

13 September 2024

Senior Director
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**Re: Gazette Notice, Part 1, June 29, 2024, Notice No. SMSE-006-24 -
Consultation on a Policy, Licensing and Technical Framework for
Supplemental Mobile Coverage by Satellite**

In accordance with the procedures set out in the above-noted consultation, please find attached the comments of Cogeco Communications Inc., on behalf of Cogeco Connexion Inc. ("Cogeco").

Cogeco thanks ISED for the opportunity to submit comments in this Consultation and remains available to answer any questions.

Yours very truly,



Paul Beaudry
Vice President, Regulatory and Government Affairs
/NJ

Introduction

Cogeco is in general agreement with the proposals set out in Innovation, Science and Economic Development Canada's ("ISED") Consultation document regarding the framework for supplemental mobile coverage by satellite ("SMCS").

While Cogeco is not providing responses to each question found in the Consultation document, we believe that, where ISED seeks comments between alternative proposals, ISED should adopt the option that maximizes flexibility in the framework regarding SMCS as the technology underpinning this service is still under development and should not be artificially confined by regulation.

Cogeco is concerned that when examining the questions within the Consultation on an individual basis, the Department may be overlooking potential conflating factors. For example, and explained in our responses below, the questions around SMCS contributing to deployment obligations must be considered within current mandatory roaming obligations. Further, the availability of SMCS to certain spectrum bands and tier sizes may limit its deployment appeal to the large national service providers (Bell Canada, Rogers and TELUS) further impacting applications for emergency services. Such implications need to be considered holistically and not on an individual basis.

Should there be a reply comment stage to this consultation process, Cogeco reserves the right to intervene further.

Q3

ISED is seeking comments on the potential for the SMCS satellites to have smaller beam sizes such that they could serve smaller service areas and potentially reduce protection areas around existing mobile networks.

Answer

As ISED noted in the Consultation, there are few instances in Canada of mobile service providers holding the same frequency block in all areas of the country. As such, the ability to duplicate the FCC's policy to limit licensing to an equivalent Tier 1 service area is not practical.

While SMCS beam sizes may range between 50-100 km today, the technology is seeing considerable investment and advancement. It is wholly possible that beam sizes may be further reduced such that co-channel interference from SMCS for smaller adjacent licence areas will be less challenging. Accordingly, a reasonably small licence area on a tier 3 basis should be established. However, smaller licenced areas should not be ruled out in the future and should be considered on a case-by-case basis as this would also allow smaller carriers to form agreements to deploy SMCS when they own geographically adjacent spectrum.

Finally, allowing for smaller licensing areas, where other terrestrial deployments exist, furthers the policy objectives of the Telecommunications Act, and the Spectrum Policy Framework for Canada, namely to maximize the economic and social benefits that Canadians derive from the use of Canada's radio frequency spectrum resource. Issuing licences only in areas without any deployed spectrum would be contrary to these policy objectives as it would limit further deployments where, in fact, no spectrum has been deployed.

Q5 - ISED is seeking comments on its proposal to apply the SMCS framework to the following initial bands:

**600 MHz (617-652 MHz/663-698 MHz)
700 MHz (698-756 MHz and 777-787 MHz)
800 MHz Cellular (824-849 MHz/869-894 MHz)
PCS (1850-1915 MHz/1930-1995 MHz)
AWS-1 (1710-1755 MHz/2110-2155 MHz)
AWS-3 (1755-1780 MHz/2155-2180 MHz)**

Q6 - ISED is seeking comments on any other bands that are used for commercial mobile services for which the SMCS framework should be applied.

Answer

Cogeco does not support a proposal that limits the adoption of SMCS to legacy wireless providers. As a new wireless carrier, access to the above listed spectrum bands is nearly impossible. As these spectrum bands have long since been auctioned off and deployed, the ability to acquire even a few megahertz of these bands is impossible. By only allowing SMCS in these legacy bands, the Department is effectively ruling out the ability for new wireless carriers to deploy SMCS.

