



**Submission to Innovation,
Science and Economic Development Canada**

**by
SSi Canada**

In Response to SLPB-004-21

***Consultation on New Access Licensing Framework, Changes to Subordinate
Licensing and White Space to Support Rural and Remote Deployment***

Reply Comments

December 7, 2021

Summary of Recommendations

- Before implementing any Access Licensing proposal, ISED should address questions about the supply of appropriate spectrum by first completing the rationalization of PCS spectrum to maximize contiguity for existing licensees. Only after such rationalization, and a reasonable period such as the remainder of all licence terms, should ISED consider whether suitable spectrum remains unused.
- In the meantime, ISED should strengthen the operation of the secondary market by providing stronger incentives and streamlined processes to facilitate pro-competitive subordination.
- ISED should focus on improving the incentives and process of subordination to ensure that the secondary market functions effectively to meet the demand for spectrum expressed in this Consultation. ISED should recognize that the variety of demand – in terms of scope, duration, and commercial viability or social use objectives – can be satisfied more precisely through the operation of such a secondary market than by the introduction of a new Access Licensing Framework.
- ISED should adopt the recommendations of a number of parties to this Consultation to strengthen the subordination process through improved incentives and streamlined processes to facilitate market-based solutions to improved remote and rural wireless deployment and innovation.

Introduction

1. SSi Micro Ltd., doing business as SSi Canada (“SSi”), is pleased to submit these reply comments to Canada’s Minister of Innovation, Science and Economic Development (“ISED” or the “Department”) in response to *Canada Gazette* notice SLPB-004-21, *Consultation on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment* (the “Consultation”).
2. In our initial comments in response to this Consultation, we noted our strong support for the objectives that ISED has identified for its Access Licensing initiative. However, we expressed our equally strong view that improving the licence subordination process, in priority to introducing a new spectrum allocation method as described in the Consultation, is by far the better way to achieve these objectives:

The policy focus should be, first and foremost, on providing incentives for primary licensees of spectrum to subordinate unused spectrum resources, and to improve and expedite the process by which the Department reviews and approves voluntary subordination agreements.

In our respectful submission, the reallocation of spectrum that appears to be unused by a process of access licensing, as proposed in this Consultation, should come only after efforts to reach voluntary subordination agreements have been exhausted, but where demand still exists for the relevant spectrum.¹

3. Review of the many comments filed by other interested parties reinforces our conviction that ISED's objectives should be met through a market mechanism. The existing subordination process must be strengthened through careful attention both to improving incentives to participate, and to streamlining the regulatory process to facilitate both applications and approvals.
4. The comments reveal significant appetite for spectrum from a wide range of would-be users that feel themselves to be not well-served by existing wireless services available in their remote and rural locations. However, the comments also make it clear that there are serious questions about whether spectrum is available at all, let alone in the locations or at the scale required to satisfy this demand.
5. The wide variety of use cases, divergences in the scope and scale of demand from the proposed access spectrum and site licences, and, most of all, the nature of the questions raised about the supply of spectrum all lead to the inescapable conclusion that properly regulated markets will do a better job at matching demand with supply than the blunt instrument proposed in the Consultation.
6. In these reply comments, we will address three issues:
 - **First**, the significant uncertainties the comments raise about the availability of suitable spectrum for Access Licensing;
 - **Second**, the gaps between the demand for Access Licensing as expressed in the comments and the proposal itself; and

¹ SSi Canada, Comments in Response to SLPB-004-21, October 26, 2021 ("SSi Comments"), paragraphs 3-4.

- **Third**, proposals to provide stronger incentives and more efficient procedures for the subordination of spectrum to maximize the efficient use of spectrum by and for Canadians.

