rated offering is open to service providers other than the carrier itself or its affiliates, (e.g., Videotron's Unlimited Music service or, in the U.S., T-Mobile's

offerings), the practice is still problematic vis-a-vis common carrier obligations, although the issues become more complex:

- what are the terms of access to the zero-rated offering?
- are payments involved?
- if there is a sponsorship, how is the value determined vis-à-vis other online services?
- is there simply a technical standard (perhaps involving data compression) that any provider can meet to access zero-rating?
- is there an additional charge to end-users?
- does the arrangement create permanent privileged access for some providers to Canadian end users in relation to other providers?
- is it clear to the general body of subscribers when they are accessing a service on the zero-rated package or the same service on the public Internet?

18. Each of these issues (and there are likely more) gives rise to further issues, all arising from the underlying problem that the practice of differential pricing and/or zero-rating is a marketing work-around to an artificial scarcity. Differential pricing practices serve primarily to maximize revenues for ISPs. They establish differential access between online service providers and end users; and they are both anti-competitive and anti-consumer. The outcome serves to constrain rather than foster competition and innovation. Pricing schemes do not constitute service innovation.

19. In this context, it is worth noting that in Canada, the pricing practices under review have been developed and implemented exclusively by dominant, vertically-integrated incumbent carrier/ISP/BDU/broadcasters. Examples cited in Public Notice 2016-192 include offerings from Bell, Rogers and Videotron. Vertical integration at the scale documented by the CRTC in its annual monitoring reports establishes a formidable marketplace dynamic. By virtue of owning and controlling the underlying network infrastructure, vertically integrated incumbents have the technical means (physical network), financial capacity (significant regular monthly cash flow), and economic incentive (competition from other services online) to extract advantage from their formidable market position at the expense of both end-users and competitors.

20. Economically and technically inefficient usage caps, together with differential pricing work-arounds to those caps, causes concerns about the interests both of end-users and of online service providers that rely on the Internet to access their clients. These same vertically-integrated incumbents are experiencing declining revenues from other lines of business such as BDU operations, wireline residential basic telephone service and TV advertising. All of this creates powerful incentives for these former monopoly entities to “stay whole” by maximizing Internet revenues. For all of these reasons, ISCC believes that regulatory attention with regard to these practices should focus on the dominant vertically-integrated carrier/ISPs.

21. The impact of these practices is potentially vast. Increasingly, a myriad of online services make use of streaming video and/or audio in one form or another. When a subset of services enjoys unlimited access to end users by not being subject to usage caps, all other services using streaming are, by default, placed at a competitive

disadvantage. Implicitly they "cost more" to access and use: the end-user *must* consider whether using those services warrants running-up against a limited data allowance — but not for the zero-rated subset. In today's Internet, subscription video services, newspapers, social media, and informational, educational and commercial websites use streaming video. Accordingly, these practices impact the entire online economy. Imagine a three lane highway. In this scenario the owner of the highway reserves one lane for broadcasting, another lane for his own services, of whatever nature, and a third for the public internet, which is open all uses and all users. Yet the proportion of people who wants to use the Internet lane constitutes two thirds of the users and they pay two thirds the costs. Of course it is tempting to use the special lane reserved for customers of the highway owner. The scheme is rigged to make the highway owner's special lane look more attractive. Freer flowing traffic at bargain prices: this is not rocket science, as they say. These practices are work-arounds to scarcity created by the vertically integrated ISPs themselves, this artificial scarcity was in Bill St Arnaud's report referenced earlier. The potential impact cannot be overstated: taken together, usage caps, differential pricing and/or zero rating serve to constrain Internet usage, enrich vertically integrated ISPs, and impede competition and innovation.

22. Accordingly, ISCC respectfully submits that the CRTC should use the opportunity to take a hard look at the practice and purpose of usage caps. Otherwise, the CRTC will be considering possible ways and means of validating work-arounds without having established, with certainty and clarity, that the underlying problem— usage caps — has any validity beyond revenue maximization.

Q.6: How should the benefits and risks identified above be weighed and how might they inform whether any specific Internet access differential pricing practice contravenes subsection 27(2) of the Act?

