



May 24, 2022

Filed electronically

Mr. Claude Doucet
Secretary-General
Canadian Radio-television and Telecommunications Commission
Ottawa, ON
K1A 0N2

RE: Telecom Notice of Consultation CRTC 2022-65, *Funding next-generation 9-1-1 access services through the National Contribution Fund* – Final Comments of SSi Canada

Dear Mr. Doucet:

1. In accordance with the procedure established in Telecom Notice of Consultation CRTC 2022-65, as amended by Telecom Notice of Consultation CRTC 2022-65-1 (“TNC 2022-65”), we are pleased to provide the final comments of SSi Micro Ltd., doing business as SSi Canada (“SSi”).

Summary of SSi’s Position

2. SSi continues to believe strongly that any subsidy the Commission mobilizes for the implementation of next-generation 9-1-1 access services (“NG9-1-1”) must be fully symmetrical and available to all Originating Network Providers (“ONPs”).
3. The record of this proceeding provides ample evidence that the justifications offered for an asymmetric subsidy in favour of SILECs and ILECs relate solely to choices made by certain SILECs and ILECs in their implementation of a classification the Commission established before any party began to initiate NG9-1-1. The Commission’s ruling in Telecom Regulatory Policy CRTC 2017-182 (“TRP 2017-182”) that SILECs were among the ILECs designated as NG9-1-1 Network Providers was clearly made in order to perpetuate a governance model inherited from the implementation of previous generations of 9-1-1 services, and did not, and could not, describe the technical and operational reality of the NG9-1-1 ecosystem as it has developed in the five years since.
4. The Commission’s regulatory framework for the implementation of NG9-1-1 must reflect that technical and operational reality. It is inappropriate, unnecessary, and contrary to the Canadian telecommunications policy as well as the 2006 and 2019 Policy Directions for the Commission now to establish a new, potentially significant, asymmetric subsidy, with all its potential for inefficiency and anti-competitive market impacts, to compensate SILECs and ILECs for those implementation choices.
5. Any failure in these Reply Comments to address a party’s position should not be construed a signifying that SSi is in agreement with that party’s argument.

Introduction

6. When the Commission made us a party to this proceeding, we were both bemused and hopeful. SSi offers voice and data services as a wireless competitive local exchange carrier in some of the most remote parts of Canada's North. In many of the communities we serve, the prospect of even basic 9-1-1 emergency services, while certainly welcome, remains distant.

7. In our intervention, we noted:

We agree with the Commission that it is important to eliminate any barriers to 9-1-1 service access, whether they are imposed by price – the subject of the present consultation – or, as in some of the areas we serve, by the lack of the underlying public service infrastructure required to support 9-1-1 service.¹

8. Accordingly, we first approached the Commission's proposal, in TNC 2022-65, to consider making use of the National Contribution Fund ("NCF") to help fund next-generation 9-1-1 ("NG9-1-1") access services in good faith and with hope that any funding the Commission would make available through this mechanism would be available to all telecommunications service providers ("TSPs"), as signalled in paragraphs 12 to 14 of the Notice. The Commission defined TSPs for purposes of the Consultation to include only "originating network providers of local voice telephony services, including traditional wireline, wireless, and local voice over Internet Protocol (VOIP) telephony networks" (footnote 2). We understood from this definition that the Commission's intention is to include CLECs, as well as incumbent LECs, as "originating network providers" and therefore as TSPs that could be eligible for subsidy to help recover the costs of providing a service the Commission has designated as essential.

9. We proposed a means by which the Commission could pursue this objective, while respecting fundamental principles of competitive and technological neutrality, by building upon the determinations made over the past five years intended to support the efforts of all qualified TSPs to contribute to the achievement of universal access to broadband services. We proposed some improvements to the Broadband Fund process developed since 2016 to ensure that all TSPs that need support might have better access to it.²

10. We were, therefore, dismayed to see, as this process developed, that most of the parties supporting the Commission's proposal are, to a greater or lesser degree, advocating the reinstatement of an asymmetric, anti-competitive subsidy to only a subset of the TSPs, namely small incumbent local exchange carriers ("SILECs").

¹ SSi Canada, Intervention, April 21, 2022 ("SSi Intervention"), paragraph 2.

² SSi Intervention, paragraphs 8 to 12.