Part A: *There are serious doubts concerning the supply of spectrum for Access Licensing, including in the Cellular and PCS bands*

7. Although the Department has recently made additional spectrum available in a range of bands, including 6 GHz and 3800 MHz, to support the achievement of the national target with respect to broadband and mobile coverage to enable the economic development of rural and remote areas to their full potential, the focus of the Access Licensing proposal is squarely on spectrum that is currently licensed for 4G-LTE and 5G service. The rationale for this focus is summarized in the Consultation:

ISED recognizes that providing additional access to spectrum in bands with robust 4G and 5G equipment ecosystems can allow for wider provision of services, particularly in rural and remote areas.²

8. While ISED's observation may be accurate – and many comments echo the Department's belief that access to such spectrum by parties other than those currently licensed to use it could support the wider provision of services in rural and remote areas – existing licensees are unanimous in raising serious doubts that the necessary spectrum is available.
9. In our initial Comments, we noted:

The proposed principle that Access Licensing will spread to bands where "sufficient" unused spectrum is available in remote and rural areas is impractical. For one thing, it guarantees that any future consultation on the extension of Access Licensing to other bands will devolve into a debate between, on the one hand, existing licensees trying to ensure they have "sufficient" spectrum for their own planned service extensions, and on the other, potential users arguing that existing licensees are simply hoarding spectrum. Such sterile debates can be resolved only by a regulator willing to examine the confidential and detailed plans of licensees and weigh them against the specific wishes of potential Access Licensing claimants.³

² Consultation, paragraph 17.

³ SSi Comments, paragraph 61.

10. The truth of this prediction is evident from the position that parties have taken on both sides of the argument that “sufficient” unused spectrum is available.
11. Bell Mobility Inc. for instance, notes that the Access Licensing proposal amounts to expropriation of existing licences. Bell observes:

Based on [an] unattributed assertion, ISED is proposing to impose an entirely new Access Licensing Framework where existing licensees may have portions of their licences expropriated and given to other service providers. ISED’s proposal essentially creates a new condition of licence for deployment in Tier 5 service areas half-way through the current licence term for all Cellular and PCS spectrum licences. ISED has never before raised this deployment requirement with existing licensees.⁴

12. In addition to constituting an unprecedented partial revocation of existing licences for failure to meet conditions added to them retrospectively and with “no accommodation for further deployment,” Bell spells out the implications of preempting the use by existing licensees of spectrum already authorized for their use:

ISED’s new Access Licensing Framework has the potential to limit innovation by existing licensees. New technologies and services are always being developed, and some are able to offer, or soon will be, wide ranging geographic coverage to rural and remote areas. For example, new satellite technologies may be able to work with terrestrial mobile devices and terrestrial spectrum bands to provide mobile services in rural and remote areas. By imposing a new access licence framework, existing licensees will need to deal with potential holes in their licence coverage, making it more difficult for existing licensees to provide services with broad coverage abilities to deal with interference issues since they no longer have contiguous geographic areas.⁵

13. By contrast, TELUS Communications Inc. makes the unsupported assertion that there is sufficient supply of undeployed spectrum across not only the PCS and Cellular 850 bands, but also across a number of other bands including the AWS-1, PCS-G, WCS and non-auctioned BRS spectrum bands. The basis for Telus’ assertion is that most of this “available” spectrum is undeployed *because* it has been licensed pursuant to ISED’s pro-competition policies in spectrum allocation, in particular the use of competitive set-asides.

⁴ Bell Mobility Inc., Comments in Response to SLPB-004-21, October 26, 2021 (“Bell Comments”), paragraph ES2.

⁵ Bell Comments, paragraphs ES3 and 16.

14. Telus' proposed remedy for this presumed excess supply of undeployed spectrum is, in effect, to allow the best-financed incumbents – such as Telus itself – to “correct some of the spectrum policy errors of the past” by acquiring spectrum in a wide range of bands that can be used for 4G and 5G everywhere in Canada.⁶
15. In other words, Telus wishes ISED to permit parties which already benefit from enormous competitive advantages to take advantage of the relatively easy terms proposed in the Consultation to re-monopolize spectrum access across the country. Terms proposed to enable the participation of new spectrum users in rural and remote areas would, under Telus' modest proposal, be used instead to undermine years of pro-competitive policy – and to undermine the market potential of competition as a means of disciplining the behaviour of the incumbents.
16. We urge ISED to reject Telus' proposal altogether, including the underlying redefinition of spectrum licensed to anyone other than one of the largest three Mobile Network Operators (“MNOs”) as, in effect, “undeployed” spectrum.
17. Telus' proposal, moreover, illustrates another danger of encouraging debate about the sufficiency of unused spectrum: It will involve the Department in ongoing justification of its own policy initiatives as well as endless discussion of how to make its policy internally consistent.
18. Leaving aside Telus' anti-competitive proposal, existing cellular and PCS licensees have made some valid and useful observations concerning whether suitable spectrum exists to support Access Licensing.
19. SSi supports two suggestions advanced by Rogers Communications Inc. to ensure that ISED does not hamper the efforts of existing licensees to make effective use of spectrum to offer mobile and broadband services to the public.
20. The first is to permit the Department's recent initiatives making additional spectrum available in Canada's remote and rural areas to perform as intended before undermining the ability of existing cellular and PCS licensees to continue the roll-out of services planned on the basis of spectrum licences already acquired. Rogers calculates that 14-15 GHz of licence-exempt or lightly licensed spectrum made available through these initiatives, and observes:

