

CANADA GAZETTE NOTICE NO. SLPB-004-21

**CONSULTATION
ON NEW ACCESS LICENSING FRAMEWORK, CHANGES TO
SUBORDINATE LICENSING AND WHITE SPACE TO SUPPORT RURAL
AND REMOTE DEPLOYMENT**

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**REPLY COMMENTS
OF
BELL MOBILITY INC.**

7 DECEMBER 2021

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1.0 **EXECUTIVE SUMMARY**

ES1. In accordance with the procedure set out by Innovation, Science and Economic Development Canada (the Department or ISED) in Notice No. SLPB-004-21, *Consultation on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment* (the Consultation), dated 14 August 2021, we are providing our Reply Comments on ISED's proposals to: (i) introduce a new supplementary licensing process (an Access Licensing Framework) for unused spectrum; (ii) modify ISED's framework for subordinate licensing approvals; and (iii) amend white space rules, as well as changes to the Rural Remote Broadband System (RRBS) policy framework.

1.1 **New Access Licensing Framework is Unnecessary**

ES2. A number of commenters supported ISED's proposal to implement a new Access Licensing Framework. However, none provided evidence on how ISED's numerous existing spectrum policies have not, or will not, provide sufficient access to spectrum resources requiring ISED to implement an unprecedented proposal to reallocate spectrum from existing licensees that are compliant with their current conditions of licence.

ES3. Rogers Communications Canada Inc. (Rogers) noted that there is "no evidence for the need for mandatory subordination or an access regime for rural deployments," and that there is "also no evidence that the current subordination process is not working for private network deployments".¹ Shaw Communications Inc. (Shaw) had a similar perspective, stating that the "appropriate incentives exist to enter into subordination arrangements and the public record of subordinate licence issuances establishes that this is a mechanism being accessed, including by smaller providers and innovators."² We agree. Subordinate spectrum licences are available to those that want to deploy in small geographic areas, including for private broadband networks or Internet of Things (IoT) applications. For example, in the past 12 months alone subordinate licences have been granted to the Iron Ore Company of Canada, Teck Resources Ltd., Ecotel Inc., and Canadian Natural Resources Ltd.³

¹ Rogers Comments, paragraphs 54 and 55.

² Shaw Comments, paragraph 8.

³ ISED Decision, 9 September 2021, *Subordination of spectrum licences held by Bell Mobility Inc. to the Iron Ore Company of Canada*. ISED Decision, 20 May 2021, *Subordination of spectrum licences by Freedom Mobile Inc. to Teck Resources Limited*. ISED Decision, 17 December 2020, *Subordination of a portion of a spectrum licence held by Telus Communications Inc. to Ecotel Inc.* ISED Decision, 11 December 2020, *Subordination of a spectrum licence held by ABC Allen Business Communications Inc. to Canadian Natural Resources Ltd.* ISED Decision, 20 August 2020, *Subordination of spectrum licences held by Freedom Inc. to Teck Resources Ltd.*

ES4. According to ISED's preliminary assessment, by not deploying to a Tier 5 service area – which existing licensees are not required to do – portions of hundreds of licences could be revoked and re-licensed to another company within three months. ISED's proposal makes no accommodation for future deployment and provides no time for existing licensees to meet the new deployment requirement. This view is shared by SaskTel which stated that "the Department seems to have made the erroneous assumption that if a licence holder has not deployed their cellular or PCS spectrum blocks in a given rural area as of March 2021 that they will never deploy the spectrum in the given rural area."⁴

ES5. The proposed Access Licensing Framework is inappropriate because ISED has already provided sufficient access to spectrum resources. ISED has also achieved their policy objectives to: (i) facilitate the deployment and timely availability of services across the country, with an emphasis on rural and remote regions; (ii) foster investment and the evolution of wireless networks by enabling the development of innovative and emerging applications; and (iii) support sustained competition in the provision of wireless services so that consumers and businesses benefit from greater choice and competitive prices. These policy objectives are currently being met without the need for ISED to impose a new regulatory measure which is designed to revoke portions of an existing licensee's spectrum licence even though they have been compliant with their conditions of licence. Canada's facilities-based wireless providers have: (i) deployed services across the country, including in rural and remote regions – since 2013, rural 4G LTE coverage across Canada has increased from 35.4% to 97.4%⁵; (ii) invested tens of billions of dollars in wireless networks which has enabled the development of innovative and emerging applications including 5G; and (iii) continue to compete vigorously, which has resulted in significant declines in wireless prices.

1.2 ISED Has Already Provided Sufficient Access to Spectrum Resources

ES6. ISED has made significant amounts of spectrum available through spectrum set-asides and caps, having existing licensees return spectrum for future licensing and allocating more spectrum for use on a shared basis. For example, large portions of spectrum were set-aside for smaller wireless providers in the auctions for AWS-1 (43% of the spectrum available), AWS-3 (60% of the spectrum available), 600 MHz (44% of the spectrum available) and 3500 MHz (approximately 42% of the spectrum available). ISED also implemented spectrum caps in the

⁴ SaskTel Comments, paragraphs 16.

⁵ CRTC, *Communications Monitoring Report*, 2020, available at <https://crtc.gc.ca/eng/publications/reports/policymonitoring/2020/index.htm>, page 98.

700 MHz and 2500 MHz auctions, and as part of fundamental reallocations of spectrum, required existing licensees to return a portion of their spectrum holdings for 2500 MHz (33% of existing holdings) and 3500 MHz (between 20% and 70% of existing holdings) to enable more widespread licensing.

ES7. In addition, ISED increased the amount of Wireless Broadband Services (WBS) spectrum⁶, enabled white space technology⁷ and tripled the amount of spectrum available for Wi-Fi⁸. As noted by Rogers, "the Department has also made significant amounts of additional spectrum available for licence-exempt or lightly-licensed usage, e.g., 6 GHz band (1,200 MHz), expanded WBS in 3900-3980 MHz (80 MHz), High Power Outdoor Devices (100 MHz), 64-71 GHz (adjacent to 57-64 GHz, providing 14 GHz of contiguous licence-exempt spectrum)."⁹

ES8. ISED should pause to see how these developments evolve before imposing the drastic proposals presented in the Consultation. It is too soon to implement yet another policy to address the same concerns. As Shaw stated, "the Department should now give these initiatives time to take hold before supplementing them with an unnecessary new licensing regime that poses several challenges and concerns."¹⁰

1.3 Imposing a New Access Licensing Requirement Within Three Months is Completely Inappropriate

ES9. A few commenters supported ISED's proposal to begin access spectrum licensing three months after the publication of the decision, but none of these provided evidence, or even unsubstantiated arguments, on why this should be the case.¹¹ We strongly disagree with ISED's proposal. It is completely inappropriate for ISED to begin access spectrum licensing three months after the publication of a decision on the Consultation. ISED's proposed Access Licensing Framework seeks to expropriate a portion of an existing licensee's spectrum licence without any warning even though existing licensees have met, and continue to meet, their

⁶ ISED, SLPB-002-20 *Consultation on the Technical and Policy Framework for the 3650-4200 MHz Band and Changes to the Frequency Allocation of the 3500-3650 MHz Band*, paragraph 84.

⁷ The Consultation, paragraph 159.

⁸ ISED, News Release, "Government of Canada announces decision to triple spectrum available for Wi-Fi, bringing faster Internet to Canadians," available at <https://www.canada.ca/en/innovation-science-economic-development/news/2021/05/government-of-canada-announces-decision-to-triple-spectrum-available-for-wi-fi-bringing-faster-internet-to-canadians.html>.

⁹ Rogers Comments, paragraph 57.

¹⁰ Shaw Comments, paragraph 4.

¹¹ See for example, Ecotel Inc. (Ecotel) Comments, paragraph 112, Telus Communications Inc. (Telus) Comments, paragraph 108, and Canadian Communication Systems Alliance Inc. (CCSA) Comments, page 11.

conditions of licence. We are not aware of any precedent for making such a change when a licensee is compliant with their conditions of licence.

ES10. ISED is assessing the extent of unused spectrum within a Tier 5 service area even though Cellular and Personal Communications Services (PCS) spectrum licensees were never required to deploy to that level. If the proposed framework is implemented, ISED will effectively be punishing existing licensees for not deploying to a target that they were never required to meet. We are unaware of any instance in which ISED imposed a new spectrum deployment requirement that had to be met in less than five years. A three-month requirement is simply absurd. As a result, we recommend that at a minimum, access spectrum licensing should not occur until five years after the publication of the decision. This would be consistent with the deployment timeline ISED recently proposed for the same spectrum bands in DGSO-003-21 *Consultation on Amending Cellular and Personal Communications Services (PCS) Licence Conditions*. However, even five years is aggressive. In DGSO-003-31, we noted that in consideration of the challenging new deployment targets ISED has proposed a 10-year deadline would be more appropriate.

1.4 Streamlined Subordination Licensing Approvals Benefit the Industry

ES11. A number of commenters supported ISED's objective to simplify the information requirements for a subordinate licence application in order to support a more timely review process.¹² As indicated in our comments, to streamline subordinate licence application processing, we recommend that ISED make greater use of standardized attestations from the applicants. For example, standardized attestations could be used to confirm: (i) the eligibility of the subordinate licensee; (ii) that the primary licensee maintains control of the spectrum licence; and (iii) that the subordination is not a transfer, deemed transfer, or prospective transfer as defined in CPC-2-1-23 – *Licensing Procedure for Spectrum Licences for Terrestrial Services*. The use of attestations was also supported by Telus¹³, TerreStar Solutions Inc. (TerreStar)¹⁴ and Xplornet¹⁵. We recommend that ISED prepare draft standardized attestations which provide clarity with respect to factors that ISED considers important. ISED should then initiate a short consultation that allows stakeholders to comment on the proposed language. This will help ensure that the proposed language does not unintentionally impair licensees' ability to negotiate commercially agreeable terms or otherwise introduce unintended consequences.

¹² Cogeco Communications Inc. (Cogeco) Comments, paragraph 92; Bragg Communications Inc. (Eastlink) Comments, paragraph 15; First Broadband Comments, page 2; Rogers Comments, paragraph 212 and Xplornet Communications Inc. (Xplornet) Comments, paragraph 90.

¹³ Telus Comments, paragraph 131.

¹⁴ TerreStar Comments, paragraph 14.

¹⁵ Xplornet Comments, paragraph 90.

ES12. SSi Canada (SSi) recommended that when streamlining its subordination process "ISED consider the ways the CRTC has streamlined the process of seeking approval for inter carrier agreements and tariff applications."¹⁶ Not all subordination applications require the same review timelines. Some subordination applications are simple to assess while others are more complex. For example, subordination applications from applicants with pre-existing subordinations can be reviewed quicker than subordination applications from applicants with no previous subordination relationships. Similarly, given their specialized nature and the fact that they will not affect competition in the market for mobile wireless services, a subordination application for a private broadband network or an IoT application should be treated as a simple application that receives a quick review, or even no review by ISED.

ES13. We recommend that ISED develop different review processes and timelines for subordinate licence application reviews depending on the complexity of the application (e.g., simple and standard). Simple subordination applications should be approved immediately (or on a highly expedited basis) and standard subordination applications should be approved within eight weeks (especially given the use of standardized attestations).

1.5 White Space Databases Should Remain in Canada

ES14. While some commenters supported ISED's proposal to remove the current restriction on database hosting in order to facilitate cloud-based database hosting solutions, we do not.¹⁷ White space databases should continue to be physically located in Canada to protect the privacy of Canadian data and maintain Canada's communication data sovereignty. White space database providers will have access to network information from all Canadian service providers that offer white space devices and the type of network telemetry data to be collected may change over time. As a result, the geographic limitation is necessary to maintain data security. If geographic restrictions on database hosting were removed, database providers would also be subject to privacy laws and practices of the foreign jurisdiction, thus making it more difficult to protect Canadian data.

ES15. Many commenters supported this position,¹⁸ including Rogers which stated that "all hosting of spectrum management database services – regardless of the spectrum band they

¹⁶ SSi Comments, paragraph 105.

¹⁷ See for example 6Harmonics Inc. Comments, pages 1 and 2, Communications Télésignal Inc. (Communications Télésignal) Comments, pages 21 and 22, and Microsoft Corporation (Microsoft) Comments, paragraph 9.

¹⁸ Advanced Interactive Canada Inc. (AIC) Comments, page 12, Rogers Comments, paragraph 219, Dr. Gregory Taylor Comments, paragraph 11.

coordinate – should be hosted in Canada to ensure our ability to retain data sovereignty, privacy, and security of information."¹⁹

1.6 PCS Spectrum Realignment

ES16. Rogers proposed that ISED "should undertake efforts to fully rationalize the entire Extended PCS band and provide all operators contiguous holdings across the band".²⁰ While this issue is not raised in the Consultation, we would support such a realignment as it would likely lead to greater spectrum utilization and efficiency for all licence holders, to the benefit of Canadians. However, we recommend that industry participants, rather than ISED, organize and manage the initiative on a commercial basis. We would support the participation of the experts at ISED to provide advice and guidance to the industry, and where required, informally mediate among conflicting interests.

2.0 NEW ACCESS LICENSING FRAMEWORK

Q1. ISED is seeking comments on its proposal to implement a new Access Licensing framework to make licences available in rural and remote areas where there is unused spectrum.

