

# **Telecom Notice of Consultation CRTC 2015-133**

## **Review of Telesat Canada's price ceiling for C-band fixed satellite services**

---

### **Intervention of the First Mile Connectivity Consortium**

---

August 21, 2015  
Rob McMahon  
Coordinator  
First Mile Connectivity Consortium  
PO Box 104  
Fredericton, NB E3B 4Y2  
1-877-737-5638 extension 4522  
<http://www.firstmile.ca>  
[info@firstmile.ca](mailto:info@firstmile.ca)

## **Introduction:**

1. The First Mile Connectivity Consortium (FMCC) is an independent, not-for-profit national association. Our membership includes First Nation and Inuit broadband organizations and other non-profit telecommunications associations serving remote and rural areas. Our associate members are university and private sector researchers and other interested parties. Our work focuses on innovative solutions to digital infrastructure and services with and in rural and remote communities.

2. As the Commission points out in this Notice: “Telesat is the only satellite operator that covers all of Canada, including remote areas in the North... FSS are used by providers of telecommunications services to deliver telecommunications services, such as voice, wireless, and Internet services, to Canadians – particularly those located in some of the nation’s most remote communities, where terrestrial transport facilities, such as fibre transport links, are unavailable. Communities that rely on FSS for the delivery of voice, wireless, or Internet services are located in Nunavut, the Northwest Territories, and Yukon, as well as in certain remote areas of British Columbia, Saskatchewan, Manitoba, Ontario, and Quebec.”<sup>1</sup> We would add that communities in Nunatsiavut (Northern Labrador) are also served by satellite.

3. Further, the Commission’s Satellite Inquiry Report (SIR) states that 83 communities rely on an aggregated satellite transport model for voice, and 89 communities rely on aggregated satellite transport for the Internet. “Of these, 76 communities rely on the community aggregator model for both fixed voice services and Internet access.”<sup>2</sup>

4. The FMCC wishes to participate in this proceeding for several reasons. First, the vast majority of these communities are First Nations or Inuit communities, or communities with a high percentage of Aboriginal residents. The cost of C-band satellite capacity is reflected in the price that residents of these communities must pay for telecommunications services, including broadband. Second, satellite connectivity is the means by which these communities get access to critical services including telehealth, distance education, e-commerce, e-government, and other communications services that contribute to their social, cultural, and economic development. Third, our members include Indigenous service providers that are dependent on Telesat to serve their customers.

## **Responses to Questions in the Call for Comments**

- (i) *...whether the continued use of a C-band FSS price ceiling remains appropriate.*

---

<sup>1</sup> Telecom Notice of Consultation CRTC 2015-133: Call for Comments. Ottawa, 9 April 2015.

<sup>2</sup> *Satellite Inquiry Report*, Ottawa: CRTC, October 2014. Available at: <http://www.crtc.gc.ca/eng/publications/reports/rp150409/rp150409.htm>.

5. We believe that a price ceiling for C-band FSS service remains appropriate because there is no realistic alternative to Telesat to provide FSS service in the Canadian North and therefore market forces cannot be relied upon in setting prices for FSS service. We also noted in our previous submission to the Satellite Inquiry that C-band is likely to remain necessary to provide FSS services in northern communities.<sup>3</sup>

6. As stated in our intervention in the Commission's Satellite Inquiry, we believe that a direct-to-home (DTH) model is very inefficient for northern communities. A DTH model is not likely to replace the community aggregator model for interactive services. These communities are generally very compact, and can be served locally by first mile wireless or in some cases, DSL, cable or optical fibre using the satellite community aggregator model for backbone connectivity.<sup>4</sup>

7. Also, Telesat's submission makes no reference to key applications such as telehealth and two-way symmetrical videoconferencing. We note that C-band is critical for the community networks to manage and deliver applications such as health and education. For example, C-Band may be required for these types of critical applications to ensure adequate quality of service and continued operation in bad weather. In our experience, Ku and Ka-bands can be used for some applications, but are less reliable and therefore not appropriate for essential services.<sup>5</sup>

8. The SIR notes that "Northwestel submitted that the DTH model has some disadvantages in terms of voice services, since calls require a double satellite hop to be performed, which significantly compromises service quality and doubles the amount of space segment required to support a given call volume."<sup>6</sup> However, Telesat concluded that "double hops are not an obstacle to choice of supplier." We disagree. Double hops cause latency that is not appropriate for VOIP, videoconferencing, and other "real time" interactive services, and is frustratingly slow for Internet users.