23. The starting premise of any framework developed as a result of this proceeding should be that any differential pricing practice implemented by a dominant vertically-integrated carrier/ISP is a potential contravention of subsection 27(2) of the Act. The potential negative impact of these practices is vast and significant. The CRTC has long-standing experience in examining, investigating, and reaching determinations based on facts presented in matters that come before it. ISCC does *not* propose that the CRTC adopt an "ex ante" prohibition on such practices but rather that complaints filed against such practices be dealt with expeditiously with a clear onus on the ISP to demonstrate that the practice is not in contravention of subsection 27(2).

Q.7: To what extent, if any, do differential pricing practices give ISPs the ability to act as "gatekeepers" that are able to determine or influence which Internet applications are more likely to be accessed than others by consumers? If so, explain whether this is appropriate.

24. The ability for dominant vertically-integrated carriers to act as “gatekeepers” — whether intentionally or incidentally — is a highly problematic characteristic of differential pricing practices. As mentioned in paragraph 23, a myriad of online services increasingly make use of streaming video and/or audio in one form or another. When a subset of services enjoys unlimited access to end users by not being subject to usage caps, all other services using streaming are, by default, placed at a competitive disadvantage. Implicitly they "cost more" to access and use: the end-user *must* consider whether using those services warrants running-up against a limited data allowance — but not for the zero-rated subset. So these practices are anti-consumer too. Accordingly, these practices impact the entire online economy, and make ISPs that implement these practices into “gatekeepers”. When those ISPs are dominant, vertically-integrated carriers, the impact is substantial because they control access to the great majority of Canadian Internet users. This is not consistent with the Internet Society’s vision of the Internet and ISCC considers this to be an inappropriate outcome.

Q.8: Are differential pricing practices examples of market forces working as they should, or are they examples of anti-competitive behaviour?

25. Differential pricing practices that have emerged to date cannot be construed to be examples of market forces working as they should. They are better understood as an outcome of imperfectly competitive markets. These are characterized by dominant local access network duopolies comprised of former monopoly cable-TV companies and telephone companies. In Canada these local access network duopoly entities dominate telecommunications, Internet access, broadcasting distribution and even broadcasting content. Moreover, these same entities control the radio frequencies that might otherwise provide meaningfully competitive terrestrial wireless Internet access. Independent ISPs using leased wholesale facilities, while important, continue to represent only a small fraction of the Internet access market, marginalized by wholesale rates and other cost factors that limit their competitiveness; while independent satellite and terrestrial wireless offerings focus on rural or remote areas underserved by the incumbents.

Q.9: Are ISPs being sufficiently transparent with respect to the information they provide to consumers about the Internet access differential pricing practices they use? How aware are consumers about the implications of these practices?

26. Differential pricing practices implemented to date have featured content services already available on the public Internet as well as in the in zero-rated offerings. It can be completely opaque and confusing to end-users whether they are accessing the service on a zero-rated basis or subject to the usage cap. As well, consumers cannot tell why some services are zero-rated while others are not. The cost implications for consumers can be significant, particularly when using mobile networks where usage caps are relatively low and prices for exceeding the caps are high.

Applying regulatory measures, if any

Q.10: To what extent do Internet access differential pricing practices fall within the scope of section 36 of the Act? If any such practices engage section 36 of the Act, what considerations ought to guide the Commission in assessing whether to approve these practices under this section?

27. ISCC is of the view that the CRTC should rely primarily on subsection 27(2) in addressing differential pricing practices. Carriers have been permitted to become providers of content services for a long time and this, in itself, is not necessarily problematic. The issues to which these practices give rise relate fundamentally to long-standing common carriage obligations and can be dealt with adequately in that context.

Q.11: Having regard to the responses to the questions above, what restrictions, if any, should be placed on any specific differential pricing practices associated with retail Internet data usage?

28. See paragraph 23.

Q.12: Should specific types of applications, such as those associated with social needs, be treated differently or be exempt from a regulatory framework on differential pricing practices, and if so, why? How might any such applications be defined, categorized, and assessed?

29. The ISCC believes that the Internet is for everyone. Any framework developed as a result of this proceeding should serve to ensure that all Canadians continue to have the most open possible access to the Internet at competitive prices, and to online service providers of their choice, unimpeded by dominant vertically-integrated carrier/ISP pricing practices that cannot be demonstrably justified under subsection 27(2) of the Act. In that context, there should be no need for special dispensations for certain types of online applications and services. Going down this path would, of necessity, introduce an unnecessary level of complexity and regulatory intervention. This would be inconsistent with the objective of the Act that regulation, *where required*, be efficient and effective.