11. We urge the Commission to change its preliminary view and back away from any proposal to use the NCF to fund the provision of NG9-1-1 services ***if the resulting subsidy will be distributed asymmetrically***. We are extremely concerned that reinstating an asymmetric subsidy would plunge the industry into the same difficulties created by the Commission's determination to apply the former local service subsidy ("LSS") in a similar anticompetitive and discriminatory manner. This concern is exacerbated by the potential magnitude of the subsidy, as noted by the Commission's own preliminary estimate that an additional \$55 million, or over 30% of the total NCF in 2022, would be required annually for the next five years to support "ILECs and SILECs" (paragraph 15).
12. If the Commission concludes from this proceeding that any ONPs require subsidy for the provision of NG9-1-1 services, we urge the Commission to make it extremely clear that all ONPs – including CLECs – have equitable access to any funding the Commission establishes.³
13. In these reply comments, we will address the following issues:
 - Whether there is any justification for distinguishing among ONPs in allocating a potential new subsidy from the NCF; and
 - The potential of an asymmetric subsidy to distort markets and delay the availability of NG9-1-1 services, especially in remote and underserved areas,

Is an Asymmetric NCF Subsidy for NG9-1-1 Implementation Justified?

14. In our submission, the record of this proceeding offers no legitimate reason for the Commission to implement an asymmetric NCF subsidy available only to certain TSPs, namely SILECs (and potentially certain ILECs), and not others performing comparable originating network functions.
15. The justifications offered by parties to this proceeding for asymmetric NCF subsidy amount, in effect, to an argument that, despite being indistinguishable from other ONPs from a technological and functional perspective, SILECs should be subsidized because of the Commission's determination that they would be categorized as "ILECs" for purposes of the governance model the Commission developed five years ago to perpetuate "direct Commission oversight" of the implementation of previous generations of 9-1-1 systems.

³ We note that the TNC 2022-65 consultation is proceeding in parallel with several closely related but still unresolved proceedings, leaving significant areas of uncertainty. These proceedings include the process of examination and approval of wholesale and retail tariffs from ILECs and SILECs referred to in TNC 2022-65 (at paragraphs 3 to 8) and Part 1 Applications from the Independent Telecommunications Providers Association ("ITPA") submitted March 2, 2021 (CRTC File Number 8663-J92-202101369) and TELUS Communications Inc. ("Telus") submitted April 21, 2022 (CRTC File Number 8633-T66-202201755).

16. A variation of this justification, offered in particular by Bell Canada and the ITPA, is that, having developed commercial arrangements to give effect to their decisions about how to implement the Commission's 2017 determinations, the Commission is now either barred from adapting its regulatory framework to better contend with the realities of the market as it has developed, or at least obligated to "make [SILECs] financially whole" in recompense for all their expenses – including those of their representative organization – they have incurred in pursuit of those decisions.⁴
17. There can be no doubt that *functionally and technologically*, SILECs that outsource the provision of NG9-1-1 services to ILECs are indistinguishable from other ONPs.
18. As Rogers notes, NG9-1-1 costs fall into two broad categories:
- (i) *NG9-1-1 network costs – these are the costs of the ESInets and Next Generation Core Services ("NGCS") that will carry NG9-1-1 calls from an originating network provider's ("ONP") point of interconnection with an NG9-1-1 network provider's ESInet to the demarcation points for all the public safety answering points ("PSAPs") in the serving area of the NG9-1-1 network provider. Only Bell, Telus and SaskTel are currently installing and operating NG9-1-1 network facilities and are NG9-1-1 network providers; and*
 - (ii) *NG9-1-1 interconnection costs – these are the costs that all originating network providers ("ONPs") are incurring to interconnect with the ILEC ESInets. For ONPs that have deployed IP networks, NG9-1-1 interconnection facilities include an IP switch or gateway, an appropriate IP firewall, and IP trunking facilities to required points of interconnection with the ESInets. ONPs that have not deployed an IP network can continue to operate as they currently do for the next three years, without incurring any NG9-1-1 interconnection costs.*⁵
19. As Rogers' classification of the costs associated with NG9-1-1 makes clear, **all** ONPs bear the same sort of NG9-1-1 interconnection costs because they perform identical functions in the NG9-1-1 ecosystem.⁶ While, as PIAC observes, competitive ONPs may not be able to recover their costs through Commission-approved and -enforced tariffs, it is not true that ONPs "do not incur contractual costs like SILECs in making arrangements with large ILECs or other vendors to be able to offer the NG9-1-1 service to their customers."⁷

⁴ Bell(CRTC)4May2022-1; ITPA(CRTC)4May2022-1.

⁵ Rogers Communications Inc., Intervention, April 21, 2022 ("Rogers Intervention"), paragraph 3. We note that TSPs providing voice services over an originating network that is technically not capable of supporting NG9-1-1 Voice are required to support the existing 9-1-1 voice service – where PSAPs exist – for the remaining life of that network: TRP 2017-182, paragraphs 162 and 12.