1. A number of commenters supported ISED's proposal to implement a new Access Licensing Framework. However, none provide evidence on how ISED's numerous existing spectrum policies have not, or will not, provide sufficient access to spectrum resources requiring ISED to implement an unprecedented proposal to reallocate spectrum from existing licensees that are compliant with their current conditions of licence.²¹

2. ISED has made significant amounts of spectrum available through spectrum set-asides and caps, having existing licensees return spectrum for future licensing and allocating more spectrum for use on a shared basis. For example, large portions of spectrum were set-aside for smaller wireless providers in the auctions for AWS-1 (43% of the spectrum available), AWS-3 (60% of the spectrum available), 600 MHz (44% of the spectrum available) and 3500 MHz (approximately 42% of the spectrum available). ISED also implemented spectrum caps in the 700 MHz and 2500 MHz auctions, and as part of fundamental reallocations of spectrum, required existing licensees to return a portion of their spectrum holdings for 2500 MHz (33% of

¹⁹ Rogers Comments, paragraph 219.

²⁰ Rogers Comments, paragraph 29.

²¹ See for example AIC Comments, page 1, Cogeco Comments, paragraph 10, Communications T l signal Comments, paragraph 2, and Xplornet Comments, paragraph 35.

existing holdings) and 3500 MHz (between 20% and 70% of existing holdings) to enable more widespread licensing.

3. In addition, ISED increased the amount of Wireless Broadband Services (WBS) spectrum²², enabled white space technology²³ and tripled the amount of spectrum available for Wi-Fi²⁴. The amount of spectrum ISED has made available for licence-exempt or lightly-licensed usage is also described by Rogers:

"Further, the Department has also made significant amounts of additional spectrum available for licence-exempt or lightly-licensed usage, e.g., 6 GHz band (1,200 MHz), expanded WBS in 3900-3980 MHz (80 MHz), High Power Outdoor Devices (100 MHz), 64-71 GHz (adjacent to 57-64 GHz, providing 14 GHz of contiguous licence-exempt spectrum), etc. The recent Television White Spaces decision has also enhanced the ability of non-licence holders to gain access to significant amounts on low-band spectrum in rural and remote areas. ... Further, the Department is also looking at ways to enhance usage of the 900 MHz LMR band as part of the consultation."²⁵

4. Rogers noted that there is "no evidence for the need for mandatory subordination or an access regime for rural deployments," and that there is "also no evidence that the current subordination process is not working for private network deployments"²⁶ Shaw had a similar perspective, stating that the "appropriate incentives exist to enter into subordination arrangements and the public record of subordinate licence issuances establishes that this is a mechanism being accessed, including by smaller providers and innovators."²⁷ We agree. Subordinate spectrum licences are available to those that want to deploy in small geographic areas, including for private broadband networks or IoT applications. For example, in the past 12 months alone subordinate licences have been granted to the Iron Ore Company of Canada, Teck Resources Ltd., Ecotel Inc., and Canadian Natural Resources Ltd.²⁸

²² ISED, SLPB-002-20 *Consultation on the Technical and Policy Framework for the 3650-4200 MHz Band and Changes to the Frequency Allocation of the 3500-3650 MHz Band*, paragraph 84.

²³ The Consultation, paragraph 159.

²⁴ ISED, News Release, "Government of Canada announces decision to triple spectrum available for Wi-Fi, bringing faster Internet to Canadians," available at <https://www.canada.ca/en/innovation-science-economic-development/news/2021/05/government-of-canada-announces-decision-to-triple-spectrum-available-for-wi-fi-bringing-faster-internet-to-canadians.html>.

²⁵ Rogers Comments, paragraph 57.

²⁶ Rogers Comments, paragraphs 54 and 55.

²⁷ Shaw Comments, paragraph 8.

²⁸ ISED Decision, 9 September 2021, *Subordination of spectrum licences held by Bell Mobility Inc. to the Iron Ore Company of Canada*. ISED Decision, 20 May 2021, *Subordination of spectrum licences by Freedom Mobile Inc. to Teck Resources Limited*. ISED Decision, 17 December 2020, *Subordination of a portion of a spectrum licence held by Telus Communications Inc. to Ecotel Inc.* ISED Decision, 11 December 2020, *Subordination of a spectrum licence held by ABC Allen Business Communications Inc. to Canadian Natural Resources Ltd.* ISED Decision, 20 August 2020, *Subordination of spectrum licences held by Freedom Inc. to Teck Resources Ltd.*

5. According to ISED's preliminary assessment, by not deploying to a Tier 5 service area – which existing licensees are not required to do – portions of hundreds of licences could be revoked and re-licensed to another company within three months. ISED's proposal makes no accommodation for future deployment and provides no time for existing licensees to meet the new deployment requirement. This view is shared by SaskTel:

"However, throughout the Consultation document there is never any mention of or any inclination to take into consideration the future plans of the current spectrum licence holder for the spectrum blocks being considered for Access Licensing. The Department seems to have made the erroneous assumption that if a licence holder has not deployed their cellular or PCS spectrum blocks in a given rural area as of March 2021 that they will never deploy the spectrum in the given rural area. ... As SaskTel modernizes and replaces our network equipment, we are installing wherever possible multi-band radios and multi-band antennas. This allows service providers such as SaskTel to activate additional spectrum bands more easily with an incremental investment at the appropriate time, allowing better management of network growth in response to ever increasing customer demands for bandwidth."²⁹

6. The proposed Access Licensing Framework is inappropriate because ISED has already provided sufficient access to spectrum resources. ISED has also achieved their policy objectives to: (i) facilitate the deployment and timely availability of services across the country, with an emphasis on rural and remote regions; (ii) foster investment and the evolution of wireless networks by enabling the development of innovative and emerging applications; and (iii) support sustained competition in the provision of wireless services so that consumers and businesses benefit from greater choice and competitive prices. These policy objectives are currently being met without the need for ISED to impose a new regulatory measure which is designed to revoke portions of an existing licensee's spectrum licence even though they have been compliant with their conditions of licence. Canada's facilities-based wireless providers have: (i) deployed services across the country, including in rural and remote regions – since 2013, rural 4G LTE coverage across Canada has increased from 35.4% to 97.4%³⁰; (ii) invested tens of billions of dollars on wireless networks which has enabled the development of innovative and emerging applications including 5G; and (iii) continue to compete vigorously, which has resulted in significant declines in wireless prices.

²⁹ SaskTel Comments, paragraphs 16 and 17.

³⁰ CRTC, *Communications Monitoring Report*, 2020, available at <https://crtc.gc.ca/eng/publications/reports/policymonitoring/2020/index.htm>, page 98.

7. In addition, several of the developments discussed above are recent and have not had time to impact the market. Moreover, private broadband networks and IoT applications are in the early stages of development and wireless providers do not know how this development will unfold. Time is needed to see how these markets develop and the introduction of unnecessary regulation has the potential to cause negative unintended consequences.

8. ISED should pause to see how these developments evolve before imposing the drastic proposals presented in the Consultation. It is too soon to implement yet another policy to address the same concerns. As Shaw stated:

"Some of these policy measures will deliver immediate benefits; for example, rural providers now have a significant amount of new 3500 MHz spectrum in rural areas after the reclamation and auction processes. Other measures will require more time to be impactful. The Department should now give these initiatives time to take hold before supplementing them with an unnecessary new licensing regime that poses several challenges and concerns."³¹

9. The above evidence clearly demonstrates that ISED has already provided sufficient access to spectrum to support wireless broadband services in rural and remote areas. As summarized by Rogers, "given all the alternative spectrum that has been made available for both the provision or expansion of broadband services and new industrial or commercial applications in rural and remote areas, secondary access to exclusively-licensed spectrum should remain subject to commercial negotiations to protect licensing rights and current and future deployments by primary licensees."³²

10. Telus recommended creating "use it or share it" access licences with one-year terms that would be subject to displacement on three to six months notice.³³ We do not support this recommendation. Not only is it unnecessary; it is unworkable. There is no justification for a "use it or share it" access licensee to spend significant amounts of capital to deploy a network and sign up customers just to have their "use it or share it" access licence revoked on three months notice, stranding both customers and network investment.

As explained above, we do not support ISED's proposal to impose a new Access Licensing Framework. Thus, our responses to the questions below should not be interpreted as deviating from this position. We are providing the comments below in the interest of furthering ISED's understanding of the issues raised in the questions.

³¹ Shaw Comments, paragraph 4.

³² Rogers Comments, paragraph 64.

³³ Telus Comments, paragraphs 22 to 26.

Q2. ISED is seeking comments on its proposal to issue access spectrum licences and access radio licences on a first-come, first-served basis.

11. The majority of commenters supported ISED's proposal to issue access spectrum licences and access radio licences on a first-come, first-served basis. However, comments from Iristel, SSI, ITPA and JBCCS, recommended a process that provides priority for certain types of applicants to access licences.³⁴ We do not support the allocation of access spectrum and radio licences based on a priority system for three reasons. First, each type of applicant will want to ensure that they receive priority and as a result, ISED is unlikely to reach a consensus regarding the types of applicants that deserve priority or the order in which they should be ranked.

12. Second, we agree with ISED that demand for access spectrum and radio licences is unlikely to exceed supply³⁵, especially if ISED adopts our recommendation that the service area for the access spectrum licence should be limited to grid cells that are within the proposed three-year deployment plan of the prospective access licensee.³⁶ It is unlikely that deployment plans will overlap and thus, multiple applicants will be able to operate within a Tier 5 service area. Moreover, if ISED adopts our recommendation that they review each access licensee's deployment plan, then ISED will be able to ensure that the access licensee has a viable deployment plan. This will mitigate the concerns of Cogeco³⁷ and Communications T l signal³⁸ that access licensees under a first-come, first-serve allocation process will simply apply for access licences and not use them.

13. Third, a first-come, first-serve approach has previously been used to licence spectrum and is well understood by industry participants. As indicated by ISED, such an approach is consistent with enabling guideline (f) of the SPFC which states "spectrum management practices, including licensing methods, should minimize administrative burden and be responsive to changing technology and market place demands."³⁹

³⁴ Iristel Inc. (Iristel) Comments, paragraph 13, SSI Comments, paragraph 45, Independent Telecommunication Providers Association (ITPA) Comments, paragraph 25, James Bay Cree Communications Society (JBCCS) Comments, paragraph 7.

³⁵ The Consultation, paragraph 31.

³⁶ Bell Mobility Inc. (Bell) Comments, paragraph 28.

³⁷ Cogeco Comments, paragraph 14.

³⁸ Communications T l signal Comments, page 4.

³⁹ The Consultation, paragraph 32, and the *Spectrum Policy Framework for Canada*, section 4.4.

14. Redline indicated that their first preference would be for ISED to establish an all-come, all-served shared network.⁴⁰ We do not support this recommendation. As noted by ISED, providing these licences on an all-come, all-serve basis or through a database driven shared spectrum approach significantly increases the potential for interference with deployments by existing licensees.⁴¹

Q3. ISED is seeking comments on its proposal to use the rural and remote Tier 5 service areas as the basis to determine the rural and remote areas in which it will apply access licensing.

15. Only AIC and Ecotel did not support ISED's proposal to use rural and remote Tier 5 service areas as the basis to determine which areas will apply for access licensing, noting that Tier 5 services areas are too large.⁴² AIC argues that it should be site-based and Ecotel argues that it should be based on grid cells. However, examining every grid cell to determine if it is eligible to be used for access licensing is unnecessarily complicated and would result in thousands of grid cells needing to be indicated by ISED as being available for access licensing. Moreover, if ISED decides to make access licences available in "tranches", then ISED will also need to determine which combinations of the thousands of grid cells to make available in each "tranche". Their proposed recommendations do not support enabling guideline (f) of the SPFC which states "spectrum management practices, including licensing methods, should minimize administrative burden and be responsive to changing technology and market place demands."⁴³

16. Rural and remote Tier 5 service areas are focused enough to determine the areas where services have not been deployed. This ensures that the new regulatory measure of imposing access licences is not overly broad in its application. This is consistent with SPFC enabling guideline (d) which states "regulatory measures, where required, should be minimally intrusive, efficient and effective."⁴⁴

17. However, in determining the eligible Tier 5 service areas, ISED must consider actual deployment rather than simply considering whether a site is operating on the applicable frequency range in the service area. Specifically, service can be provided into a Tier 5 service area from a site located outside of that area yet this has not been considered in identifying candidate areas for access licensing. This view is also expressed by Rogers which stated "any

⁴⁰ Redline Communications Group Inc. (Redline) Comments, page 11.

⁴¹ The Consultation, paragraph 33.

⁴² AIC Comments, pages 2 and 3 and Ecotel Comments, paragraph 49.

⁴³ *Spectrum Policy Framework for Canada*, section 4.4.

⁴⁴ *Spectrum Policy Framework for Canada*, section 4.4.

Tier 5 that has any level of wireless coverage from the primary licensee or commercial subordinate, whether from a site within the Tier 5 or adjacent, should automatically not be made available."⁴⁵ Similarly, ITPA argues "that in the determination of whether spectrum should be made available in a given Tier 5 area, ISED needs to consider coverage of existing licensees at the specific frequency band of interest, rather than purely relying on site location."⁴⁶

18. While Tier 5 service areas can be effectively used to identify possible locations for access licences, we do not support the use of Tier 5 service areas for the geographic area covered by an access licence. We recommend that ISED issue access licences on a narrower basis (the grid cells that are within the proposed three-year deployment plan of the prospective access licensee). Adopting our recommendation to issue access licences on a narrower basis would also mitigate the concerns of AIC and Ecotel that Tier 5 service areas are too large.⁴⁷

Q4. ISED is seeking comments on its proposed principles to be used when considering spectrum licensed or radio licensed bands where the proposed Access Licensing framework will apply.

Q5. ISED is seeking comments on other principles it should take into account when considering bands where the proposed Access Licensing framework will apply.

19. Cogeco suggested two amendments to ISED's proposal.⁴⁸ The first is to include "fixed and/or mobile" such that ISED's principle now states "the potential to support fixed and/or mobile wireless broadband, private networks and/or industry vertical use cases." We do not object to this inclusion. The second is to remove "rural and remote areas" such that ISED's principle now states "sufficient amounts of unused spectrum for practical use." We do not support this change. Not only does Cogeco not define what "practical use" means, but as ISED indicates, the purpose of implementing access licensing is to "facilitate greater access to unused spectrum in rural and remote areas and support the provision or expansion of broadband services and new industrial or commercial applications in these areas."⁴⁹ Therefore, "rural and remote areas" should remain as part of ISED's principles.