⁶ TELUS Communications Inc., Comments on SLPB-004-21, October 26, 2021 (“Telus Comments”), quoting paragraph 4.

46. ... Rogers is unaware of any rural and remote applications that could require more than 15 GHz of spectrum across various bands, particularly as these applications do not support the numbers of customers or need to provide the same level of service as the national network providers.

21. As Rogers notes, the Access Licensing proposal actually undermines the Department's own recent initiatives:

48. The Department has simply not allowed sufficient time for the TVWS and other lightly-licensed and licence-exempt technologies to mature and, in fact, the proposed Access Licensing will likely do them irreversible harm, as it disincentivizes the use of these spectrum bands. Rural public operators and remote private operators are being incited to request an access licence in order to leverage the ecosystems that exclusively-licensed network operators have spent decades developing and investing in. This is yet another reason why the proposed Access Licensing regime is a net negative for Canadian wireless policy.⁷

22. Shaw Communications Inc. also points to the Department's recent policy measures to support service in remote and rural Canada, noting that while some deliver immediate benefits, other will require more time to demonstrate their utility.⁸

23. Supporting the view that existing licensees need both regulatory certainty and ongoing access to the spectrum resources secured through past licensing processes to continue to serve the public, Shaw notes that the proposed Access Licensing framework poses a number of challenges:

Chief among them is the regulatory uncertainty it would introduce to an industry reliant on stability to justify multi-year, capital-intensive network investments. Long-term certainty about control and use of the spectrum asset is critical to the capital-intensive business model for wireless. It not only allows network builders to establish multi-year build plans based on the availability of a core asset, but also enables the creation of innovative partnerships (through subordinations, for example) as well as network builds and expansion. Licence holders have high expectations of renewal of these spectrum

⁷ Rogers Communications Inc., Comments in Response to SLPB-004-21, October 26, 2021 ("Rogers Comments"), paragraphs 46-48. Bell also helpfully enumerates the many recent ISED initiatives intended to expand access to spectrum resources: Bell Comments, paragraphs 10-13.

⁸ Shaw Communications Inc., Comments in Response to SLPB-004-21, October 26, 2021 ("Shaw Comments"), paragraph 4.

*licences, except in specific situations, such as the fundamental reallocation of the spectrum band, which do not apply here.*⁹

24. As an existing licensee in PCS and other bands, very active in delivering state-of-the-art mobile and broadband services in some of the most remote parts of Canada, SSi can attest to the truth of these remarks. We urge the Department to strengthen the subordination process that works **with** the existing regulatory framework, not against it, to reach its stated objectives for this Consultation.
25. SSi also strongly supports Rogers' second helpful suggestion, which is to re-assign PCS spectrum to maximize contiguity **before** making any administrative assessment of whether unused spectrum exists.
26. Rogers outlined the efforts it believes the Department should take to "fully rationalize the entire Extended PCS band and provide all operators contiguous holdings across the band" by re-assigning PCS spectrum frequencies both in response to this Consultation and, in greater detail, in connection with the simultaneous *Consultation on Amending Cellular and Personal Communications Services (PCS) Licence Conditions*, DGSO-003-21 (the "Deployment Conditions Consultation").
27. As noted in our Reply Comments to the Deployment Conditions Consultation, we fully support Rogers' proposal.¹⁰ As Rogers notes, "Rationalizing the PCS band also benefits small rural operators and large national carriers alike."¹¹ For SSi, reassignment to maximize the contiguity of the PCS spectrum for which we are licensed would allow us to make even better use of greater throughput capacity and efficiencies of LTE technologies to deliver greater benefits in the remote areas we serve in Canada's North. Indeed, the clear and demonstrable benefits of contiguity have led to us completing a successful agreement with Rogers for subordination of PCS spectrum in the North.¹²
28. Because the rationalization proposed by Rogers will make it easier for existing licensees, including SSi, to use already-licensed spectrum in our efforts to continue to expand coverage and capacity in the remote areas we serve, that process should precede any attempt by ISED to determine what licensed capacity is truly "unused" as it assesses the supply of 4G and 5G suitable spectrum.