In addition, the technology for SMCS continues to rapidly evolve and its ability to be deployed with other bands is certain to evolve. Should the deployment of SMCS be limited to the above bands, anytime the technology evolves there will be a need for a new Consultation to update the framework. Such a rigid policy framework stifles the industry and overburdens all stakeholders with excessive regulatory paperwork.

Instead, the Department should adopt a flexible approach to SMCS. This approach would prioritize the above bands for the reasons noted in the Consultation but allow SMCS on other bands on a case-by-case basis. Given its supplemental nature and the expectation that terrestrial deployment can expand in the future and the fact that terrestrial mobile services will remain primary in the frequency, there is no underlying policy rationale to limit SMCS deployment to the bands proposed by ISED.

Q10

ISED is seeking comments on its proposal that SMCS would not contribute to meeting deployment conditions associated with flexible use licences.

Answer

Cogeco proposes that, along with requiring SMCS access to mandatory roaming, SMCS should contribute to a carrier's obligation of meeting deployment conditions associated with flexible use licences. The fact that the technology is not completely terrestrial should not dissuade the Department from its ability to expand mobile service coverage for Canadians. Furthermore, as the technology advances and matures, the customer experience of SMCS will become indistinguishable from a fully terrestrial connection. By allowing SMCS to contribute to deployment coverage obligations, the Department is furthering the policy objectives of the Telecommunications Act, and the Spectrum Policy Framework for Canada, namely to maximize the economic and social benefits that Canadians derive from the use of Canada's radio frequency spectrum resource.

By enabling SMCS to contribute to a carrier's deployment conditions, the Department will encourage carriers to consider previously uneconomic areas for deployment, thereby increasing connectivity and benefiting Canadians. For example, it is estimated that terrestrial mobile networks currently provide coverage in only approximately 37%¹ of Canada's total land area. It is not financially viable for a country like Canada to guarantee 100% mobile coverage of its entire landmass through terrestrial networks. SMCS provides a solution to this issue. This not only ensures emergency connectivity throughout the country, including in sparsely populated areas, but also creates economic opportunities for IoT, wildlife preservation, wildfire monitoring, and other connectivity applications that were previously unavailable.

To guarantee fairness for all carriers, should the Department permit SMCS to provide enhanced service coverage to Canadians, we must evaluate the implications of modifying the Mandatory Roaming Conditions of Licence ("COL"). The problematic wording in CPC 2-0-17 Mandatory Roaming COL is as follows:

37. As a general principle, roaming should provide a Roamer with the ability to access voice and data services offered by the Roamer's Home Network at a level of quality comparable to that offered for similar services by the Host Network carrier to its own subscribers. For further clarity, the policy does not require a Host Network carrier to provide a Roamer with a service that the Host Network operator does not itself provide

¹ *Compare Canadian Network Coverage Maps*, WhistleOut Canada. Accessed September 1, 2024.
<https://www.whistleout.ca/CellPhones/Guides/Coverage>.

to its own subscribers, nor to provide a Roamer with a service which the Roamer's Home Network operator does not itself provide.

Essentially, if the roaming carrier does not have SMCS, the Host Network carrier would refuse to provide roaming access to any coverage areas served by SMCS. This issue can be addressed with the following additional wording "Notwithstanding the above, SMCS service does not need to be provided by the Roamer's Home Network operator in order to gain access to this service from the Host Network carrier."

It is imperative that the Department refrain from establishing a framework that precludes the potential for SMCS to fulfill the conditions for flexible use licenses. At a minimum, the Department could adopt a case-by-case approach to examining each application for the deployment of SMCS. Such an examination would require the applicant to provide evidence and arguments supporting why the Department should allow the SMCS deployment to contribute to the carrier's deployment obligations. This approach allows for a flexible, case-by-case evaluation of SMCS's contribution to the policy objectives of the Telecommunications Act and the Spectrum Policy Framework for Canada as the technology develops and matures.

Q11 - ISED is seeking comments on any considerations and/or limitations in providing network reliability and resilience using SMCS, based on the requirements in the MOU on Telecommunications Reliability.