20. Access licensing should not be permitted for spectrum licensed through an auction process that is still in its initial term. Doing so would violate the implicit contract between ISED and auction participants regarding the characteristics of the spectrum that auction participants

⁴⁵ Rogers Comments, paragraph 72.

⁴⁶ ITPA Comments, paragraph 31.

⁴⁷ AIC Comments, page 2, and Ecotel Comments, paragraph 49.

⁴⁸ Cogeco Comments, paragraph 21.

⁴⁹ The Consultation, paragraph 29.

were bidding on. Allowing access licences during the initial term decreases the value of the spectrum since the extent of population covered by the spectrum licence is reduced.

21. As a result, we recommend that ISED's proposed principle which states "had adequate time for existing licensees to deploy (e.g. initial licence term has lapsed), or time permitted to meet initial deployment requirement has lapsed in the case of bands that were auctioned)" be replaced with the principle "completed the initial term of the licence." This principle is better at respecting the characteristics of the spectrum that auction participants bid on and providing licensees sufficient time to deploy the spectrum licences.

Q6. ISED is seeking comments on adopting a flexible use licensing model for fixed and mobile services when issuing access spectrum licences.

22. No commenters objected to adopting a flexible use licensing model for fixed and mobile services when issuing access spectrum licences. However, Rogers recommended that the proposed Access Licensing Framework should not permit fixed point-to-point or drone operations.⁵⁰ We support Rogers' recommendation. As Rogers stated "there are substantial amounts of fixed service bands – both licensed and licence-exempt – that are available for operators, should they require spectrum for [point-to-point] services," and that "drone operations by access licensees present significant [interference] risks not only to adjacent co-channel primary licensees, but also to spectrum adjacent operators in the same service area."⁵¹

Q7. ISED is seeking comments on its proposal to use Tier 5 service areas for the proposed access spectrum licences and any associated potential technical challenges should this process be applied to all commercial mobile or flexible use frequency bands.

Q8. ISED is seeking comments on any future adjustments to the licence areas for access spectrum licences, including consideration of more localized areas (e.g. smaller than Tier 5).

23. Cogeco⁵² and others, supported ISED's proposal to use Tier 5 service areas for access spectrum licences. However, as explained in our comments, Tier 5 service areas where no service is being provided should only be used as an initial screen to determine the rural and remote service areas that are eligible for an access spectrum licence. The service area for the

⁵⁰ Rogers Comments, paragraph 85.

⁵¹ Rogers Comments, paragraphs 86 and 87.

⁵² Cogeco Comments, paragraph 25, Twin Island Communications (TwinComm) Comments, page 2, Canadian Association of Wireless Internet Service Providers (CanWISP) Comments, paragraph 27, First Mile Connectivity Consortium (FMCC) Comments, paragraph 52, ITPA Comments, paragraph 56 and Syngenta Comments, page 2.

access spectrum licence should be limited to grid cells that are within the proposed three -year deployment plan of the prospective access licensee. Many commenters supported this position,⁵³ including Ecotel which stated:

"Since access licences are offered on a first-come-first-serve basis, an entity making an application for such a licence should already have a very good idea of its specific coverage requirement. ISED does not want to end up with entities taking advantage of this process to obtain large license areas that will not be covered in the future."⁵⁴

24. As ISED indicates: "access spectrum licences are intended to provide access to spectrum in relatively localized areas within larger areas that have already been licensed" and "should be made available for relatively small areas."⁵⁵ An access licensee does not require a larger geographic area than they are planning to deploy. Making access licences available for relatively small areas also ensures that the regulatory measure is minimally intrusive as required by SPFC enabling guideline (d).⁵⁶

25. In addition, after the initial three-year term has expired and the access licensee has met and maintained the deployment indicated in the three-year deployment plan submitted to ISED, then we recommend that the access licensee submit a deployment plan upon renewal which can either consist of their existing deployment or their existing deployment plus proposed new deployment over a three-year term as long as the new deployment does not interfere with the existing deployment of the primary licensee (either on their own or through a subordination). By requiring a prospective access licensee to provide a three-year deployment plan, it will provide the Department with the opportunity to remedy interference issues with existing licensees before they arise.

Q9. ISED is seeking comments on its proposed process for identifying rural and remote Tier 5 service areas in which there is unused spectrum that would be made available for access spectrum licensing.

26. Only Communications Télésignal supported ISED's proposal.⁵⁷ However, by not considering actual network coverage and spectrum usage, ISED's process for determining the

⁵³ AIC Comments, page 4, Communications Télésignal Comments, page 9, Iristel Comments, paragraph 23, Redline Comments, paragraph 13, Rogers Comments, paragraph 89, SaskTel Comments, paragraph 33, SeaBoard Group (Seaboard) Comments, page 3 and 4, Wilson Engineering, page 1, CEA Comments, paragraph 7, and Telus Comments, paragraph 44.

⁵⁴ Ecotel Comments, paragraph 66.

⁵⁵ The Consultation, paragraph 42.

⁵⁶ *Spectrum Policy Framework for Canada*, section 4.4.

⁵⁷ Communications Télésignal Comments, page 10.

extent of unused spectrum is incomplete and inaccurate. As a result, we do not support ISED's proposed process for identifying rural and remote Tier 5 service areas in which there is unused spectrum that would be made available for access spectrum licensing. ISED needs to consider actual network coverage and spectrum usage in addition to whether a site is operating on the applicable frequency range in the service area. Given the smaller geographic size of Tier 5 service areas and the broader propagation characteristics of lower frequency spectrum, service can be provided into a Tier 5 service area from a site located outside of that area. Ecotel⁵⁸, FCM⁵⁹, Iristel⁶⁰, ITPA⁶¹ Lyttonnet⁶², Rogers⁶³, SaskTel⁶⁴, Telus⁶⁵ and Technation⁶⁶ all had similar views. As noted by Iristel:

"Even if the [Spectrum Management System] is up to date, it is possible that spectrum might be in use in a tier 5 area even if there is no radio situated in that tier 5 area. A radio in an adjacent tier 5 area may, depending on propagation characteristics and topography, provide coverage in a tier 5 area that does not contain a radio. The SMS is a good starting point, but analysis of coverage for specific bands is required."⁶⁷

27. This issue is also raised by ITPA:

"... the use of ISED Spectrum Management System site licence data needs to be complemented with propagation analysis of systems in surrounding Tier 5 areas using the proposed spectrum block before spectrum is deemed available. As previously stated, it is sometimes possible for a licence holder to cover the population of a given Tier 5 area without deploying sites within the geographical boundaries of the Tier 5, when sites are located close to the border and propagation characteristics are favorable."⁶⁸

28. As noted by Xplornet, "parties should be given the opportunity to identify to ISED where they are serving within their primary licence area."⁶⁹ Similarly, Telus recommended that "ISED can use its initial study to identify potential candidate block and Tier 5 area pairs, but further analysis must be undertaken before such a pairing can be deemed appropriate for access

⁵⁸ Ecotel Comments, paragraph 68.

⁵⁹ The Federation of Canadian Municipalities (FCM) Comments, paragraph 28.

⁶⁰ Iristel Comments, paragraph 26.

⁶¹ ITPA Comments, paragraph 61.

⁶² Lytton Area Wireless Society (Lyttonnet) Comments, page 3.

⁶³ Rogers Comments, paragraph 99.

⁶⁴ SaskTel Comments, paragraph 41.

⁶⁵ Telus Comments, paragraph 46.

⁶⁶ Technation Comments, paragraph 14.

⁶⁷ Iristel Comments, paragraph 26.

⁶⁸ ITPA Comments, paragraph 61.

⁶⁹ Xplornet Comments, paragraph 51.

spectrum licensing, ensuring that deployment within that Tier 5 area would not adversely impact coverage being offered by the primary licensee."⁷⁰

29. To help facilitate the analysis, the Department and existing licensees can focus on the "tranches" of spectrum blocks as they are made available. For example, three months prior to a "tranche" of spectrum being made available, existing licensees could verify whether service is being provided on that spectrum block in the Tier 5 service area. Once verified by the Department, that licence block and Tier 5 service area pair would no longer be available for access licensing. Having existing licensees verify their deployment prior to the issuance of access licences will minimize the risk of errors in the identification of "unused spectrum" as well as the potential for harmful interference between an existing licensee and an access licensee .

30. In addition, Rogers recommended that "any access requests should require confirmation that any particular area is not part of an operators' 18-month build plan."⁷¹ We support this recommendation. As Rogers noted:

"Primary licensees require regulatory certainty to ensure that the spectrum they have invested in will be available to support their own network coverage and capacity expansion plans. This certainty is further needed as public funding programs from all levels of government and the CRTC continue to ramp up in order to help close the Digital Divide in areas with challenging economics. Evaluating whether there is actually any unused spectrum available in a rural and remote area is one of the key reasons why secondary access should remain subject to commercial negotiations."⁷²

31. SaskTel had a similar view:

"Completely ignoring the plans of existing licence holders, including those with existing network infrastructure in the associated Tier 4 service area, and particularly those licence holders with existing network infrastructure in the given Tier 5 service area, would go against the achievement of the goals of the Department of extending wireless broadband services into rural and remote areas."⁷³

32. Therefore, after ISED's initial site-based analysis, existing licensees must be given the opportunity to review the licence block and Tier 5 service area pairs to verify that service is: (i) not being provided by a site located outside of the Tier 5 service area; and (ii) not being provided within the next 18 months.

⁷⁰ Telus Comments, paragraph 48.

⁷¹ Rogers Comments, paragraph 99.

⁷² Rogers Comments, paragraph 99.

⁷³ SaskTel Comments, paragraph 41.

Q10. ISED is seeking comments on its proposal to impose a condition of licence to prohibit existing primary and subordinate licensees' deployment in areas for which an access spectrum licence has been issued.

33. A number of commenters supported ISED's proposal prohibiting existing primary and subordinate licensees' deployment in areas for which an access spectrum licence has been issued.⁷⁴ We do not support ISED's proposal. Primary and subordinate licensees should still have the opportunity to deploy spectrum within the relevant Tier 5 service area as long as they do not cause harmful interference with the access licensee's deployment. Interference is even easier to coordinate if ISED issues access licences on a narrower basis (i.e., the grid cells that are within the proposed three-year deployment plan of the prospective access licensee).

34. Preventing primary and subordinate licensees from deploying further is contrary to ISED's policy objective to "facilitate the deployment and timely availability of services across the country, with an emphasis on rural and remote regions."⁷⁵ ISED's proposal is also contrary to enabling guideline (a) of the SPFC which states "market forces should be relied upon to the maximum extent feasible," as it is expressly limiting a primary and subordinate licensee's ability to expand its existing deployment.⁷⁶ As Rogers stated, "the proposed condition of licence on the primary licensee is creating a de facto veto of future network deployments in a service area for which a primary licensee holds an exclusive licence term for another ten years."⁷⁷

Q11. ISED is seeking comments on its proposal that stations already deployed by primary or subordinate spectrum licensees within their service areas would be protected from subsequent deployment under access spectrum licences.

35. No commenters objected to ISED's proposal that stations already deployed by primary or subordinate spectrum licensees within their service areas should be protected from subsequent deployment by access spectrum licensees.⁷⁸ This is consistent with existing ISED policy. For example, 2500 MHz spectrum conditions of licence require the licensee to not cause harmful interference with existing systems.⁷⁹

⁷⁴ See for example AIC Comments, page 5, Cogeco Comments, paragraph 30, Communications T  l  signal Comments, paragraph 10, and Telus Comments, paragraph 52.

⁷⁵ The Consultation, paragraph 12.

⁷⁶ *Spectrum Policy Framework for Canada*, section 4.4.

⁷⁷ Rogers Comments, paragraph 107.

⁷⁸ Bell Comments, paragraph 34.

⁷⁹ See Q9 — 2.5 GHz BRS Non-Auctioned Spectrum Licences issued via the 2020 Renewal Process.

Q12. ISED is seeking comments on the above options for eligibility.

Q13. ISED is seeking comments for Option 1 and Option 2, specifically should the deployed and/or undeployed spectrum be based on any frequency band (e.g. 2500 MHz) currently held by the applicant or only the band (e.g. PCS band) for which the application is made?

36. Communications Télésignal⁸⁰, ECN⁸¹, Rogers⁸², SaskTel⁸³ and JISM⁸⁴ all supported Option 2 since the access licensee already has access to spectrum that they can use. However, we prefer Option 1 over Option 2. Option 1 requires that an applicant for an access licence does not hold a spectrum licence for undeployed commercial mobile, fixed, or flexible use spectrum for the frequency band in question in the relevant Tier 5 service area. Different spectrum bands have different propagation characteristics and may be better suited to certain applications. For example, low band spectrum (below 1 GHz) facilitates coverage and in-building service, while mid-band spectrum (above 1 GHz), increases capacity and is well suited to sites located close together. As a result, an applicant that has undeployed spectrum in a different spectrum band may still require spectrum in the band for which the application is made because it is better suited to the service that the applicant wants to provide. Cogeco⁸⁵, Eastlink⁸⁶, Lyttonnet⁸⁷, MSI⁸⁸, SSI⁸⁹, Telus⁹⁰, TerreStar⁹¹, CanWISP⁹² and FMCC⁹³ also supported Option 1. Moreover, as Telus stated, Option 2 "would foreclose the opportunity for any existing licensee to use access licensing to expand and improve the service they deliver to their existing customers which runs counter to the intent of the proposed policy."⁹⁴

37. Communications Télésignal⁹⁵, Lyttonnet⁹⁶, and Rogers⁹⁷ argued that eligibility should be based on deployed or undeployed spectrum in any spectrum band. We do not support this recommendation. Having deployed spectrum in the band for which the application is made

⁸⁰ Communications Télésignal Comments, pages 10 and 11.