⁹ Shaw Comments, paragraph 5.

¹⁰ SSi Canada, Reply Comments in Response to DGSO-003-21, November 8, 2021, at paragraphs 5-10.

¹¹ Rogers Comments, paragraph 31.

¹² Approved by ISED October 30, 2018: <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11444.html>

29. Therefore, we recommend:

Before implementing any Access Licensing proposal, ISED should address questions about the supply of appropriate spectrum by first completing the rationalization of PCS spectrum to maximize contiguity for existing licensees. Only after such rationalization, and a reasonable period such as the remainder of all licence terms, should ISED consider whether suitable spectrum remains unused. In the meantime, ISED should strengthen the operation of the secondary market by providing stronger incentives and streamlined processes to facilitate pro-competitive subordination.

Part B: The demand expressed for additional access does not align with the scope and scale of the Access Licences as proposed

30. Demand, and in particular the ability of the Access Licensing proposals to meet demand efficiently and effectively, constitutes the second major issue SSi will address in these Reply Comments.

31. While many parties to this Consultation identified populations and economic activities that they do not consider to be well-served by Canada's existing providers of wireless mobile and broadband services, the users and uses they outline do not constitute a good match for the Access Spectrum licences as proposed. We remain convinced that strengthened subordination, not Access Licensing, is the more expeditious and frankly better way to match demand with available supply.

32. There are three main gaps between the demand expressed and how the Access Licensing Framework, as proposed, would address it:

- **Scope** of the expressed demand, especially geographic scope;
- **Duration** of the demand as outlined; and
- **Commercial viability** of potential Access Licensees.

33. Taken together, these demand gaps cast significant doubt as to the viability of the Access Licensing Framework as a means of advancing ISED's objectives. We urge the Department to recognize that the variety of scope, duration, and viability expressed by would-be users of spectrum can be far more effectively addressed by improving the subordination process than by the introduction of a rather arbitrary regulatory process.

34. In the Consultation, ISED proposed to use the recently developed set of Tier 5 licensing areas, both to identify where spectrum might be available for Access Licensing, and to designate the scope of the resulting licences.
35. Both uses are highly problematic.
36. In our initial Comments, we focused on the proposed use of Tier 5 licensing areas to determine where a sufficient supply of unused spectrum exists. We observed that the Access Licensing proposals would arbitrarily subdivide and reallocate existing licences being used to offer spectrum-based mobile and broadband services to individuals, communities and enterprises in remote and rural areas.
37. We noted that reallocating parts of existing Tier 1, 2, 3 or 4 licences on the basis of the new Tier 5 service areas would have the effect of reallocating publicly accessible spectrum to potential private network operators on relatively easy, first-come first-served spectrum terms, since private networks appear to have been the primary beneficiaries of the Tier 5 areas created in remote areas.¹³
38. Many of the others who responded also pointed out deficiencies with the proposal to issue Access Licences on the basis of Tier 5 areas.
39. For instance, a number of proponents of private networks observed that Tier 5 areas were still far too large to meet the needs of enterprise clients, including agriculture, forestry, and mining. Several of these commentators urged ISED to issue Access Licences on the basis of the grid system that has already been developed to facilitate subordination of spectrum to those proposing a more limited geographic scope than the serving area that was initially licensed.
40. Communications T l signal inc., a supplier of radio and microwave networks to forestry, pulp and paper and mining companies operating in Northern Quebec, succinctly states the problem with attributing Access Licences at the Tier 5 service area level:

Toutefois, afin de limiter le gaspillage de spectre, c'est- -dire attribution exclusive de spectre qui s'av re  tre inutilis , les licences ne devraient pas s'appliquer syst matiquement   l'enti ret  de la zone du niveau 5. En effet, ces zones ont des superficies tr s variables, allant de quelques dizaines de kilom tres carr s jusqu'  quelques centaines de milliers. Il irait donc   l'encontre des objectifs de cet avis d'attribuer

¹³ SSi Comments, paragraphs 26-33, 47-55.