⁶ A similar point is made by Québecor Média on behalf of Vidéotron: Intervention, April 21, 2022 ("Vidéotron Intervention"), paragraph 13. Shaw Communications Inc. ("Shaw") is even more clear on this point, identifying the SILECs' belief that they have wholesale NG9-1-1 responsibilities as "erroneous" and observing that a consequence of this erroneous belief is the possibility "that the subscribers of other service providers who live in the SILECs' service areas will see similarly large increases in their monthly bills." Shaw Intervention, April 21, 2022, paragraph 4.

⁷ PIAC(CRTC)4May22-1, paragraph 13.

20. Telus states the case for symmetrical treatment of all ONPs very simply:

[T]he fundamental issue is that SILECs are not NG9-1-1 providers themselves, but act in the same fashion to an ONP that interconnects with a large ILEC to provision NG9-1-1 and obtains the service at a tariffed wholesale rate. Therefore, instead of utilizing the NCF to resolve the cost differences provisioning of NG9-1-1 in SILEC versus ILEC territories, the problem to solve is to enable the most efficient provisioning model for NG9-1-1 in all territories, so that the NCF is not needed at all.⁸

21. As Shaw observes, “From a network switching and routing perspective, the SILEC is completely irrelevant. ... The ITPA has never provided a technical or logical explanation why SILECs should be responsible for providing NG9-1-1 connectivity to other TSPs’ end users in exchanges where there is no local PSAP.”⁹

22. Given yet another opportunity to offer a technical or logical explanation in the current proceeding, ITPA once again fails to do so. In fact, ITPA requests NCF subsidy to better position its members in competition with other ONPs:

By levelling the playing field between large and small NG9-1-1 Network Providers with regards to the retail rates the Commission would level the competitive playing field for SILECs as they compete against far larger CLECs and WSPs in their incumbent operating territories. In addition, the significant reduction or even elimination of a wholesale rate will not deter competitive entry by companies looking to compete against SILECs in their incumbent exchanges.¹⁰

23. So if, from a technological and functional perspective, SILECs perform the functions and incur the same sorts of costs that all other ONPs must absorb without benefit of Commission-enforceable tariffs, what justifies an asymmetric subsidy to this subset of ONPs?

24. The only explanation offered is the Commission’s determination, in Telecom Regulatory Policy CRTC 2017-182, to include small ILECs in the category of “NG9-1-1 Network Providers” for purposes of the exercise of its jurisdiction with respect to the implementation of the next generation of 9-1-1 emergency services.

25. However, the Commission’s intention in TRP 2017-182 was not to enrich SILECs to improve their competitive positions. Nor was it to distort the competitive marketplace by subsidizing the ability of some ONPs to meet obligations and costs imposed on all TSPs obligated to offer NG9-1-1 services. Rather, the Commission’s stated intention was to “retain direct oversight” over NG9-1-1 services through an “active supervisory role for the Commission”.¹¹

⁸ TELUS Communications Inc., Intervention, April 21, 2022 (“Telus Intervention”), paragraphs 7-8.

⁹ Shaw Intervention, paragraph 11.

¹⁰ Independent Telecommunications Providers Association, Intervention, April 21, 2022 (“ITPA Intervention”), paragraph 17.

¹¹ Telecom Regulatory Policy CRTC 2017-182, *Next-generation 9-1-1 – Modernizing 9-1-1 networks to meet the public safety needs of Canadians*, 1 June 2017 (“TRP 2017-182”), paragraph 67.

26. As Telus observes in its April 21, 2022 Part 1 Application, the NG9-1-1 ecosystem has evolved in a way that differs from the Commission's expectations at the time TRP 2017-182 was issued:

When determining that SILECs were to be NG9-1-1 service providers, the Commission likely considered that options would be available for SILECs to choose from when selecting their NG9-1-1 vendor, either by partnering with other SILECs to self-provision, or by seeking offers from other Canadian NG9-1-1 service providers to secure favourable contract terms. Unfortunately for SILECs, the NG9-1-1 downstream market, which had not yet begun developing in Canada when TRP 2017-182 was released, did not develop in a way that was conducive to SILECs procuring NG9-1-1 services in a competitive wholesale market.¹²

27. In fact, the only alternative that has emerged for SILECs is the option that is available to all other ONPs: that is, to outsource NG9-1-1 functionality to one of the three larger ILECs identified by Rogers, a choice constrained by the requirement to connect to all local PSAPs to which the ONP might be required to route calls so that it is limited to the large ILEC incumbent in the same territory.