⁸¹ Eeyou Communications Network (ECN) Comments, paragraph 36.

⁸² Rogers Comments, paragraph 113.

⁸³ SaskTel Comments, paragraph 50.

⁸⁴ Joint Internet Society and Mozilla (JISM) Comments, page 7.

⁸⁵ Cogeco Comments, paragraph 34.

⁸⁶ Eastlink Comments, paragraph 11.

⁸⁷ Lyttonnet Comments, page 3.

⁸⁸ Motorola Solutions Inc.(MSI) Comments, page 3.

⁸⁹ SSI Comments, paragraph 74.

⁹⁰ Telus Comments, paragraph 59.

⁹¹ TerreStar Comments, paragraph 8.

⁹² CanWISP Comments, paragraph 38.

⁹³ FMCC Comments, paragraph 65.

⁹⁴ Telus Comments, paragraph 62.

⁹⁵ Communications Télésignal, Comments, page 11.

⁹⁶ Lyttonnet Comments, page 3.

⁹⁷ Rogers Comments, paragraph 116.

should not prevent an applicant from applying for an access licence in the same licence area. Eastlink⁹⁸, Telus⁹⁹, CCSA¹⁰⁰, and Clearwater¹⁰¹ all supported this view. An applicant that has deployed their existing spectrum licences has put their spectrum licences to use and requires additional spectrum to improve the services that they currently offer. Requiring the applicant to not hold a deployed spectrum licence artificially prohibits applicants that have clearly demonstrated that they are willing and able to deploy spectrum in a particular licence area. Prohibiting such applications would be contrary to ISED's policy objective to "facilitate the deployment and timely availability of services across the country, with an emphasis on rural and remote regions."¹⁰²

38. Ecotel¹⁰³ and Redline¹⁰⁴ recommended that large, major regional or national spectrum holders should not be eligible for access licences. We do not support this recommendation. There should be no eligibility restrictions that prevent national wireless providers from applying for access licences as long as they satisfy the requirements discussed above. National wireless providers should not be prevented from accessing additional spectrum if they require it. Doing so would prevent applications from organizations that have clearly demonstrated they are willing and able to deploy spectrum. Prohibiting such organizations would be contrary to ISED's policy objective to "facilitate the deployment and timely availability of services across the country, with an emphasis on rural and remote regions."¹⁰⁵ As Telus stated, "crafting a rule that excludes the national carriers from being eligible to acquire access licences would counteract the intended policy effect: encouraging proven network builders to rapidly expand broadband services into rural and remote regions to benefit Canadian consumers across the country."¹⁰⁶

39. However, ISED should ensure that applicants for access licences can clearly demonstrate that they are able to provide telecommunications services. To achieve this goal, we recommend that ISED carefully review the proposed deployment plan of each access licence applicant. ISED should take into account factors such as whether or not they are actively providing commercial telecommunications service that are regulated under the *Telecommunications Act* to the general public in the corresponding Tier 4 service area; previous experience deploying private broadband networks; and previous experience deploying IoT

⁹⁸ Eastlink Comments, paragraph 12.

⁹⁹ Telus Comments, paragraph 59.

¹⁰⁰ CCSA Comments, page 7.

¹⁰¹ Clearwater County (Clearwater) Comments, page 6.

¹⁰² The Consultation, paragraph 12.

¹⁰³ Ecotel Comments, paragraph 78

¹⁰⁴ Redline Comments, paragraph 19.

¹⁰⁵ The Consultation, paragraph 12.

¹⁰⁶ Telus Comments, paragraph 66.

services. This would prevent the inefficient allocation of spectrum to an applicant that does not have the experience and/or ability to deploy the access licence within three years. During that time, rather than being ineffectively deployed by an unqualified licensee, the spectrum could have been used by the primary licensee or another applicant that has clearly demonstrated that they are able to provide telecommunications services.

Q14. ISED is seeking comments on its proposal to issue access spectrum licences with a three-year licence term and the proposed wording of the condition of licence above.

40. Many of the commenters did not support ISED's proposal to issue access spectrum licences with a three-year licence term but rather, proposed longer licence terms ranging from five to 10 years.¹⁰⁷ We do not support longer licence terms. As noted by ISED, three years is a sufficient amount of time for new access licensees with well defined deployment plans in small geographic areas to meet their self-defined deployment obligations.¹⁰⁸ Operators that are looking to gain access spectrum licences should already have developed plans for deployment. Telus shared this view and stated that "access spectrum should only be licensed to operators with a well-developed business case and the desire to deploy the spectrum immediately."¹⁰⁹

41. As mentioned in the Consultation, ISED's expectation is that "the spectrum is put to use in a timely manner."¹¹⁰ If ISED were to increase the licence term, it would not incentivize new access licensees to rapidly deploy and thus, undermines ISED's desire to increase the availability of services provided in rural and remote areas. If the access licensee cannot deploy within the proposed timeline then spectrum should be returned to the original licence holder so that may continue to provide services in the area.

42. Ecotel stated that the licence term needs to be longer to justify the investment.¹¹¹ However, ISED specifies that "there will be a high expectation that a new licence will be issued for an equivalent licence term unless a breach of licence condition has occurred."¹¹² As a result, the access licensee should expect that the licence will be renewed so long as no breach occurs. Therefore, the access licensee's business case should be enough justification for the investment.

¹⁰⁷ AIC Comments, page 6, Communications Télésignal Comments, page 11, Ecotel Comments, paragraph 79, Lyttonnet Comments, page 3, MSI Comments, page 3, Redline, Comments, page 18, British Columbia Broadband Association (BCBA) Comments, page 5, CCSA Comments, page 7, CanWISP Comments, paragraph 45, Fertilizer Canada, page 2, Clearwater, paragraph 39.

¹⁰⁸ The Consultation, paragraph 54.

¹⁰⁹ Telus Comments, paragraph 67.

¹¹⁰ The Consultation, paragraph 54.

¹¹¹ Ecotel Comments, paragraph 79.

¹¹² The Consultation, paragraph 54.

Q15. ISED is seeking comments on its proposal that access spectrum licences not contain transfer, subdivision or subordination privileges.

43. A number of commenters supported ISED's proposal that access spectrum licences not contain transfer, subdivision or subordination privileges.¹¹³ However, Telus¹¹⁴, MSI¹¹⁵ and Clearwater¹¹⁶ did not agree with access spectrum containing subordination privileges but did request that ISED allow access licences to be transferrable. We support ISED's proposal. Access licences should be issued only to those capable of deploying the spectrum themselves. A prohibition of transfers, subdivisions and subordinations will prevent arbitrage opportunities where an applicant profits from the transfer of an access licence. As noted by Rogers, "to provide access licensees the ability to appropriate primary licensees' spectrum rights and then profit from them through a transfer, subdivision or subordination is grossly unfair and would incentivize speculation and unscrupulous behaviour."¹¹⁷ This position is also supported by Lyttonnet, which noted that allowing access licences to be transferrable will reduce competition and incentivize organizations to gain spectrum with the sole intention of selling it to other providers.¹¹⁸

Q16. ISED is seeking comments on its proposal to align the deployment conditions for access spectrum licences with the relevant conditions of licence currently applied to the licences in the specific band, taking into account any differing characteristics such as Tier sizes, and the timing as to when those deployment requirements should apply. ISED is also seeking comments on the appropriateness of existing deployment requirements for private networks.

ISED will consider alternative proposals for the deployment requirements for access spectrum licences. Such proposals should contain a rationale and discussion of their implications for ISED's policy objectives.

44. A number of commenters recommended that deployment requirements apply within 12 to 24 months.¹¹⁹ We do not object to these proposed timelines and support Rogers' recommendation that "access licensees should be required to submit an attestation that

¹¹³ Communications T l signal Comments, page 11, Lyttonnet Comments, page 3, MSI Comments, page 4, Rogers Comments, paragraph 120, SaskTel Comments, paragraph 53, SSI Comments, paragraph 79, Telus Comments, paragraph 72, TerreStar Comments, paragraph 10, Xplornet Comments, paragraph 57, CCSA Comments, paragraph 8, ITPA Comments, paragraph 76, JISM Comments, page 7, Clearwater Comments, paragraph 42.

¹¹⁴ Telus Comments, paragraph 72.

¹¹⁵ MSI Comments, paragraph 4.

¹¹⁶ Clearwater Comments, paragraph 6.

¹¹⁷ Rogers Comments, paragraph 120.

¹¹⁸ Lyttonnet Comments, page 3.

¹¹⁹ AIC Comments, page 6, Ecotel Comments, paragraph 89, Lyttonnet Comments, page 3, Rogers Comments, paragraph 123, SaskTel Comments, paragraph 55, Telus Comments, paragraph 76, CanWISP Comments, paragraph 53, FCM Comments, paragraph 34, ITPA Comments, paragraph 78, Syngenta Comments, page 2, and Clearwater Comments, paragraph 47.

deployment has begun within six months of the access licence being granted." These recommendations will ensure that access licences are put to use in a timely manner.

45. Telus recommended aggressive population-based deployment requirements.¹²⁰ We do not support population-based deployment requirements for access licences. Access spectrum licences should only be issued for the grid cells that are within the proposed three-year deployment plan of the prospective access licensee. As a result, we recommend that the deployment condition require that the access licensee deploy the system(s) and provide the services described in its access licence application (or any application renewal) in relation to this licence and maintain such coverage throughout any subsequent licence terms. This type of deployment requirement has been previously used by ISED and is well understood by industry participants.¹²¹ This approach is also supported by AIC.¹²²

46. In addition, if ISED issues a new access licence, then the existing licensee's deployment requirements should be amended to account for the new access licensee's deployment. ISED should reduce the existing licensee's deployment requirements by the amount of population covered by the new access licence. The existing licensee should not have a population -based deployment target that includes people to whom they are not permitted to serve.

47. Setting deployment targets related to private broadband networks or some other service-specific measure, would be an unnecessary and improper form of interference in the normal functioning of the market. It is also contrary to enabling guideline (a) of the SPFC which states that "market forces should be relied upon to the maximum extent feasible."¹²³ The market for private broadband networks is in the early stages of development and wireless providers do not know how this development will unfold. The development of these new and innovative applications should not be hindered by the introduction of arbitrary deployment targets. Without fully understanding how these markets will develop and evolve, the risk of negative unintended consequences is simply too large.

48. However, our proposed deployment requirement that the access licensee deploy the system(s) and provide the services described in its access licence application (or any application renewal) in relation to this licence and maintain such coverage throughout any

¹²⁰ Telus Comments, paragraph 76.

¹²¹ See for example, "Annex J: Conditions of applicable to all fixed wireless access spectrum licences in the 3500 MHz band", ISED, *Policy and Licensing Framework for Spectrum in the 3500 MHz Band*.

¹²² AIC Comments, page 6.

¹²³ *Spectrum Policy Framework for Canada*, section 4.4.

subsequent licence terms, is flexible enough to apply to private broadband networks or any other system and is consistent with enabling guideline (f) of the SPFC which states "spectrum management practices, including licensing methods, should minimize administrative burden and be responsive to changing technology and market place demands."¹²⁴

Q17. ISED is seeking comments on its proposal to apply the conditions of licence set out in annex B to access spectrum licences issued through the proposed Access Licensing Framework.

49. Most commenters generally supported ISED's proposal to apply the conditions of licence set out in annex B of the Consultation but adjusted to reflect their individual proposals with respect to licence term, deployment requirements and transferability.¹²⁵ We generally support the Department's proposal to apply the conditions of licence in annex B to access spectrum licences. Conditions of licence for access licences should follow the same policies and procedures as the underlying primary spectrum licences – a position supported by SaskTel.¹²⁶

50. We also recommend that any annual spectrum licence fees paid by the existing primary licensee be reduced to reflect the fact that a new access licence has been issued. For example, for Cellular and PCS spectrum licences, the primary licence covers a smaller percentage of the population and thus, the total amount paid should reflect this reduction. There is no justification to require existing primary licensees to pay the full annual licence fee for a spectrum licence that does not cover the full population within a service area. Telus had a similar view and stated that "the fees for the primary licence must be reduced by the equivalent amount to ensure that fees are not submitted twice for the same licence."¹²⁷

51. Telus recommended that ISED remove the research and development (R&D) spending condition for access licences.¹²⁸ As we have noted in previous consultations, this condition of licence is unnecessary and out-of-step with today's modern wireless industry, and inappropriately imposes a regulatory disadvantage on a subset of licensees. This is certainly the case for access licences.

¹²⁴ Ibid.

¹²⁵ See for example, CanWISP Comments, paragraph 58, AIC Comments, page 7, and Rogers Comments, paragraphs 125 to 127.

¹²⁶ SaskTel Comments, paragraph 58.

¹²⁷ Telus Comments, paragraph 78.

¹²⁸ Telus Comments, paragraph 79.

52. Iristel recommended that the annual reporting requirement places an undue bureaucratic burden on the access licensee.¹²⁹ The existing annual reporting condition of licence is overly burdensome on all spectrum licence holders. We encourage ISED to initiate a consultation in the near future with the aim of removing or reducing this requirement for all spectrum licences and recommend that it not be included as part of the access licence conditions of licence.

Q18. ISED is seeking comments on its proposal to make 800 MHz cellular available for access spectrum licenses in rural and remote Tier 5 service areas in which the existing primary or subordinate has no deployment.

Q19. ISED is seeking comments on its proposal to modify the CTFA, where relevant, to change the existing fixed service allocation to primary status in the 824-849 MHz/869-894 MHz range, noting that the fixed service is already allocated on a primary basis in the 890-894 MHz portion.