*une zone complète à une licence, surtout si la zone en question est d'une grande superficie.*¹⁴

41. Another supplier to private networks, Redline Communications, expressed a similar concern that access licensing Tier 5 service areas would be “grossly inefficient and will lead to less-than-optimal outcomes.” As an alternative, Redline pointed to tools that ISED already uses as part of the subordination process:

*ISED has not presented a sufficient rationale for using Tier 5 areas as the minimum area for Access Licensing ... In fact, ISED has at its disposal the tools for dividing license areas down to the grid cell level (as defined in the ISED web page entitled Service Area for Competitive Licensing) which it uses as a matter of course when subdividing spectrum areas between an incumbent and a subordinate licensee.*¹⁵

42. Likewise, Ecotel Inc. states bluntly that Tier 5 service areas tend to be “way too big in size for what is required by the Applicant” while the use of this level of Tier will also unduly limit the use that third parties can make of the Access Licensing Framework.¹⁶ In a similar vein, Motorola Solutions asserts that Tier 5 services areas are too large to meet the “ever-increasing need for localized private broadband networks to serve critical infrastructure, industrial, business and other specialized users.”¹⁷
43. Similar concerns were also expressed by proponents of small, local, publicly accessible networks as well as associations representing other potential users of spectrum in the public interest.
44. A number of commentators noted that Tier 5 service areas that incorporate both urban and rural areas make this a tool that is not fit for either of the purposes to which ISED would use them. Not only are they too large and diverse to meet the demand in many cases; according to the proposal, these mixed service areas will also not be made available to meet demand for Access Licensing so long as the existing licensee offers service in an urban area.
45. Several municipalities, organizations representing public sector users, and small or non-profit telecommunications service providers supported this observation concerning the lack of fit

¹⁴ Communications T l signal inc., Commentaires avis SLPB-004-21, 26 octobre 2021 (“T l signal Comments”), page 8.

¹⁵ Redline Communications Group Inc., Comments in Response to SLPB-004-21, October 26, 2021 (“Redline Comments”), quoting paragraphs 12 and 8-9.

¹⁶ Ecotel Inc., Comments in Response to SLPB-004-21, October 26, 2021 (“Ecotel Comments”), paragraph 26.

¹⁷ Motorola Solutions, Comments in Response to SLPB-004-21, October 12, 2021 (“Motorola Comments”), in response to Question 7.

between the demand for additional service, on the one hand, and the scale on which the Department proposes to issue Access Spectrum Licences, on the other, including a number who made specific reference to their own locations.¹⁸

46. In SSi's submission, the policy reversal we urge ISED to implement is fully supported by the fact that numerous voices from the industry and representatives of both private networks and the general public all identify the problem of geographic scope. Improve the ability of the secondary market to match available supply to specific demand, as the subordination process is able to do, rather than introducing a new, top-down regulatory mechanism such as Access Licensing that must accord with the framework of service area tiers already developed by the Department.
47. An improved subordination process will also be much more effective at matching supply with demand in connection with the second gap identified in the comments between real-world demand and the Access Licensing proposal as outlined in the Consultation. That is, many of the private and public network proponents challenged the Department's proposal to limit Access Licences to an initial three-year term, even with the expectation of a further renewal.
48. Advocates for expanded private network licensing were nearly unanimous in opposing the very short licence term of three years proposed for Access Spectrum Licences in the Consultation. Redline referred to this short term as "an undue burden"; Télésignal, for its part, asserted that a private LTE network would require a minimum of nine years' access to appropriate spectrum, while Motorola believed at least six years would be needed.¹⁹
49. Representatives of small, community-based, and public sector spectrum users also argued for significantly longer licence terms. These ranged from CCSA, which asked for five-year terms with a high expectation of renewal, to the Canadian Electricity Association, which in effect proposed permanent reassignment: Once alienated from a primary licensee by the Access Licensing Framework, CEA argued spectrum should remain in the hands of the new licensee

¹⁸ For instance, see: Clearwater County, Comments in Response to SLPB-004-21, October 12, 2021, paragraph 16; Rural Municipalities of Alberta, Comments in Response to SLPB-004-21, September 24, 2021 ("RMA Comments"), paragraph 6; Eeyou Communications Network, Comments in Response to SLPB-004-21, October 26, 2021 ("ECN Comments"), paragraph 11; Twincomm, Comments in Response to SLPB-004-21, page 2; Canadian Communications System Alliance, Inc., Comments in Response to SLPB-004-21, October 12, 2021 ("CCSA Comments"), response to Question 3; Canadian Electricity Association, Comments in Response to SLPB-004-21, October 22, 2021 ("CEA Comments"), paragraph 7; First Mile Connectivity Consortium, Comments in Response to SLPB-004-21, October 26, 2021 ("FMCC Comments"), paragraph 44.