Q.13: Do any other factors influence whether differential pricing practices should or should not be permitted in certain cases? For example, should permission depend on whether

1. **the ISP controls multiple parts of the supply chain, including the transmission facilities and the data applications;**
2. **the differential pricing practice is based on economic or purely technical parameters;**
3. **the differential pricing practice affects the success of the application or service in question;**
4. **there is a societal benefit to doing so;**

5. **the ISP makes the offer available to all application providers offering the same or similar services or applications; or**
6. **the practice affects broadcasting policy?**

30. ISCC believes that *the first five* factors listed above are all reasonable considerations that ought to be taken into account in any proceeding before the CRTC arising from a disputed differential pricing practice. It would not, however, be useful or prudent to attempt to delineate "ex ante" whether and how these factors might weigh with respect to such practices in the context of a regulatory framework. Rather, any of these five factors may involve considerations that exacerbate or mitigate potential downsides to a given pricing practice and impact the CRTC's ultimate determination as to whether the practice is or is not consistent with subsection 27(2) and whether, for example, the practice could be allowed subject to certain safeguards.

31. With respect to differential pricing practices involving "broadcasting" and "broadcasting policy" under the *Broadcasting Act*. ISCC notes that Public Notice 2016-192 contains, at paragraph 11, the following reference:

> *11. Pursuant to section 28 of the Act, when an issue of discrimination, preference, or disadvantage arises regarding the provision of broadcasting services, the Commission is required to consider the broadcasting policy for Canada set out in subsection 3(1) of the Broadcasting Act in determining whether any discrimination is unjust or any preference or disadvantage is undue or unreasonable.*

32. ISCC is of the view that section 28 of the *Telecommunications Act* should be interpreted narrowly, and in the context of common carrier obligations. ISCC anticipates that some intervenors in this proceeding may suggest that the CRTC should consider the use of section 28 as a means to give prominence or priority carriage to Canadian content on the Internet by means of differential pricing or zero-rating. However, consistent with the Supreme Court's decision with respect to ISPs, ISCC is of the view that it would not be appropriate to do so. As the Court determined, ISPs acting in that capacity are not broadcasting undertakings. Accordingly, it would not be appropriate to use section 28 of the *Telecommunications Act* to implement broadcasting policy by way of these practices. ISCC believes that the CRTC got it right in *Broadcasting and Telecom Decision 2015-26.* That decision clearly delineated the common carriage and broadcasting activities of V-I entities. The Federal Court of Appeal has concurred with the CRTC's determinations in that regard. While the CRTC has asserted jurisdiction under the *Broadcasting Act* over certain online audio and audiovisual services, it has exempted those services from regulation under that Act. While the ISCC is of the view that online content services should not be regulated as broadcasting, any attempt to do so should be undertaken subject to the *Broadcasting Act* and not indirectly slipped through the backdoor of the *Telecommunications Act*.

Q.14: Should the Commission's ITMP framework be modified to address differential pricing practices and, if so, how?

33. ISCC considers that differential pricing practices cannot be construed to be Internet Traffic Management Practices. Rather, these are marketing strategies. They are intended solely to treat some online services differently than others. It would be more appropriate for the CRTC to set out some guidelines, along the lines of those published by the Competition Bureau, providing some guidance as to how it foresees interpreting subsection 27(2) in relation to differential pricing practices related to Internet data plans. As previously noted, compliance should focus on dominant vertically-integrated carrier/ISPs.

Q.15: Describe how any transparency concerns about the information that is made available to consumers with respect to differential pricing practices could be mitigated.

34. In ISCC's view, a significant issue arises from these practices. By their nature, these practices are bound to cause confusion because some services available via the public Internet are subject to usage caps while the same services available through an ISP's specific "app" are exempt from the cap. As ISCC has argued in this intervention, usage caps are a self-inflicted problem of artificial scarcity. Accordingly, the onus should be placed squarely on the shoulders of dominant vertically-integrated carrier/ISPs that implement differential pricing practices to demonstrate to the CRTC how transparency concerns will be addressed in the context of subsection 27(2).