Q20. ISED is seeking comments on its proposal to make PCS blocks A to F available for access spectrum licenses in rural and remote Tier 5 service areas in which the existing primary or subordinate licensee has no deployment.

Q21. ISED is seeking comments on any other spectrum licence bands that meet the principles proposed in section 5 that could be considered for access spectrum licensing.

53. Commenters that supported ISED's proposal to implement a new Access Licensing Framework also supported ISED's proposal to make 800 MHz and PCS blocks A to F available for access spectrum licences. They also recommended various combinations of other commercial mobile spectrum bands be made available for access licensing. We do not support ISED's proposal to impose a new access licence requirement in the Cellular, PCS or any other spectrum bands. As described in our response to Question 1, no evidence was provided on how ISED's numerous existing spectrum policies (some of which were only recently implemented) have not, or will not, provide sufficient access to spectrum resources requiring ISED to implement an unprecedented proposal to reallocate spectrum from existing licensees that are compliant with their current conditions of licence.

54. Canada's facilities-based wireless providers have: (i) deployed services across the country, including rural and remote regions; (ii) invested tens of billions of dollars on wireless networks which has enabled the development of innovative and emerging applications including 5G; and (iii) continue to compete vigorously which has resulted in significant declines in wireless prices over time. ISED has also made significant amounts of spectrum available

¹²⁹ Iristel Comments, paragraph 46.

through spectrum set-asides and caps, having existing licensees return spectrum for future licensing and allocating more spectrum for use on a shared basis. There is insufficient rationale for ISED to impose a new Access Licensing Framework in the Cellular, PCS or any other spectrum bands.

55. No commenters objected to ISED's policy to adopt flexible use licensing models for fixed and mobile services. We also support ISED's proposal to modify the CTFA, where applicable, to change the existing fixed service allocation to primary status in the 824-849 MHz/869-894 MHz range. Doing so supports the implementation of flexible mobile or fixed deployments in the Cellular spectrum band.

Q22. ISED is seeking comments on the proposal to generally adopt the same technical requirements, including coordination requirements, as published in RSS-132 and SRSP-503 in the cellular band, and RSS-133 and SRSP-510 in the PCS band for future access spectrum licences.

56. All commenters except Lyttonnet and AIC, supported ISED's proposal. AIC recommended "the use of the spectrum be subject to the technical requirements of the system that is being proposed."¹³⁰ However, effective coordination at boundary levels where multiple operators have services requires the harmonization of all technical requirements based on a standard RSS/SRSP. Without such harmonization guard bands will be required to help with out-of-band emissions which will limit the amount of spectrum that can be effectively used and may reduce the quality of the services offered. We support the revision to SRSP-503 that is presently being discussed within the Radio Advisory Board of Canada (RABC).

57. Lyttonnet proposed that the best way to avoid interference issues is to use a database driven model that does not rely on service area boundaries.¹³¹ However, Lyttonnet is not clear how the proposed database would function. We support the use of service area boundaries which strictly enforce interference coordination at geographical locations and ease the coordination process.

58. We support ISED's proposal to adopt the same technical requirements, including coordination requirements and power levels, to facilitate coordination and enable coexistence between licensees operating on the same frequency in neighbouring service areas or operating on adjacent frequencies. This will minimize interference issues and is consistent with enabling

¹³⁰ AIC Comments, page 8.

¹³¹ Lyttonnet Comments, page 4.

guideline (h) of the SPFC that states "spectrum policy and management should support the efficient functioning of markets by ensuring that appropriate interference protection measures are in place."¹³²

Q23. ISED is seeking comments on the above proposal to amend the Condition of Licence concerning "International and Domestic Coordination" for all existing spectrum licensees in blocks A and B of the cellular band and blocks A through F, inclusively, of the PCS band.

59. We recommend that the service area for the access spectrum licence should be limited to the grid cells that are within the proposed three-year deployment plan of the prospective access licensee. Under our recommendation, there is no excess unused geographic area within the licence area of the access licence. Thus, a primary and subordinate licensee can continue to deploy within the relevant Tier 5 service area and there is no need for ISED's proposed change to the primary licence's condition of licence to include "where an access spectrum licence has been issued, the licensee may only deploy in the area licensed to an access spectrum licensee where the licensee and the access spectrum licensee have entered into a coordination agreement." However, if ISED does not adopt our recommendation, then ISED's proposal that allows existing licensees to deploy within the Tier 5 service area if the access licensee and the existing licensee have entered into a coordination agreement would minimize potential interference issues between existing licensees and access licensees. A number of other commenters supported ISED's proposal as well.¹³³

Q24. ISED is seeking comments on its proposal that existing cellular and PCS stations under spectrum licences will be protected from access spectrum licence operations and would not be required to coordinate with new access spectrum licence operations in adjacent service areas.

Q25. ISED is seeking comments on its proposal that any future stations deployed by existing cellular and PCS spectrum licensees would be subject to the coordination rules in SRSP-503 and SRSP-510 applied at the new Tier 5 service area boundary where an access spectrum licence has been issued.

Q26. ISED is seeking comments on its proposal that existing radio licensees operating standard systems in the PCS band would be protected from access spectrum operations and access spectrum licensees may not trigger displacement of existing radio licences in the PCS band.

¹³² *Spectrum Policy Framework for Canada*, section 4.4.

¹³³ Communications T l signal Comments, page 14, Ecotel Comments, paragraph 103, Iristel Comments, paragraph 52, MSI Comments, page 5, SaskTel Comments, paragraph 69, Telus Comments, paragraph 96, Xplornet Comments, paragraph 67, CCSA Comments, page 10, CanWISP Comments, paragraph 68, FMCC Comments, paragraph 80, and ITPA Comments, paragraph 99.

60. All commenters broadly supported ISED's proposal that existing Cellular and PCS stations under spectrum licences will be protected from access spectrum licence operations and would not be required to coordinate with new access spectrum licence operations in adjacent service areas.¹³⁴ However, Ecotel disagreed with the requirement to coordinate with new access spectrum licence operations in adjacent service areas "as [it] would be detrimental to new access licensees."¹³⁵ We do not support this view. ISED's proposal protects existing and access licensees in the Cellular and PCS spectrum bands as it will help ISED manage the relationship between existing licensees and access licensees. In addition, Rogers correctly pointed out that "the stated goal of the Consultation is to increase rural and remote coverage but requiring primary licensees to coordinate existing stations is not only unfair but would be a counter-productive policy decision."¹³⁶

61. The majority of commenters broadly supported ISED's proposal that any future stations deployed by existing cellular and PCS spectrum licensees would be subject to the coordination rules in SRSP-503 and SRSP-510 applied at the new Tier 5 service area boundary where an access spectrum licence has been issued.¹³⁷ However, consistent with our comments that the service area for the access spectrum licence should only be for the grid cells that are within the proposed three-year deployment plan of the prospective access licensee, the appropriate boundary should be the access licensees' deployment boundary and not the boundary of the Tier 5 service area.¹³⁸ The CEA had a similar view and stated that ISED should allocate access licences based on grid cells.¹³⁹

62. Furthermore, we support Telus' recommendation that if the access licence is returned or revoked, this boundary coordination requirement should no longer apply to the primary licence or to its subordinate licences.¹⁴⁰

¹³⁴ Communications Télésignal Comments, page 14, Ecotel Comments, paragraph 104, Iristel Comments, paragraph 53, MSI Comments, page 5, Redline Comments, page 20, Rogers Comments, paragraph 160, SaskTel Comments, paragraph 69, SSI Comments, paragraph 90, Telus Comments, paragraph 98, Xplornet Comments, paragraph 68, BCBA Comments, page 5, CCSA Comments, page 10, Canadian Electricity Association (CEA) Comments, page 15, CanWISP Comments, paragraph 69, FMCC Comments, paragraph 81, ITPA Comments, paragraph 100, JISM Comments, page 9.

¹³⁵ Ecotel Comments, paragraph 105.

¹³⁶ Rogers Comments, paragraph 160.

¹³⁷ Communications Télésignal Comments, page 14, Ecotel Comments, paragraph 106, Iristel Comments, paragraph 54, Redline Comments, page 20, Rogers Comments, paragraph 162, SaskTel Comments, paragraph 71, SSI Comments, paragraph 71, Telus Comments 99, Xplornet Comments, paragraph 69, BCBA Comments, page 5, CCSA Comments, page 10, CEA Comments, page 15 CanWISP Comments, paragraph 70, FMCC Comments, paragraph 82, ITPA Comments, paragraph 102, JISM Comments, page 9.

¹³⁸ Bell Comments, paragraphs 28 to 30 and 52.

¹³⁹ CEA Comments, paragraph 7.

¹⁴⁰ Telus Comments, paragraph 100.

63. All commenters supported ISED's proposal that existing radio licensees operating standard systems in the PCS band would be protected from access spectrum operations and access spectrum licensees may not trigger displacement of existing radio licences in the PCS band.¹⁴¹ However, Telus accepted the proposal on the condition that ISED does not issue access licences in Tier 5 areas where a licensee (or a subordinate licensee) currently offers coverage.¹⁴² We agree with Telus, and further support their additional request to "protect grandfathered operations of point-to-point radio licensed systems operating in the PCS band and that access spectrum licensees should not displace existing radio licences in the PCS band."¹⁴³

Q27. ISED is seeking comments on the process for making access spectrum licences available and the options described above.

64. A number of commenters supported Option 1 with Telus noting that adopting Option 2 and offering access licences in "tranches" introduces added complexity.¹⁴⁴ We disagree. In our comments we proposed a simple mechanism where access licences are issued for Tier 5 service areas with the smallest populations first. This is a straightforward mechanism that is simple to understand, easy to implement, and does not favour one access licence applicant over another.

65. We prefer ISED's proposed Option 2 which would make selected Tier 5 service areas available for access spectrum licensing in sequential releases or "tranches" but the sequential release cannot begin three months after the release of the decision. Rogers¹⁴⁵, SaskTel¹⁴⁶, CCSA¹⁴⁷, Clearwater¹⁴⁸, and RMA¹⁴⁹ also supported Option 2. Staggering the release of Tier 5 service areas will provide both the Department and existing licensees with a systematic process and sufficient time to verify that services have not been deployed within the Tier 5 service area. However, we recommend that the "tranches" be released every six months rather than on a

¹⁴¹ Communications Télésignal Comments, page 15, Ecotel Comments, paragraph 107, Iristel Comments, paragraph 55, MSI Comments, page 5, Rogers Comments, paragraph 163, SaskTel Comments, paragraph 72, SSi Comments, paragraph 90, Telus Comments, paragraph 101, Xplornet Comments, paragraph 70, BCBA Comments, page 5, CCSA Comments, page 11, CanWISP Comments, paragraph 71, FMCC Comments, paragraph 83, ITPA Comments, paragraph 103, Cogeco Comments, paragraph 63, JISM Comments, page 9.

¹⁴² Telus Comments, paragraph 99.

¹⁴³ Telus Comments, paragraph 101.

¹⁴⁴ Cogeco Comments, paragraph 67, Iristel Comments, paragraph 56, Lyttonnet Comments, page 4, Redline Comments, page 20, Telus Comments, paragraph 102, CanWISP Comments, paragraph 72, FCM Comments, paragraph 38, and ITPA Comments, paragraph 107.

¹⁴⁵ Rogers Comments, paragraph 164.

¹⁴⁶ SaskTel Comments, paragraph 79.

¹⁴⁷ CCSA Comments, page 11.

¹⁴⁸ Clearwater Comments, paragraph 49.

¹⁴⁹ Rural Municipalities of Alberta (RMA) Comments, paragraph 13.

quarterly basis. Releasing spectrum every three months will not provide ISED or existing licensees with sufficient time to conduct the necessary verification.

66. Rogers also supported Option 2 because of the administrative burden that Option 1 creates. Rogers stated:

"As the Department indicates, Option 1 is also likely to create significant administrative challenges for both the Department and prospective applicants. We believe that with the wide range of spectrum files that the Department is currently managing, in addition to the significant resources the Department needs to devote to other sectors of the economy looking to power out of COVID, creating unnecessary administrative burden is not a good use of government resources."¹⁵⁰

67. The CCSA is also concerned about the administrative burden of Option 1 and that it may have the unintended consequence of slowing down rural deployment:

"As the Notice of Consultation suggests, release of all the blocks at once nationally could create a significant bottleneck in processing time and, in CCSA's view, possibly frustrate timely deployment of the spectrum. In addition, a phased release may allow stakeholders – especially the smaller ones – to get a better understanding of the playing field as the process unfolds. Finally, a phased release in tranches will probably support access to spectrum for by smaller applicants by spreading their required capital spends over time."¹⁵¹

Q28. Under both options, ISED is seeking comments on its proposal to begin access spectrum licensing three months after the publication of the decision.

68. A few commenters supported ISED's proposal to begin access spectrum licensing three months after the publication of the decision, but none of these provided evidence, or even unsubstantiated arguments, on why this should be the case.¹⁵² We strongly disagree with ISED's proposal. It is completely inappropriate for ISED to begin access spectrum licensing three months after the publication of a decision on the Consultation. ISED's proposed Access Licensing Framework seeks to expropriate a portion of an existing licensee's spectrum licence without any warning even though existing licensees have met, and continue to meet, their conditions of licence. We are not aware of any precedent for making such a change when a licensee is compliant with their conditions of licence.

¹⁵⁰ Rogers Comments, paragraph 167.

¹⁵¹ CCSA Comments, page 11.

¹⁵² Ecotel Comments, paragraph 112, Iristel Comments, paragraph 57, Telus Comments, paragraph 108, CCSA Comments, page 11, CanWISP Comments, paragraph 77, FMCC Comments, paragraph 8, ITPA Comments, paragraph 108, and Clearwater Comments, paragraph 51.