¹⁹ Redline Comments, paragraph 21; Télésignal Comments, p. 11; Motorola Solutions Inc., Comments in Response to SLPB-004-21, October 12, 2021 ("Motorola Comments"), response to Question 14.

until the primary licensee “can prove that their own spectrum options have been exhausted.”²⁰

50. In making the claim for much longer licence terms than three years with high expectation of renewal, as proposed, commentators cited the need to justify the significant investment required to offer mobile and broadband services or to match with the expected life of equipment being installed.²¹ These arguments are consistent with the observation SSi made in our initial comments, that the proposed licence term and conditions “will be inadequate to support the development and introduction of a new wireless service designed for public use.”²²
51. We urge ISED to recognize that, in the subordination framework, the Department already has a mechanism that is far more adept than any *a priori* licence term could be to ensure that spectrum is made available for the duration required by a would-be user.
52. The subordination framework, suitably ameliorated as to both incentive and procedure, is also a better way to accommodate would-be service providers in remote and rural locations whose objectives and means are such that their commercial viability is less important than it might be for the primary licensees.
53. In our initial Comments, we suggested a means by which ISED could provide advantages to groups that policy considerations dictate should have priority access to spectrum that is available for subordination:

*We believe the subordination process should be approved to streamline ISED approval of negotiated subordination agreements and to provide incentives to primary licensees to **prioritize access to public spectrum resources by and to the benefit of underserved Indigenous peoples.** This will address service gaps in Canada more effectively and in ways that provide mutually satisfactory spectrum sharing solutions that meet specific needs and interests of the parties. And we believe it will do so far more efficiently than the redistribution of spectrum through the Department’s Access Licensing proposals. ...*

ISED should take notice of the relatively poor access that First Nations and other Indigenous communities enjoy to both broadband and mobile wireless services, and

²⁰ CCSA Comments, response to Question 14; CEA Comments, paragraph 15.

²¹ Lyttonnet, Comments in Response to SLPB-004-21, October 26, 2021, response to Question 14; Clearwater Comments, paragraph 39.

²² SSi Comments, paragraph 79.

consider making efforts to redress this wrong by establishing priorities for access to subordinated licences. ...

*Under a revised and streamlined approval process, the fact that parties have agreed to a spectrum licence subordination arrangement **according with clear policy objectives and procedural requirements** should itself bear considerable weight towards approval.²³*

54. The focus of our recommendation was Indigenous communities, which are especially underserved under current conditions. However, ISED could extend priority access to non-profits, community groups, public services, or other groups proposing a “social use” of spectrum the Department agrees should be advanced.²⁴
55. The challenge of devising a framework such as Access Licensing to allocate spectrum resources directly to “social use cases” is the possibility that, without either special evaluation of proposals for such uses to verify that the proponent has the resources necessary to develop and offer services – as several commentators suggest²⁵ – or additional concessions such as reduced annual licence fees, ongoing public subsidy for construction, operation and maintenance of radio equipment, or other accommodations,²⁶ there is a chance that such licensees will not be able to make use of the spectrum.
56. The most straightforward and transparent way to support such groups, while ensuring that the vital resource of spectrum is genuinely put to good use, is through direct financial support, such as the Universal Broadband Fund, which evaluates the feasibility, sustainability, and financial viability of projects that propose to offer improved broadband services to remote and rural locations.
57. ISED could also consider working with “social use” proponents and existing licensees to support the extension by licensees of services to rural and remote locations at prices that are genuinely affordable.
58. However, we continue to believe that according priority to such uses within subordination agreements is a better way to accommodate these interests than Access Licensing. We note

²³ SSi Comments, paragraphs 32, 103 and 122.

²⁴ FMCC Comments, paragraph 47.