9. Telesat also seems to disregard the importance of reliable telecommunications in the North. Telesat's submission refers to the statement in the SIR that NICSN (the Northern Indigenous Community Satellite Network) incurred five days of downtime when it had to repoint

---

<sup>3</sup> First Mile Connectivity Consortium. Comments re Telecom Notice of Consultation 2014-44, July 7, 2014.

<sup>4</sup> For a discussion of similar satellite backbone service models in remote communities in Alaska, see Hudson, Heather E. *Connecting Alaskans: Telecommunications in Alaska from Telegraph to Broadband*. University of Alaska Press, 2015.

<sup>5</sup> Comments of the First Mile Communications Consortium (FMCC) in Telecom Notice of Consultation 2014-44, July 8, 2014.

<sup>6</sup> CRTC, *Satellite Inquiry Report*, Ottawa: October 2014, para. 150.

antennas from Anik F2 to Anik F3,<sup>7</sup> and then concludes: “This is not excessive, given frequency of weather-related outages and other downtime in Northern Canada.”<sup>8</sup> NICSN provides connectivity for important community public services including telehealth. Five days is excessive for residents and social services providers in the remote North that are highly dependent on telecommunications. For more information about this event, please refer to this news bulletin from K-NET Services.<sup>9</sup>

10. Compared to the DTH model, the community aggregator model also contributes to the local economy as dollars for service circulate within the community to local service providers that also provide local jobs. Details of these kinds of local economic development projects from several First Nations serviced by NICSN are available on K-NET’s website.<sup>10</sup> Telesat seems to lack any consideration for the economic conditions facing northern residents. It seeks to justify its prices as “reasonable” because the cost of living is higher in the North. While challenging the SIR’s evidence that Canadian C-band prices are slightly higher than average FSS C-band prices in North America or other regions of the world, Telesat states: “Even if this comparison were accurate, Telesat suspects that the price of many other types of products or services in Canada, and particularly in remote satellite-dependent communities, are more than slightly higher than North American prices.”<sup>11</sup> Transport costs contribute to higher prices for food, supplies, and fuel in the North. However, an advantage of satellite connectivity is that cost is independent of distance. Northern consumers and service providers should not be penalized by arbitrarily high prices for satellite service.

11. Telesat claims that in Canada “For many years now, it has been competitive market forces and negotiations between sophisticated buyers and sellers of FSS services that have determined

---

<sup>7</sup> CRTC, *Satellite Inquiry Report*, Ottawa: October 2014, para. 61.

<sup>8</sup> Intervention by Telesat in Telecom Notice of Consultation CRTC 2015-133, July 20, 2015, footnote 17.

<sup>9</sup> See: <http://media.knet.ca/node/3174>

<sup>10</sup> Please see the following stories on the K-NET website:

- Eabametoong First Nation - *Access Increases Demand for even more Bandwidth* -<http://smart.knet.ca/satellite/eabametoong.html>
- Fort Severn First Nation - *Supporting Local Economic and Social Development On-line*-<http://smart.knet.ca/satellite/fortsevern.html>
- Slate Falls First Nation - *The power of partnerships: “We’re not remote anymore”* -<http://smart.knet.ca/satellite/slatefalls.html>
- Weagamow First Nation - *Making education opportunities available in remote communities* -<http://smart.knet.ca/satellite/weagamow.html>
- Webequie First Nation - *ICTs from the Ground Up: Grassroots Demand Pushes Expansion and Growth* - <http://smart.knet.ca/satellite/webequie.html>

<sup>11</sup> Intervention by Telesat in Telecom Notice of Consultation CRTC 2015-133, July 20, 2015, para. 46.

the prices of C-band services.”<sup>12</sup> Telesat’s statement should be compared with that of the U.S. Satellite Industry Association: “Customers of ‘wholesale’ FSS satellite capacity typically are sophisticated corporations or governments that try to negotiate the best possible deal for transponder capacity from FSS providers before entering into service contracts. As a result, there is *competition* both on price and on non-price factors (*e.g.*, coverage/power levels and service quality) *among satellite capacity providers* when responding to customer requests for proposals.”<sup>13</sup> (emphasis added)

12. Telesat’s statement is not true for the Canadian North. As we have pointed out above, there is no competition for FSS service covering remote Canadian communities. The customers for Telesat’s backbone services have no choice. Further, local and Indigenous buyers of Telesat services do not have the resources to hire negotiators with the engineering, pricing and legal expertise of large carriers or corporations.