69. ISED is assessing the extent of unused spectrum within a Tier 5 service area even though Cellular and PCS spectrum licensees were never required to deploy to that level. If the proposed framework is implemented, ISED will effectively be punishing existing licensees for not deploying to a target that they were never required to meet. This is clearly contrary to enabling guidelines (d), (e) and (h) of the SPFC which state that "regulatory measures, where required, should be minimally intrusive, efficient and effective," "regulation should be open, transparent and reasoned, and developed through public consultation, where appropriate," and "spectrum policy and management should support the efficient functioning of markets by clearly defining the obligations and privileges conveyed in spectrum authorizations."¹⁵³

70. Existing licensees would need significantly more than three months to adjust to ISED's proposed new Access Licensing Framework. This concern is also raised by Rogers:

"While it may be possible that primary operators can look to bring forward some network deployments, operators need sufficient time to understand the details of the 850 & PCS Consultation decision and fold it into their standard network planning processes. Site selection and design will need to occur, which may require significant new site builds. In rural and remote areas, that may also necessitate building power and access to a new site location, in addition to standard structural and backhaul facilities. Building in rural and remote areas can also be particularly time consuming due to the limited specialized workers in local areas, as well as shortened construction seasons due to harsh weather. Funding will also need to be secured as part of the rigorous budgeting processes required for publicly-traded companies."¹⁵⁴

71. We are unaware of any instance in which ISED imposed a new spectrum deployment requirement that had to be met in less than five years. A three-month requirement is simply absurd. As a result, we recommend that at a minimum, access spectrum licensing should not occur until five years after the publication of the decision. This would be consistent with the deployment timeline ISED recently proposed for the same spectrum bands in *DGSO-003-21 Consultation on Amending Cellular and Personal Communications Services (PCS) Licence Conditions*. However, even five years is aggressive. In DGSO-003-21, we noted that in consideration of the challenging new deployment targets ISED has proposed a 10-year deadline would be more appropriate.

¹⁵³ *Spectrum Policy Framework for Canada*, section 4.4.

¹⁵⁴ Rogers Comments, paragraph 171.

72. Rogers stated a similar position:

"... the proposal to begin access licensing three months after the publication of the decision would lead to a number of poor wireless policy outcomes. In particular, the fact that ISED is also consulting on increased deployment requirements for Cellular and PCS in parallel, launching the consultations on the same day, creates a high-level of regulatory uncertainty that is almost certain to result in a delay in rural and remote deployments. It would have been a much better policy choice to consult on an Access Licensing regime at the end of the Cellular and PCS licence terms; however, at a minimum, the Department should not impose any access regime for five years in order to allow primary licence holders an opportunity to build out to the new requirements."¹⁵⁵

Q29. Under both options, ISED is seeking comments on its proposals to limit the number of access spectrum licence applications to:

- **Option 1: 20 per applicant per 12 month period**
- **Option 2: 5 per applicant at the opening of the access licensing process for each tranche**

73. A number of commenters supported ISED's proposal to limit the number of access spectrum licence applications to 20 per applicant per 12 month period¹⁵⁶ and ITPA noted that "Option 2 would be a less effective process than Option 1" because it will lead to partial or incomplete spectrum releases everywhere.¹⁵⁷ However, Option 2 will support more equitable distribution of access licences and as noted above, staggering the release of Tier 5 service areas will provide both the Department and existing licensees with a systematic process and sufficient time to verify that services have not been deployed within the Tier 5 service area. Rogers also noted that Option 2 will likely provide a more orderly approach to releasing access licences as "having no limits on applications risks opening the proverbial flood gates to disreputable actors that are looking to gain from speculation," and "also risks overloading the Department with administrative burdens and injecting greater risk and disruption into primary licensees' network planning and building processes."¹⁵⁸

74. Rogers¹⁵⁹, SaskTel¹⁶⁰ and CCSA¹⁶¹ supported limiting the number of access spectrum licence applications to five per applicant at the opening of the access licensing process for each "tranche". We agree, but also propose that ISED allow applications that request more than five

¹⁵⁵ Rogers Comments, paragraph 168.

¹⁵⁶ Ecotel Comments, paragraph 113, Iristel Comments, paragraph 58, Lyttonnet Comments, page 4, CEA Comments, page 16, CanWISP Comments, paragraph 78, ITPA Comments, paragraph 109.

¹⁵⁷ ITPA Comments, paragraph 109.

¹⁵⁸ Rogers Comments, paragraph 174.

¹⁵⁹ Ibid.

¹⁶⁰ SaskTel Comments, paragraph 81.

¹⁶¹ CCSA Comments, page 12.

spectrum licences if the applicant can clearly demonstrate to ISED that they require additional spectrum for deployment. For example, there may be an IoT use case for monitoring equipment across more than five service areas. ISED should not arbitrarily dismiss this type of deployment and should review each application on a case-by-case basis. With this exception ISED could still maintain its discretion to limit the application to five spectrum licences.

Q30. Under Option 2, ISED is seeking proposals on how it should prioritize Tier 5 licence areas and spectrum blocks if it adopts a sequential release of spectrum for access spectrum licensing. Proposals should address the key considerations of equitable geographic distribution, coverage, impacts on existing licensees, potential business cases, and timeliness.

75. CanWISP proposed ISED select service areas based on the equal number of Tier 5 areas for each Tier 3 service area and prioritizing the release of higher populated areas first.¹⁶² In fact, the opposite approach is appropriate – ISED should focus on Tier 5 service areas with the smallest populations first. Traditionally, existing licensees will plan their network deployment to start in the largest population centres and work their way out to smaller population centres. Access licences should then be made available in the smallest population service areas first and then work their way in towards the deployment of existing licensees. Therefore, to the extent possible, each "tranche" of spectrum should consist of an equal number of Tier 5 service areas from each Tier 2 service area across Canada starting with the Tier 5 areas with the smallest population areas. This would be similar to the assignment stage process in the recent 3500 MHz spectrum auction, but in reverse order.¹⁶³ Rogers had a similar view and further stated that "primary licensees will continue extending their network coverage outwards so, logically, it makes sense to focus on providing access licences furthest from current network coverage areas."¹⁶⁴

Q31. ISED is seeking comments on its proposal to issue site-specific access radio licences within rural and remote Tier 5 service areas under the Access Licensing Framework.

76. No commenters objected to ISED's proposal to issue site-specific access radio licences within rural and remote Tier 5 service areas under the Access Licensing Framework.¹⁶⁵ The

¹⁶² CanWISP Comments, paragraph 82.

¹⁶³ ISED, SLPB-001-20 *Policy and Licensing Framework for Spectrum in the 3500 MHz Band*, paragraph 199.

¹⁶⁴ Rogers Comments, paragraph 179.

¹⁶⁵ AIC Comments, page 9, Communications Télésignal, page 16, Ecotel Comments, paragraph 120, Iristel Comments, paragraph 60, Lyttonnet Comments, paragraph 4, MSI Comments, page 6, Redline Comments, page 20, Rogers Comments, paragraph 180, Telus Comments, paragraph 117, Xplornet Comments, paragraph 75, BCBA Comments, page 5, CEA Comments, page 17, CanWISP Comments, paragraph 83, FMCC Comments, page 90, ITPA Comments, paragraph 112, Clearwater Comments, paragraph 55.

issuance of site-specific access radio licences within rural and remote Tier 5 service areas is appropriate as it is consistent with the original licensing approach. As indicated by ISED, "aligning with the same site-specific regime when applying the Access Licensing framework to radio licensed bands will allow ISED to manage interference to existing LMR or fixed licensees while giving flexibility to access radio licensees to deploy in localized areas."¹⁶⁶ Furthermore, we support Rogers' recommendation to issue "site-specific access licences for both public and private network operators to limit the harms done to primary licences."¹⁶⁷

Q32. ISED is seeking comments on its proposal to follow its LMR licensing process to receive and review applications for access radio licences.

Q33. ISED is seeking comments on its proposal not to limit the number of access radio licence applications an applicant may submit via the Spectrum Management System for these bands.

77. The majority of commenters were in support of ISED's proposal to follow its LMR licensing process to receive and review applications for access radio licences except for Rogers and minor comments from Telus. Rogers stated that "the Department should not follow its LMR licensing process to receive and review applications for access radio licences, as these are not licences that are being wholly managed by the Department but, rather, proposing to grant access to spectrum that has been exclusively licensed to a primary licensee on a spectrum licence service area."¹⁶⁸ Furthermore, Rogers suggested that contact should be established with the primary licensee to confirm their 18-month build plans before access licensing is implemented, including radio access licensing.¹⁶⁹ We support Rogers' recommendation that there should be contact with the primary licensee to confirm build plans before implementing any type of access licensing, including radio access licensing.

78. Telus is of the view that ISED's proposal is to deviate from the existing SRSP and RSS technical standards: "ISED proposes to allow 3+3 MHz 'broadband' use of the 900 MHz LMR band that is currently allocated for narrowband."¹⁷⁰ We support Telus' position as well as ISED's proposal to implement broadband in the LMR band. Furthermore, we support Telus' recommendation that ISED initiate a consultation for the transition of the 900 MHz band.¹⁷¹ We

¹⁶⁶ The Consultation, paragraph 99.

¹⁶⁷ Rogers Comments, paragraph 180.

¹⁶⁸ Rogers Comments, paragraph 182.

¹⁶⁹ Ibid.

¹⁷⁰ Telus Comments, paragraph 118.

¹⁷¹ Telus Comments, paragraph 119.

support this proposal as there is a need for standards modernization to allow broadband use of the 900 MHz LMR band.

79. The majority of commenters were of the view that ISED should not limit the number of access radio licence applications an applicant may submit via the Spectrum Management System for these bands. However, Rogers and CanWISP opposed ISED's proposal. Rogers is proposing to require the confirmation of the availability of the spectrum with an 18-month build cycle and limiting number of applicants to 20 in a six-month period.¹⁷² Although we maintain our initial position, we also support Rogers recommendation limiting a single applicant to 20 applications in a six-month period.

Q34. ISED is seeking comments on potential eligibility restrictions for access radio licences.

80. Communications Télésignal¹⁷³ and Clearwater¹⁷⁴ oppose ISED's proposal and recommended that there should be no limitation on eligibility. We do not support this view and support ISED's proposal to "limit eligibility to those parties who can present to ISED a plan for a specific private network."¹⁷⁵ Xplornet¹⁷⁶, CanWISP,¹⁷⁷ ITPA¹⁷⁸ and BCBA¹⁷⁹ also share this view. As ISED reviews each application on a case-by-case basis, ISED will be able to approve plans from non-traditional applicants that are able to clearly demonstrate that they will be able to deploy the access radio licence.

Q35. ISED is seeking comments on its proposal to apply the above conditions of licence to access radio licences.

81. The majority of commenters supported ISED's proposal to apply the above conditions of licence to access radio licences.¹⁸⁰ We support ISED's proposal to require access licensees to provide, within 30 calendar days following a request from ISED, a summary of all data for the radio equipment and system related to this licence as set out in the request. In addition, we

¹⁷² Rogers Comments, paragraph 187.

¹⁷³ Communications Télésignal Comments, page 17.

¹⁷⁴ Clearwater Comments, paragraph 62.

¹⁷⁵ The Consultation, paragraph 103.

¹⁷⁶ Xplornet Comments, paragraph 78.

¹⁷⁷ CanWISP Comments, paragraph 91.

¹⁷⁸ ITPA Comments, paragraph 115.

¹⁷⁹ BCBA Comments, page 5.

¹⁸⁰ Communications Télésignal Comments, page 17, Ecotel Comments, paragraph 124, Redline Comments, page 21, Xplornet Comments, paragraph 79, BCBA Comments, page 5, GEA Comments, page 18, CanWISP Comments, paragraph 92, ITPA Comments, paragraph 116.

recommend that if site uploads do not match the deployment plan submitted in the application, then the licence should be revoked.

Q36. ISED is seeking comments on its proposal to allow broadband use in the 900 MHz LMR band as shown in figure 6.

82. All commenters supported ISED's proposal to allow broadband use in the 900 MHz LMR band. The 900 MHz LMR band can support broadband use and should align with the United States band plan as 3 MHz and 5 MHz channel bandwidths are supported by LTE and LTE/New Radio (NR) technologies, respectively. However, there currently exist implementation issues. While radio and device ecosystems for band 8/n8 exist, the relevant radios and devices are not yet certified in Canada and as stated by ISED, modifications may be needed to accommodate different duplex spacing requirements.¹⁸¹ We also note that the uplink (UL) frequency range of band 8 (UL 880–915 MHz / DL 925–960 MHz) overlaps with the downlink (DL) frequency band 5 (UL 824–849 MHz / DL 869–894 MHz) which can create additional interference issues. This means radio access network (RAN) vendors will need to be involved for required modifications before broadband use can be fully implemented in the 900 MHz LMR band.

Q37. ISED is seeking comments on its proposal to issue access radio licenses in the 897.5-900.5 MHz and 936.5-939.5 MHz portions of the 900 MHz LMR band in rural and remote Tier 5 service areas and only in locations within those service areas where there will be no interference to existing LMR operations.

83. The majority of commenters supported ISED's proposal to issue access radio licenses in the 897.5-900.5 MHz and 936.5-939.5 MHz portions of the 900 MHz LMR band in rural and remote Tier 5 service areas.¹⁸² JISM noted that 2x3 MHz has limitations and that an overwhelming majority of LTE eNodeB manufacturers provide LTE equipment which requires a minimum of 2x5MHz of spectrum.¹⁸³ We disagree, as the 3 MHz channel bandwidth is supported in standards (3GPP) for LTE bands and can be leveraged for various applications such as IoT and eMTC. We support ISED's proposal as the 900 MHz spectrum band can be used for access radio licences as it is attractive for many different services and applications due to its favourable radio frequency propagation characteristics. It can provide the needed spectrum for IoT applications and private broadband networks as they can require a large

¹⁸¹ The Consultation, paragraph 112.