28. Under these conditions, the rational regulatory model for both governance and funding of NG9-1-1 is clearly to focus on ensuring that the tariffed wholesale rates of those three large ILECs are just, reasonable, and available to all functional ONPs, including the SILECs. The Commission loses nothing in terms of direct and active regulatory oversight by adopting such a regulatory model in the face of actual market developments.

29. Instead of shouldering ILEC tariffed wholesale rates, the record of the proceeding demonstrates that a number of SILECs – presumably including those in which Bell holds an ownership position – have entered into “commercial” agreements with Bell for access to Bell's NG9-1-1 ESInet and NGCS, together with the interconnection arrangements that make this possible.

30. Telus has suggested that because they represent “an inefficient manner of supplying the service,” these arrangements impose significantly higher costs on the SILECs, and, therefore, on their customers, than would recourse to the ILEC NG9-1-1 tariffs.¹³ If this is true, it suggests that the wholesale tariffs, not these agreements, offer the basis of a more efficient provisioning model. Whatever the nature of the agreements, however, it stands to reason that the greater demand for a wholesale service resulting from treating all ONPs alike should, itself, result in lower tariffed rates as non-causal costs are recovered from a larger base of wholesale customers.

¹² Telus Part 1 Application, April 21, 2022, paragraph 11.

¹³ Telus Intervention, paragraphs 18 to 21, quoting paragraph 18.

31. As justification for perpetuation of the status quo and the introduction of an asymmetric subsidy based on expansion of the NCF, Bell has argued that the alternative proposed in Telus' Part 1 Application "creates a complex precedent" relating to the transfer of SILEC "obligations" to ILECs.¹⁴
32. On the contrary: we understand the Telus proposal to be to realign the funding model alone so that it better tracks the reality of how the market has developed since TRP 2017-182 was issued. No "complex precedent" is created. All TSPs, including the SILECs, will continue to be obligated to "ensure that NG9-1-1 traffic is routed to primary PSAPs over the ILECs' NG9-1-1 networks" as a condition of offering and providing telecommunications services (paragraph 72). All that is involved is the recognition that SILECs are not offering wholesale NG9-1-1 services but are, instead, customers for those services offered by large ILECs.
33. In fact, a restatement of the roles of SILECs with respect to NG9-1-1 so that it better tracks the reality of how the Canadian market has developed is not only entirely consistent with the Commission's mandate and practice: the consequences for the NG9-1-1 funding model will also accord more closely with the Commission's objectives as stated in TRP 2017-182:
- 69. An approach based on Commission-approved tariffs would provide the Commission with the tools necessary to ensure that the funding of NG9-1-1 is provided as cost effectively as possible. This approach would also ensure that funding is based on recovering the actual costs of building, operating, and maintaining the NG9-1-1 networks, and that costs are subject to the Commission's disclosure guidelines to ensure that they are as transparent as possible.*
34. The existence of not one but four related, ongoing proceedings certainly provides the Commission with ample opportunity to establish a record that can support the restatement and realignment that would enable a more efficient and equitable outcome than an asymmetric subsidy based on certain ILECs' and SILECs' decisions about how to implement TRP 2017-182.
35. For its part, ITPA's justification of the proposed path of following an outdated and artificial regulatory determination with a potentially expensive new subsidy from the NCF amounts to an argument that its members must be "made whole."
36. This type of argument is far from new for the ITPA.¹⁵ Nor is it justified. SILECs are not the only small players in Canada's ecosystem. Nor are they the only TSPs to shoulder operational and regulatory costs in pursuit of an approach that proves to be outdated or based on an inappropriate interpretation of a

¹⁴ Bell(CRTC)4May22-1.

¹⁵ The argument is not dissimilar from the interpretation of the regulatory compact ITPA urged upon the Commission in its application of September 24, 2018, for review and variance of certain aspects of Telecom Regulatory Policy CRTC 2018-213. The Commission rejected this argument: Telecom Decision CRTC 2020-41, 4 February 2020, paragraphs 19-38.

regulatory ruling that should change as circumstances change. The Commission must reject these arguments. There is no justification for an asymmetric subsidy of SILEC NG9-1-1 costs.