Q12 - ISED is seeking views on any considerations and/or limitations to providing emergency roaming using SMCS based on the requirements in the MOU on Telecommunications Reliability.

Q13 - ISED is seeking comment on the technical possibilities and limitations of SMCS for the provision of 9-1-1 access to all handsets from all service providers where there is SMCS satellite coverage.

Q14 - ISED is seeking comments on how SMCS deployments would support the distribution of emergency alerts to mobile devices.

Q15 - ISED is seeking comments on whether existing mechanisms will support emergency communications in the absence of a roaming agreement between providers, or whether a new obligation would be appropriate regarding this issue for SMCS.

Answer

With regards to the questions listed above, it is of the utmost importance that ISED guarantee emergency access to SMCS coverage for all Canadians regardless of their wireless service provider, in order to ensure public safety. The safety of Canadians should not be contingent on the wireless service provider's ability and scale to deploy SMCS.

It is imperative that the department refrain from considering any policy framework that removes the obligation of wireless carriers to provide 9-1-1 access, emergency alerts, or emergency roaming over SMCS. Arguments pertaining to the technical limitations are inconsequential, given that this technology is still in its nascent stages of development. On the contrary, a policy framework that enshrines SMCS emergency access will undoubtedly expedite the advancement of solutions to any technology limitation by the current iteration of SMCS.

Finally, the ability to deploy SMCS, even when there exists a terrestrial network, needs to be considered in the framework. For example, when a wildfire destroys terrestrial infrastructure, SMCS should be available to provide service in the interim. Whether this is done through the MOU on Telecommunications Reliability or a licence is issued by ISED on a temporary emergency basis, this sort of innovation and flexibility in the framework is needed.

Q20

ISED seeks comments on whether Option 1 (implement a mandatory roaming requirement for SMCS licences that would take effect 5 years following the publication of a decision) or Option 2 (not impose a mandatory roaming requirement) would be most appropriate. Alternate options supported with a strong rationale may also be considered.

Answer

As noted in Cogeco's response to Q10, a mandatory roaming requirement for SMCS is required when allowing SMCS to contribute to deployment obligations. Accordingly, Cogeco proposes an alternate option - should the Department allow SMCS to contribute to deployment obligations, the Department should then implement a mandatory roaming requirement.

Mandatory roaming and deployment requirements go hand-in-hand for obvious reasons including fostering the development of competitive wireless communications services and reducing barriers to market entry by new carriers.² The ability of one carrier to provide true Nationwide coverage could place considerable competitive pressure on smaller regional carriers. Without a requirement to offer this access, even at negotiated rates, would allow the large national service providers a considerable marketing advantage. This could stifle competition and dissuade market entry by new carriers.

The requirements for mandatory roaming were put in place *"to advance the policy objectives of enabling ... new entrants to offer national service coverage to their subscribers from the initial launch of services, reducing tower proliferation and facilitating competitive entry by expediting network deployment."*³ These objectives remain relevant and should be expanded to SMCS licences. Finally, this advantage would be further entrenched if the Department only allowed legacy spectrum bands access to SMCS (as contemplated in Q5 of the Consultation), all but confining SMCS availability to the large national service providers.

Again, in order to ensure equitable access for all carriers, problematic wording in CPC 2-0-17 Mandatory Roaming COL would need to be addressed. Cogeco proposes the following additional wording:

37. As a general principle, roaming should provide a Roamer with the ability to access voice and data services offered by the Roamer's Home Network at a level of quality

² See *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*.

³ Proposed Revisions to the Frameworks for Mandatory Roaming and Antenna Tower and Site Sharing, para. 3.

comparable to that offered for similar services by the Host Network carrier to its own subscribers. For further clarity, the policy does not require a Host Network carrier to provide a Roamer with a service that the Host Network operator does not itself provide to its own subscribers, nor to provide a Roamer with a service which the Roamer's Home Network operator does not itself provide. Notwithstanding the above, SMCS service does not need to be provided by the Roamer's Home Network operator in order to gain access to this service from the Host Network carrier.

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