¹⁸² Communications Télésignal Comments, page 18, Ecotel Comments, paragraph 127, Iristel Comments, paragraph 64, MSI Comments, page 6, Redline Comments, page 21, Rogers Comments, paragraph 197, Xplornet Comments, paragraph 81, BCBA Comments, page 5, CanWISP Comments, page 95, CCSA Comments, page 13, CEA Comments, page 18, JISM Comments, page 11.

¹⁸³ JISM Comments, page 11

number of wireless smart meters, sensors, or control devices to monitor various conditions of deployment. Various industries can leverage LTE and 5G technologies for enhanced communications utilizing handheld devices, cameras, etc. for improved safety and reliability of equipment and processes. Furthermore, existing LMR operations should be protected from interference by access radio licences. This view is also shared by Communications T l signal¹⁸⁴ and Rogers.¹⁸⁵

Q38. ISED is seeking comments on availability of equipment for the proposed broadband service, including the feasibility of modifying 3GPP band 8 equipment.

84. CanWISP¹⁸⁶ and Ecotel¹⁸⁷, noted that the availability of equipment for the proposed broadband service is scarce. However, as mentioned by MSI¹⁸⁸ and Redline¹⁸⁹, both broadband and narrowband equipment designed for the 900 MHz band in the United States is available from multiple vendors, with equipment modifications being possible based on market demand. We agree with MSI and Redline, as the equipment for the proposed broadband service should become available once it is certified by ISED. Currently, there are 158 modules supporting band 8, and 32 of these support LTE Machine-Type Communication (MTC) and NB-IoT. In addition, 744 integrated devices are supporting band 8, and 205 of those support LTE-MTC and NB-IoT.

85. Rogers raised the issue that the large numbers of additional private (and public) network operators will put a significant strain on Home Network Identity code resources.¹⁹⁰ We support Rogers' proposal for ISED to engage the Canadian Steering Committee on Numbering prior to making the spectrum available to define appropriate protocols and processes to prevent resource exhaustion.¹⁹¹

¹⁸⁴ Communications T l signal Comments, page 18.

¹⁸⁵ Rogers Comments, paragraph 197.

¹⁸⁶ CanWISP Comments, paragraph 96.

¹⁸⁷ Ecotel Comments, paragraph 128.

¹⁸⁸ MSI Comments, page 6.

¹⁸⁹ Redline Comments, page 21.

¹⁹⁰ Rogers Comments, paragraph 202.

¹⁹¹ Ibid.

Q39. ISED is seeking comments on the potential use cases of 3/3 MHz for broadband services, including the potential for 5G deployment.

86. Rogers¹⁹², Iristel¹⁹³, Cogeco¹⁹⁴, ITPA¹⁹⁵ and FMCC¹⁹⁶ raised potential issues with the use of 3/3 MHz for broadband services. In our comments, we also mentioned that in the future, operators may need to maintain LTE operations to provide service to legacy mMTC devices and that as a result, it is important to enable efficient spectrum co-existence between new radio and LTE-MTC.¹⁹⁷ In addition, Iristel stated that ISED should favour using the standard duplex spacing of 45 MHz.¹⁹⁸ Although 45 MHz would align with the current ecosystem, vendors can make the necessary modifications in existing equipment based on market demand.

87. Cogeco noted that 3/3 MHz might limit use to low throughput applications.¹⁹⁹ We disagree. While 3/3 MHz may provide insufficient capacity for public networks, it can provide material speed and capacity for private network operations. A similar view was expressed by Rogers.²⁰⁰

Q40. ISED is seeking comments on the feasibility of also making 896-901 MHz and 941-946 MHz available for broadband at the same time as 987.5-900.5 MHz and 936.5-939.5 MHz.

88. The majority of commenters supported ISED's proposal on the feasibility of also making 896-901 MHz and 941-946 MHz available for broadband at the same time as 987.5-900.5 MHz and 936.5-939.5 MHz. However, MSI recommended that ISED should align its band plan with the United States for the 900 MHz band and opposed making the entire band available for broadband.²⁰¹ We do not support this recommendation. Although ISED may consider full alignment with the United States band plan in the future, we continue to support ISED's proposal. Furthermore, we support Rogers' recommendation that ISED begin consulting on aligning with the United States changes to 900 MHz LMR band plans.²⁰²

¹⁹² Rogers Comments, paragraph 203.

¹⁹³ Iristel Comments, page 19.

¹⁹⁴ Cogeco Comments, page 19.

¹⁹⁵ ITPA Comments, paragraph 126.

¹⁹⁶ FMCC Comments, paragraph 99.

¹⁹⁷ Bell Comments, paragraph 66.

¹⁹⁸ Iristel Comments, paragraph 66.

¹⁹⁹ Cogeco Comments, paragraph 80.

²⁰⁰ Rogers Comments, paragraph 203.

²⁰¹ MSI Comments, page 7.

²⁰² Rogers Comments, paragraph 206.

Q41. ISED is seeking comments on its proposal to use the same methodology for determining geographic separation for broadband service as already included in SRSP-506 for land mobile systems.

89. A number of commenters supported ISED's proposal to use the same methodology for determining geographic separation for broadband service as already included in SRSP-506 for land mobile systems.²⁰³ Rogers broadly supported ISED but noted that specific details (e.g., units, values and any other relevant applicable information) should be reviewed by the RABC.²⁰⁴ We support Rogers' proposal and if required, we support ISED consulting with industry stakeholders through the RABC to develop and refine further technical rules. The RABC is the appropriate forum to thoroughly discuss technical rules as they affect all industry stakeholders.

Q42. ISED is seeking comments on whether the 1.5 MHz and 500 kHz of separation are sufficient to protect the adjacent band Air-Ground Radiotelephone Service, fixed service and Narrowband Personal Communications Service.

90. A number of commenters supported ISED's proposal.²⁰⁵ We support the view that ISED should have a 1.5 MHz and 500 kHz of separation between the broadband segment to protect the adjacent band Air-Ground Radiotelephone Service, fixed service and Narrowband Personal Communications Service. As noted by ISED, "these frequency separations will provide sufficient protections to Air-Ground Radiotelephone Service, fixed service and Narrowband Personal Communications Service."²⁰⁶

3.0 STREAMLINING THE SUBORDINATE LICENSING PROCESS

Q43. ISED is seeking comments on the potential or actual benefits of subordinate licensing to increase rural broadband access and accommodating new innovative network usage.

91. Only the CEA²⁰⁷, Ecotel²⁰⁸ and FCM²⁰⁹ suggested that subordinate licensing is dysfunctional, is not a useful tool, and should be mandated. We disagree. As explained by Shaw, "subordination represents a powerful market-based solution for facilitating rural and remote wireless deployment and supporting innovative uses that does not invite the challenges

²⁰³ Communications T l signal Comments, page 19, MSI Comments, page 7, Rogers Comments, paragraph 207, BCBA Comments, page 5, CanWISP Comments, paragraph 100, ITPA Comments, paragraph 133.

²⁰⁴ Rogers Comments, paragraph 207.

²⁰⁵ Communications T l signal Comments, page 19, MSI Comments, page 7, Rogers Comments, paragraph 208, ITPA Comments, paragraph 133,

²⁰⁶ The Consultation, paragraph 120.

²⁰⁷ CEA Comments, page 19.

²⁰⁸ Ecotel Comments, paragraph 136;

²⁰⁹ FCM Comments, paragraph 39.

associated with ISED's access licensing proposals."²¹⁰ We also agree with Shaw that "appropriate incentives exist to enter into subordination arrangements and the public record of subordinate licence issuances establishes that this is a mechanism being accessed, including by smaller providers and innovators."²¹¹

92. Since 2017, there have been 53 subordination applications approved by ISED covering hundreds of spectrum licences in all regions of Canada, including rural and remote areas.²¹² The use of subordinate licences has also supported network deployment to over 99% of Canadians. Furthermore, subordinate licences have been approved for use by private broadband networks. For example, subordinate spectrum licences have been approved for the Iron Ore Company of Canada, Ecotel Inc., Teck Resources Ltd., and Canadian Natural Resources Ltd. The number of subordinate applications clearly demonstrates that subordinate licences are an effective means to facilitate access to spectrum and the delivery of innovative broadband services across all regions of Canada including rural and remote areas.

93. 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.

94. However, process improvements can be made with respect to the length of time required to approve subordinate licence applications, especially for those related to private broadband networks. The development of new and innovative services should not be hindered by long subordinate licence application approval timelines. For example, there is no reason that an approval for a short-duration subordination such as for a music festival or sporting event, or a subordination for a limited geographic area such as a mine, should take the same amount of time to review as a 20-year subordination across a Tier 2 service area. ISED should allow for immediate approval (or highly expedited approval) for subordinations related to private broadband networks and IoT applications.

²¹⁰ Shaw Comments, paragraph 7.

²¹¹ Shaw Comments, paragraph 8.

²¹² ISED, *Decisions on Licence Transfers of Commercial Mobile Spectrum*, available at <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10717.html>.

Q44. ISED is seeking comments on ways in which to streamline the general application requirements for subordinate licences as set out in sections 5.6.3 and annex D of CPC-2-1-23. ISED also seeks proposals to streamline the application process for all subordinate licence applicants, including those in commercial mobile bands who must also provide material addressing the criteria and considerations in section 5.6.4 of CPC-2-1-23. In these proposals, ISED also seeks comments as to how parties can demonstrate (e.g., an attestation, or other commitment) that their request for a subordinate licence does not constitute a transfer, deemed transfer, or prospective transfer as discussed in section 8.2.1 above.

95. A number of commenters supported ISED's objective to simplify the information requirements for a subordinate licence application in order to support a more timely review process.²¹³ To streamline subordinate licence application processing, we recommend that ISED make greater use of standardized attestations from the applicants. For example, standardized attestations could be used to confirm: (i) the eligibility of the subordinate licensee; (ii) that the primary licensee maintains control of the spectrum licence; and (iii) that the subordination is not a transfer, deemed transfer, or prospective transfer as defined in CPC-2-1-23 – *Licensing Procedure for Spectrum Licences for Terrestrial Services*. The use of attestations was also supported by Telus²¹⁴, TerreStar²¹⁵ and Xplornet²¹⁶.

96. We recommend that ISED prepare draft standardized attestations which provide clarity with respect to factors that ISED considers important. ISED should then initiate a short consultation that allows stakeholders to comment on the proposed language. This will help ensure that the proposed language does not unintentionally impair licensees' ability to negotiate commercially agreeable terms or otherwise introduce unintended consequences.

97. SSi recommended that when streamlining its subordination process "ISED consider the ways the CRTC has streamlined the process of seeking approval for intercarrier agreements and tariff applications."²¹⁷ Not all subordinate licence applications require the same review timelines. Some subordinate licence applications are simple to assess while others are more complex. For example, subordinate licence applications from applicants with pre-existing subordinations can be reviewed quicker than subordinate licence applications from applicants with no previous subordination relationships. Similarly, given their specialized nature and the fact that they will not affect competition in the market for mobile wireless services, a subordinate

²¹³ Cogeco Comments, paragraph 92, Eastlink Comments, paragraph 15, First Broadband Comments, page 2, Rogers Comments, paragraph 212 and Xplornet Comments, paragraph 90.

²¹⁴ Telus Comments, paragraph 131.

²¹⁵ TerreStar Comments, paragraph 14.

²¹⁶ Xplornet Comments, paragraph 90.

²¹⁷ SSi Comments, paragraph 105.

licence application for a private broadband network or an IoT application should be treated as a simple application that receives a quick review, or even no review by ISED.

98. We recommend that ISED develop different review processes and timelines for subordinate licence application reviews depending on the complexity of the application (e.g., simple and standard).²¹⁸ Simple subordinate licence applications should then be approved immediately (or on a highly expedited basis) and standard subordinate licence applications should be approved within eight weeks (especially given the use of standardized attestations).

99. Moreover, we recommend that spectrum used by a private network should not require a subordinate licence, regardless of who owns or operates the private network equipment. Given that a private network does not provide service to the general public and only operates in a localized area, there should be minimal concern about harmful interference. However, to the extent that interference issues arise, the spectrum licensee retains responsibility for meeting any regulatory obligations (including interference management) and can work with other parties to implement corrective actions.

100. By not requiring a private network entity to have a subordinate licence, spectrum may be put to use more quickly and efficiently. Spectrum licensees and private network operators will also be able to more effectively create and expand new services and applications and develop new business opportunities. This will increase the economic and social benefits that Canadians derive from the use of spectrum resources. To the extent that ISED feels it is prohibited by provisions in the *Radiocommunication Act* from implementing this recommendation, then it would be beneficial to all industry stakeholders to seek changes to the relevant sections in the legislation.

101. Telus recommended that with respect to subordinate licence applications, that ISED: (i) only require that "the parties list out their existing spectrum holdings and the prospective subordinate party indicate their planned use for the subordinate spectrum"²¹⁹ rather than discussing all criteria; and (ii) that for subordinate licence applications, "providing spectrum concentration calculations for all licensees in the region is unnecessary, because a subordination does not change the overall spectrum concentration of the primary licensees."²²⁰

²¹⁸ Bell Comments, paragraphs 75 to 77.

²¹⁹ Telus Comments, paragraph 130.

²²⁰ Telus Comments, paragraph 129

We support these recommendations and agree that they would reduce the administrative burden of the subordinate licence application process.