*(ii) assuming that the use of a C-band FSS price ceiling remains appropriate, whether the level of this price ceiling should be adjusted;*

13. The CRTC’s FSS price band ceiling was included in its Telecom 99-6 Decision and became effective as of January 1, 2001. Advances in communications technologies have contributed to dramatic reductions in the costs of telecommunications equipment and services in the past 15 years. It is not surprising that Telesat’s prices remain below the ceiling set at in 1999. The question is how much lower should they be in 2015?

14. At this time, only the Commission has access to Telesat’s pricing and cost studies. We believe that the Commission should review the data with the help of experts in satellite technology and pricing.

*(iii) assuming that the use of a C-band FSS price ceiling remains appropriate and that the level of the current price ceiling should be adjusted, how should the revised level be set (e.g. benchmarked against current market rates, justified based on costing, or some other approach), and what should the revised level be;*

15. We reserve the right to review the responses of other parties and to respond as appropriate through Interrogatories and Final Comments.

*(iv) whether it is appropriate to have a mechanism to review and adjust the level of the C-band FSS price ceiling on an ongoing basis and, if appropriate, what that mechanism should be (e.g. an adjustment factor);*

---

<sup>12</sup> Intervention by Telesat in Telecom Notice of Consultation CRTC 2015-133, July 20, 2015, para. 99.

<sup>13</sup> Comments of the Satellite Industry Association before the Federal Communications Commission, *In the Matter of the Fourth Report to Congress on the Status of Competition in the Provision of Satellite Services*, February 6, 2015, p. 10.

16. Given the de facto monopoly on C-band FSS for northern and remote communities that are dependent on satellite service and rapid advances in technology, we think there should be a mechanism to review and adjust the level of the FSS price ceiling every three years.

17. We reserve the right to review the responses of other parties concerning possible mechanisms and to respond as appropriate through Interrogatories and Final Comments.

*(v) whether C-band FSS other than the services to which the price ceiling currently applies should also be subjected to a price ceiling (e.g. partial transponders and short-term leases for less than five years);*

18. As we have pointed out, there is no alternative to Telesat for C-band coverage of the entire remote North. It has a de facto monopoly. Further, negotiations for Telesat capacity are not necessarily “between sophisticated parties”, given the limited resources of Indigenous service providers.

19. Further, Telesat states “As long as the price for the principal service is just and reasonable, so will the prices for the services that are repackaging of that principal service.”<sup>14</sup> As noted above, we lack evidence that the price for the principal service is just and reasonable. Even with such evidence, in a monopoly environment, Telesat would be able to determine the price of repackaged services unilaterally. Earlier, Telesat states that “... prices for partial transponders are generally higher than prices for full transponders ...” and “prices for a short-term lease of a given capacity are generally higher than prices for a long-term lease....”<sup>15</sup> If the satellite provider has unused capacity, in a competitive environment, it might choose to offer a lower price in order to generate additional revenue. Like the owner of a hotel or an airline, the owner has fixed costs and can generate additional revenue only if it can fill the empty rooms or seats – or in this case, the transponders. Therefore, prices for repackaged capacity could actually be lower than for the principal service.

20. We therefore believe that services such as partial transponders and short-term leases for less than five years should also be subjected to a price ceiling, with periodic review by the Commission.

*(vi) whether other regulatory measures should be taken in respect of C-band FSS, either in addition to or instead of modifying the C-band FSS price ceiling.*

21. We reserve the right to review the responses of other parties and to respond as appropriate through Interrogatories and Final Comments and thank the Commission for the opportunity to participate in this proceeding.

**\*\* End of Document \*\***

---

<sup>14</sup> Intervention by Telesat in Telecom Notice of Consultation CRTC 2015-133, July 20, 2015, para. 96

<sup>15</sup> Intervention by Telesat in Telecom Notice of Consultation CRTC 2015-133, July 20, 2015, para. 93.