²⁵ For instance, see RMA Comments, paragraph 5; CEA Comments, paragraph 14; and Advanced Interactive Canada Inc. (AIC), Comments in Response to SLPB-004-21 (“Advintive Comments”), pages 1-2, in which Advintive proposes that would-be access licensees be required to file a technical plan demonstrating the exclusive coverage they propose to offer.

²⁶ Advintive Comments, pages 1-2.

that a number of Indigenous interests appear to support this approach, none more directly than the Spuzzum First Nation in its call for a:

Requirement of Canadian telecom companies to subordinate license their unused spectrum over Indigenous lands to the communities for their use.²⁷

59. Therefore, our second recommendation is:

ISED should focus on improving the incentives and process of subordination to ensure that the secondary market functions effectively to meet the demand for spectrum expressed in this Consultation. ISED should recognize that the variety of demand – in terms of scope, duration, and commercial viability or social use objectives – can be satisfied more precisely through the operation of such a secondary market than by the introduction of a new Access Licensing Framework.

Part C: Improving licence subordination to enable market solutions

60. SSi emphasized that ISED should address both the incentives to subordinate and the existing process by which parties wishing to access spectrum can approach existing licensees, negotiate mutually beneficial arrangements with them, and then gain rapid approval of these arrangements from the Department.

61. Although nearly all the comments that addressed this part of the Consultation supported the Department's proposed changes to streamline the approval process for subordination agreements, and several joined us in suggesting additional measures that could make the process work even more effectively, a number of commentators disputed that there was any need to address incentives operating on some of the largest existing licensees to enter into subordination agreement.

62. The record of this Consultation leaves little doubt that only one of the three major MNOs actively considers, negotiates and agrees to subordination from the majority of applicants.²⁸

63. Telus remains adamant that it will negotiate subordination only where "a mutually beneficial arrangement is feasible" and admits to a preference for dealing with "large-scale networks."

²⁷ Spuzzum First Nation on behalf of itself and 61 signatory nations across Canada, Comments in Response to SLPB-004-21, October 26, 2021.

²⁸ See, for instance, SSi Comments, paragraphs 15-16 and 35-38; Redline Comments, paragraphs 28 and 30.

64. Bell, while noting that ISED has approved 53 subordination applications since 2017 and pointing specifically to subordinations in remote and rural areas for both public and private broadband network usage, does not explain why of the ten approved subordination agreements that Bell Mobility has been involved with in that time, only the most recent one has involved a party other than Telus, SaskTel or Rogers.²⁹

65. Bell does provide an excellent summary of the incentive acting on smaller prospective spectrum licensees to seek subordination arrangements:

Moreover, virtually all commercial mobile spectrum licences are divisible by geography and/or frequency. This flexibility means that subordinate spectrum licences can be highly customized in terms of the geography they cover and the amount of spectrum they use. This greatly enhances their accessibility to smaller prospective subordinate licensees.³⁰

66. However, this does leave open the question of what incentives there may be to induce the MNOs to enter into subordination agreements with smaller operators rather than simply rearranging spectrum among themselves or with other “large-scale networks.”

67. CEA concludes from the relative paucity of approved subordination arrangements that a new regulatory framework is required to improve the incentive to participate:

If subordination was truly in the best interests of the spectrum holder then it would be common and ISED would not be asking how to encourage subordination. Instead it should be taken as evidence that subordination, only works between companies with similar commercial interest. Despite the clear benefits to Canadians, reallocation of unused spectrum is not something that can be resolved without a new regulatory approach.³¹

68. CEA suggests that mandatory subordination is required, although it expresses a preference for the Access Licensing framework over such an approach because applications for such licences would go to ISED directly, not “to the spectrum holder who, for competitive reasons, may delay/hamper deployments of the new entrant.”³²

²⁹ See ISED, Decisions on Licence Transfers of Commercial Mobile Spectrum, available at <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10717.html> . Rogers addresses the anticompetitive implications of cooperative agreements between major operators, such as Bell and Telus, that enable them to operate as network partners and to circumvent auction caps by bidding separately and combining their spectrum holdings afterwards: Rogers Comments, paragraphs 213 and 214.

³⁰ Bell Comments, paragraph 71.

³¹ CEA Comments, paragraph 26.

³² CEA Comments, paragraphs 26-28.