102. We also recommend that ISED remove factors (c) and (e) from section 5.6.4.2 of in CPC-2-1-23 – *Licensing Procedure for Spectrum Licences for Terrestrial Services* which state "the current and/or prospective services to be provided and the technologies available using the licensed spectrum band" and "the relative utility (e.g. above and below 1 GHz) and substitutability of the licensed spectrum and other commercial mobile spectrum bands in the licensed area," respectively.²²¹ ISED is well aware of the types of services being provided in the market and the utility of other commercial mobile spectrum bands in the licenced area. To the extent that the subordinate licence applicants are enabling a service that ISED is not aware of, the applicants can discuss the service in relation to factor (h) which allows for the assessment of "any other factors relevant to the policy objective outlined in Section 5.6.4 that may arise from the Licence Transfer or the Prospective Transfer."²²²

103. Rogers suggested that ISED "must finally address the Belus issue and explore spectrum caps applied at the network level (in auctions and with subordination requests) to support sustained competition in the provision of wireless services so that consumers and businesses benefit from greater choice and competitive prices."²²³ Not only is such a statement unsupported by any facts, it is completely misplaced in the current proceeding. Rogers does not explain how the network reciprocity agreement between Bell and Telus negatively impacts competition or the Canadian public. In fact, the experience to date has been the opposite. Nor does Rogers dispute that Bell and Telus actively compete against each other in retail and wholesale markets. Rogers' primary complaint seems to be that it is dissatisfied with its own business model while the primary motivation for its proposal seems to be to compensate for its own failing network sharing relationship. On this last point, we note the recent public disclosure related to the breakdown of Rogers' longstanding network sharing relationship in Quebec and Ontario with Videotron. That network sharing relationship is now the subject of an \$850 million lawsuit brought against Rogers by Videotron for alleged breach of contract and bad faith negotiating tactics.²²⁴

²²¹ ISED, CPC-2-1-23 – *Licensing Procedure for Spectrum Licences for Terrestrial Services*, section 5.6.4.2.

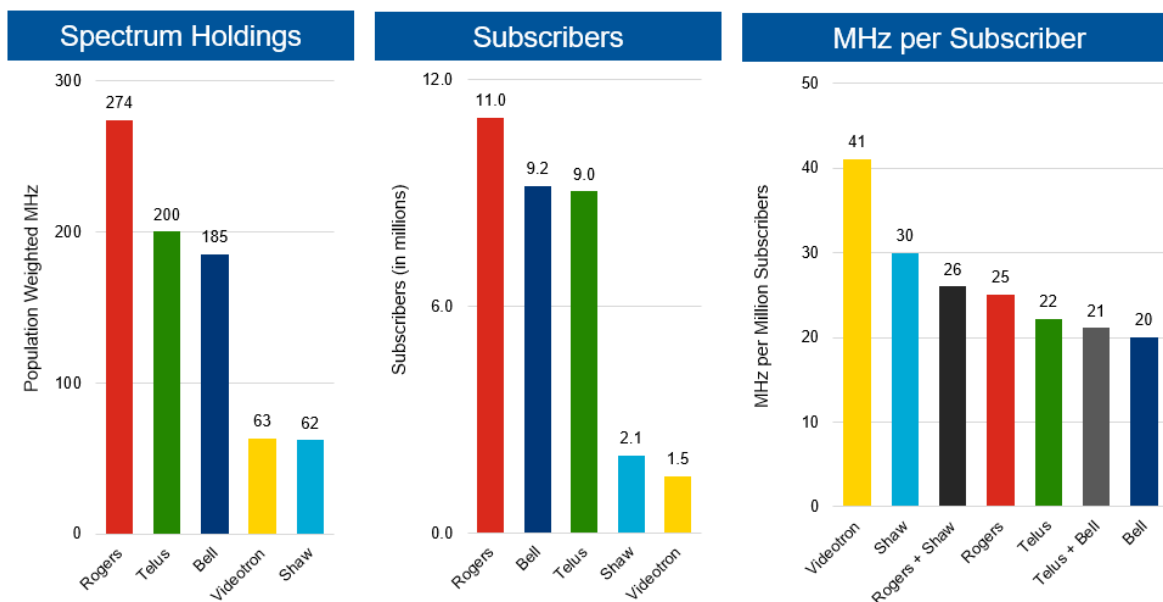
²²² *Ibid.*

²²³ Rogers Comments, paragraph 213.

²²⁴ See <https://nationalpost.com/news/canada/videotron-sues-rogers-for-850m-claiming-breach-of-contract-and-bad-faith-negotiations-over-shared-network-in-quebec>.

104. Notwithstanding its lack of supporting evidence, Rogers goes on to recommend that ISED should "implement spectrum caps applied at the network level (both in auctions and when assessing subordination requests)."²²⁵ Again the statement is out of scope and therefore misplaced in the current proceeding. It is also a transparent and clumsy attempt to transform ISED's regulations in such a way that Rogers can extend the size of its current spectrum surplus. As ISED is well aware, Rogers not only has more spectrum than any other Canadian wireless carrier on an absolute basis, it has more spectrum per subscriber than either Bell or Telus, and Bell and Telus combined (see Figure 1). Rogers' surfeit of spectrum would only expand if Rogers is permitted to acquire any of Shaw's spectrum holdings as part of its attempted acquisition of Canada's fourth largest wireless provider.

Figure 1: Commercial Mobile Spectrum Holdings on a MHz per Subscriber Basis²²⁶



105. Finally, if Rogers' proposal to implement network-based spectrum caps in future auctions were adopted it would lead to an absurd situation where Bell and Telus, which serve approximately 18 million subscribers, would be limited to acquiring the same amount of

²²⁵ Rogers Comments, paragraph 43.

²²⁶ Spectrum holdings are national commercial mobile spectrum holdings calculated on a population weighted basis for the Cellular, 600 MHz, 700 MHz, PCS, AWS-1, AWS-3, AWS-4, 2300 MHz, 2500 MHz, and 3500 MHz (flexible-use) spectrum bands. This calculation is similar to the one used by ISED for the *National Holdings for Commercial Mobile Spectrum Licences*, 15 July 2016, available at <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11210.html>. Postpaid and prepaid subscribers are from company financial reports for Q2 2021, except Shaw, which is for Q3 2021. Subscribers for Bell and Telus do not contain tablets and connected devices. This results in a conservative analysis of MHz per subscriber as the Rogers number is underestimated because they are reporting more subscribers relative to Bell and Telus.

spectrum as Rogers, which serves about 11 million subscribers.²²⁷ The result would be a guaranteed Government-sanctioned quality of service and/or operational cost advantage for Rogers (the largest wireless carrier in the country) over the next two largest competitors, and a long-term disadvantage to 18 million Canadian wireless subscribers.

Q45. ISED is seeking comments on facilitating subordinate licensing and encouraging secondary market transactions including:

- **Should additional changes be made to existing licences that will encourage the use of subordinate licences as a means to help deploy more services?**
- **Given ISED's regulatory role, are there any issues or actions ISED should consider?**

106. Some commenters recommended that ISED should implement timelines for processing subordinate licence requests, require that primary licensees provide a reason for refusing a request for subordination, or track the number of successful and unsuccessful subordinate licence requests.²²⁸ We do not support these recommendations and note that there is no justification to require primary licensees to provide a reason for refusing a request for subordination, especially if the reason is related to commercially confidential information such as future network deployment. As demonstrated by ISED's *Decisions on Licence Transfers of Commercial Mobile Spectrum* webpage,²²⁹ subordinate licensing requests are granted on a regular basis and often involve small and regional wireless providers. We support Shaw's recommendation that ISED should maintain a market-based process. As Shaw stated:

"While a review of the process for market-based subordinations is worthwhile, Shaw does not consider it necessary for the Department to pursue a more aggressive role in driving secondary market transactions. These arrangements should continue to be market-driven. Where the Department does have a role is with respect to reviewing the effectiveness of the subordination approval process and we support this aspect of the Consultation."²³⁰

107. Any steps by ISED to impose additional regulations or requirements on the subordinate licensing process are not necessary and would be an overly intrusive regulatory policy that would be contrary to enabling guidelines (a) and (d) of the SPFC which state "market forces

²²⁷ See: <https://www.cwta.ca/wp-content/uploads/2021/08/Sub-Stats-2021-Quarter-2-EN-Web1.pdf>.

²²⁸ AIC Comments, page 11, Cogeco Comments, paragraphs 94 and 95, Ecotel Comments, paragraph 143, First Broadband Comments, page 3, Iristel Comments, paragraph 74, Lyttonnet Comments, page 5, Redline Comments, paragraph 32, Xplornet Comments, paragraph 91, and CCSA Comments, page 16.

²²⁹ <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10717.html>.

²³⁰ Shaw Comments, paragraph 9.

should be relied upon to the maximum extent feasible," and "regulatory measures, where required, should be minimally intrusive, efficient and effective."²³¹

108. In our comments, we indicated that ISED could create, publish and maintain a list of primary licensees' contact information on its website. A public list would be an efficient method to support the initial contact between WSPs seeking subordinate licences and primary spectrum licence holders. It is also consistent with enabling guidelines (a) and (d) of the SPFC which state "market forces should be relied upon to the maximum extent feasible," and "regulatory measures, where required, should be minimally intrusive, efficient and effective."²³² Xplornet had a similar view as this "would provide those seeking subordinate licences with clear information about where to submit their requests."²³³

Q46. ISED seeks comments on what additional information, if any, should be included in the draft form shown in annex D.

109. The majority of commenters did not suggest additional information that should be included in the draft form shown in annex D. However, Iristel suggested that a prospective subordinate licensee be provided space to discuss their expectation for renewal.²³⁴ We do not object to this suggestion and agree that this is a key element that needs to be discussed between primary and subordinate licensees. In addition, Telus suggested that a prospective subordinate licensee should provide a geospatial representation of the intended area they wish to subordinate if it does not align to ISED's standard service areas.²³⁵ We support this recommendation. As Telus noted, "providing a digital representation of the desired area would remove the potential for confusion as to the geographical boundaries an applicant desires to be licensed for should it not be on a whole Tier or Sub-tier area basis."²³⁶

²³¹ *Spectrum Policy Framework for Canada*, page 9.

²³² *Ibid.*

²³³ Xplornet Comments, paragraph 91.

²³⁴ Iristel Comments, paragraph 75.

²³⁵ Telus Comments, paragraph 137.

²³⁶ Telus Comments, paragraph 137.

4.0 WHITE SPACES AND RRBS LICENCES

Q47. ISED is seeking comments on its proposal to remove the current restriction on database hosting in order to facilitate cloud-based database hosting solutions.

110. While some commenters supported ISED's proposal to remove the current restriction on database hosting in order to facilitate cloud-based database hosting solutions, we do not.²³⁷ White space databases should continue to be physically located in Canada to protect the privacy of Canadian data and maintain Canada's communication data sovereignty. White space database providers will have access to network information from all Canadian service providers that offer white space devices and the type of network telemetry data to be collected may change over time. As a result, the geographic limitation is necessary to maintain data security. If geographic restrictions on database hosting were removed, database providers would also be subject to privacy laws and practices of the foreign jurisdiction, thus making it more difficult to protect Canadian data.

111. Many commenters supported this position,²³⁸ including Rogers which stated:

"[A]ny database that provides access to Canadian spectrum must itself be required to be physically located in Canada, operate according to Canadian spectrum regulations and subject to Canadian laws, including telecommunications, privacy, and cyber security. ... As such, all hosting of spectrum management database services – regardless of the spectrum band they coordinate – should be hosted in Canada to ensure our ability to retain data sovereignty, privacy, and security of information."²³⁹

112. Protecting the privacy and security of information was integral to most comments, including those that supported ISED's proposal. Comments from 6Harmonics²⁴⁰, Communication T l signal²⁴¹ and Telus²⁴² all emphasized the importance of maintaining security and complying with Canada's privacy laws and regulations.

²³⁷ 6Harmonics Comments, page 1 and 2, Communication T l signal Comments, page 21, Microsoft Comments, paragraph 9, Redline Comments, paragraph 23, Red Technologies Comments, page 2, Telus Comments, paragraph 139, Xplornet Comments, paragraph 97, BCBA Comments, page 5, CCSA Comments, paragraph 17, CEA Comments, paragraph 20, CanWISP Comments, paragraph 116, ITPA Comments, paragraph 145, JISM Comments, page 12.

²³⁸ AIC Comments, paragraph 12, Rogers Comments, paragraph 219, Dr. Gregory Taylor Comments, paragraph 11.

²³⁹ Rogers Comments, paragraph 219.

²⁴⁰ 6Harmonics Comments, page 2.

²⁴¹ Communication T l signal Comments, page 22.

²⁴² Telus Comments, paragraph 140.

Q49. ISED is seeking comments on its proposal to no longer renew existing RRBS licences after March 31, 2027.

113. The majority of commenters supported ISED's proposal to no longer renew existing RRBS licences after 31 March 2027.²⁴³ We appreciate the ample time allocated for RRBS licences to transition, however we recommend that ISED review the extent to which white space devices have evolved and are being used. If ISED finds the white space ecosystem has not developed as expected during the intervening period, then the time period to end RRBS licences should be extended. If white space devices are not being used, then existing RRBS licences should be renewed so that existing systems can continue to provide service. Kris Joseph and Michael B. McNally had a similar view and proposed that ISED also undertake an assessment of the RRBS ecosystem.²⁴⁴

*** End of Document ***

²⁴³ Communication Télésignal Comments, page 22, Redline Comments, paragraph 23, Rogers Comments, paragraph 222, Telus Comments, paragraph 142, Xplornet Comments, paragraph 99, CEA Comments, page 21, CanWISP Comments, paragraph 118, FMCC Comments, paragraph 113, FPAC Comments, page 4, ITPA Comments, paragraph 147, JISM Comments, page 12

²⁴⁴ Kris Joseph and Michael B. McNally Comments, paragraph 54.