Asymmetric Subsidy Distorts Competitive Markets

37. Not only is asymmetric subsidy of SILECs unjustified: it is inefficient and anti-competitive. As Rogers notes, “subsidies should not be implemented absent clear and compelling evidence of a well-defined affordability issue, and must be precisely targeted to that issue to mitigate anti-competitive effects.”¹⁶
38. Some of the inefficiencies and anti-competitive impacts of asymmetric subsidies will be felt in all communities served by TSPs that contribute to, but cannot claim the benefit of, the new proposed use of the NCF. For instance, both Rogers and SaskTel point to subsidization’s negative impact on cost discipline and transparency.¹⁷
39. Other impacts, especially anti-competitive ones, will be felt especially in the remote and rural underserved locations which are already disadvantaged in terms of access to basic and enhanced 9-1-1 services. Subsidy to SILECs (or, potentially, to an ILEC such as Northwestel Inc.) alone will permit these service providers to implement NG9-1-1 when PSAPs become able to support it, gaining a market advantage over competitive providers of local voice services which must bear the full cost of NG9-1-1 interconnection and implementation.
40. Requiring some TSPs to bear all their own costs of implementing NG9-1-1 services while also subsidizing other TSPs disadvantages competitive ONPs and may well contribute to extending to NG9-1-1 exactly the effect that the Commission pointed to in explaining its determination (with which SSi disagrees, given the reality of our own customer base in comparison to the ILECs), in Telecom Decision CRTC 2000-745, to convert the local service subsidy (“LSS”) from one that was portable to CLECs to one directed exclusively to LECs:

*The Commission considers that ILECs receive intangible benefits as universal service providers, but that such benefits may be somewhat offset by the advantage CLECs have in serving primarily the more profitable customers in low-cost serving areas.*¹⁸

41. Bell suggests that only asymmetric subsidies are “appropriate” for NG9-1-1, but the rationale offered is unclear, even incoherent:

¹⁶ Rogers Intervention, paragraph 4.

¹⁷ Rogers Intervention, response to Question 2; Saskatchewan Telecommunications, Intervention, April 21, 2022 (“SaskTel Intervention”), paragraphs 9-11; SaskTel(CRTC)4May22-1.

¹⁸ Telecom Decision CRTC 2000-745, *Changes to the contribution regime*, 30 November 2000, paragraph 73.

Under no circumstances would it be appropriate for the NCF to fund the NG9-1-1 related costs incurred by other TSPs. This would be contrary to the principle of the 9-1-1 funding mechanism expressed in TRP 2017-182 that the 9-1-1 networks are funded by the entities that make use of those networks.¹⁹

42. Surely with all TSPs under the obligation stated in TRP 2017-182, as a condition of offering and providing telecommunications services, to “ensure that NG9-1-1 traffic is routed to primary PSAPs over the ILECs’ NG9-1-1 networks”, all TSPs, including the ILECs themselves, are “the entities that make use of 9-1-1 networks” and therefore all TSPs bear a responsibility for funding them. In fact, if Bell’s commercial agreements with its subsidiaries and other SILECs are based on Bell’s apparent assumption that only non-ILEC NG9-1-1 network users must pay for access, these agreements are problematic to say the least.
43. We urge the Commission to change its own preliminary view. The NCF should not be expanded to replicate an asymmetric subsidy on the model of the LSS. The supposed affordability issue the proposal is intended to address can be resolved far more easily and sensibly by clarifying that SILECs, being functionally and technologically indistinguishable from ONPs for purposes of NG9-1-1 provision, are entitled to the same support as any other ONP – whether that be an evolution of the Broadband Fund model, as we proposed, or re-examination of the ILECs’ wholesale tariffs in view of the expanded range of customers that would result from the sort of reclassification that Telus has proposed in its Part 1 Application.

Conclusion

44. SSi continues to believe that any subsidy the Commission mobilizes for the implementation of NG9-1-1 must be fully symmetrical and available to all ONPs.
45. The record of this proceeding clearly demonstrates that the justifications offered for an asymmetric subsidy in favour of SILECs and ILECs are based solely upon choices made by certain SILECs and ILECs in their implementation of a classification the Commission established long before any party began to initiate NG9-1-1.
46. The Commission’s ruling in TRP 2017-182 that SILECs were among the ILECs designated as NG9-1-1 Network Providers was clearly made in order to perpetuate a governance model inherited from the implementation of previous generations of 9-1-1 services, and did not, and could not, describe the technical and operational reality of the NG9-1-1 ecosystem as it has developed in the five years since.
47. The Commission’s regulatory framework for the implementation of NG9-1-1 must reflect that technical and operational reality, not a supposed obligation to recompense certain parties for the consequences

¹⁹ Bell Intervention, paragraph 41.

of their decisions. It is inappropriate, unnecessary, and contrary to the Canadian telecommunications policy as well as the 2006 and 2019 Policy Directions for the Commission now to establish a new, potentially significant, asymmetric subsidy, with all its potential for inefficiency and anti-competitive market impacts, to compensate SILECs and ILECs for those implementation choices.

All of which is respectfully submitted.

SSi Canada

[SGD – DEAN PROCTOR]

Dean Proctor
Chief Development Officer

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