69. TECHNATION provides an interesting perspective on the incentives to subordination that might develop organically with the advent of 5G:

TECHNATION submits that subordinate licensing agreements, alongside verticals, stand to become a major means of justifying and capitalizing on investment in 5G infrastructure which may allow the subordination of unprofitable areas covered by a license or dedication of slices of networks. ... However, 5G also means that primary licensees need their spectrum more than ever to continue deploying public network coverage and service their own private network customers. Secondary spectrum access should remain on the basis of commercial negotiating to allow licensees that have invested significant amounts of capital into exclusive spectrum licences are able to gain a fair and equitable return on their investments.³³

70. TECHNATION's argument does suggest that in the event certain 5G licensees neither deploy public network coverage nor agree to subordination in locations or frequencies they are not deploying, there may indeed be a market failure present that can only be solved by more aggressive regulatory intervention.

71. Like SSi and others, both CEA and TECHNATION observe that improved subordination is an alternative to the proposed Access Licensing framework. We agree with TECHNATION that subordination is preferable and should be incentivized with "use it or lose it" provisions such as the possible introduction of Access Licensing – but only after the subordination process is streamlined, improved, and given a reasonable period of time to bear fruit. We also agree with this observation made by TECHNATION:

It is important that ISED not establish a competing parallel framework of licensing that disincentivizes the formation of [mutually beneficial market-based subordination] agreements.³⁴

72. While CEA and others are correct that existing licence holders might well delay, hamper or even outright prevent the deployment by potential competitors of networks that rely in part on spectrum subordinated from those existing licensees, we believe that ISED can and should find a more effective way of dealing with these problems within the subordination regime, rather than by introducing the parallel Access Licensing framework.

³³ TECHNATION, Comments in Response to SLPB-004-21, October 26, 2021 ("TECHNATION Comments"), paragraph 19.

³⁴ TECHNATION Comments, paragraph 4.

73. One technique that could work well to reduce opportunities for anti-competitive behaviour by existing licensees is to establish clear guidelines for the timelines within which existing spectrum licensees must acknowledge and respond to subordination requests. FMCC's formulation of the logic for such guidelines is helpful:

ISED should:

- *Establish timelines and deadlines for a licensee to respond to a request to enter into a subordinate agreement;*
- *Require that the Primary Licensee provide valid reasons for refusing to enter into a subordinate arrangement (e.g. an imminently planned deployment);*
- *Establish potential consequences ranging from fines to forfeiture of licences for failing to respond to a request.³⁵*

74. We urge ISED to explore the process improvements proposed by SSi and others to streamline both the application and the approval process for subordination agreements.

75. These include:

- Greater use of publicly accessible, ISED-verified databases of actual spectrum usage to permit parties to ascertain where unused, licensed spectrum may be available and to identify the entities to which application to use it should be made;³⁶
- The use of standardized forms of agreement for relatively routine applications;³⁷ and
- Require existing licensees to report on subordination requests received, acceded to or rejected, the latter with reasons.³⁸

³⁵ FMCC Comments, paragraph 109. Similar suggestions are proposed by Ecotel (paragraph 37 CHECK), Iristel Inc. (paragraphs 72-74); Redline (paragraph 32); CCSA (answer to Question 45); and Cogeco Communications Inc., Comments in Response to SLPB-004-21, October 26, 2021 ("Cogeco Comments"), paragraph 94.

³⁶ For instance, TECHNATION (paragraph 22) and Independent Telecommunications Providers Association, Comments in Response to SLPB-004-21, October 26, 2021, paragraph 140.

³⁷ For instance, SSi Comments, paragraphs 119-121; Télésignal (pages 20-21).

³⁸ Cogeco Comments, paragraph 95.

76. Coupled with stronger “use it or share it” incentives, the subordination process can be strengthened so that it can, indeed, live up to its promise as:

... [T]he primary mechanism for facilitating secondary market transactions of spectrum at a level below the licensed tier size. In this respect, subordination represents a powerful market-based solution for facilitating rural and remote wireless deployment and supporting innovative uses that does not invite the challenges associated with ISED’s access licensing proposals.³⁹

77. Therefore, our third recommendation is:

Strengthen the subordination process through improved incentives and streamlined processes to facilitate market-based solutions to improved remote and rural wireless deployment and innovation.

78. We appreciate the opportunity to participate in this important consultation.

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³⁹ Shaw Comments, paragraph 7.