

BEFORE INNOVATION, SCIENCE, AND ECONOMIC DEVELOPMENT CANADA

IN THE MATTER OF

**CONSULTATION ON A POLICY AND LICENSING FRAMEWORK FOR SPECTRUM
IN THE 3800 MHZ BAND, JANUARY 2022**

**REPLY COMMENTS OF THE
CANADIAN ASSOCIATION OF WIRELESS INTERNET SERVICE PROVIDERS**

21 MARCH 2022

TABLE OF CONTENTS

1.0	Introduction.....	3
2.0	Pro-Competitive Measures.....	4
2.1	Pro-competitive measures are necessary.....	4
2.2	Set-asides and spectrum caps are not responsible for high spectrum and consumer prices.....	7
2.3	A meaningful set-aside and cross-band cap are necessary to support competition.....	8
2.4	A meaningful set-aside and cross-band cap will support the secondary market.....	10
2.5	Bell-Telus radio access network sharing is inconsistent with fair competition	11
2.6	Use of Tier 5 service areas supports efficient spectrum use	11
2.7	Prohibition of transfers of set-aside licences to set-aside-ineligible entities should be extended to 7 years	12
3.0	Coexistence with Radio Altimeters	12
4.0	Implications of Radioaltimeter Coexistence Measures on WBS transition.....	13
5.0	Auction Format	13
6.0	Conclusion	14

1.0 INTRODUCTION

1. This constitutes the reply of the Canadian Association of Wireless Internet Service Providers (“CanWISP”) to the initial comments to the Consultation on a Policy and Licensing Framework for Spectrum in the 3800 MHz Band¹ (“3800 MHz Consultation”).
2. The comments provided in this consultation demonstrate the diversity of stakeholders in Canada’s telecommunications market. Companies ranging from the largest in Canada (National Mobile Service Providers, or “NMSPs”)², to large Regional Mobile Service Providers³ (“RMSPs”)⁴, to small and very small operators such as those represented by CanWISP, have provided diverse perspectives on how the 3800 MHz auction can best serve Canadians.
3. If encouraged to flourish, this diversity of service providers will underpin a robust telecommunications market, foster competition and innovation, and serve a variety of market niches.
4. If, on the other hand, progressively smaller companies are shut out of the telecommunications marketplace, Canadian consumers will be faced with reduced choice, higher prices, and a persistent urban-rural digital divide.
5. The submissions of numerous interest groups representing rural farms, businesses, and consumers⁵ demonstrate that rural Canada still lacks fast, reliable, ubiquitous connectivity.

¹ *SLPB-006-21, Consultation on a Policy and Licensing Framework for Spectrum in the 3800 MHz Band*, December 2021 (“3800 MHz Consultation”).

² These companies are Bell Mobility Inc. (“Bell, TELUS Communications Inc. (“Telus”), and Rogers Communications Canada Inc. (“Rogers”).

³ *Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions, 2020 Edition*, January 15, 2021, Prepared for Innovation, Science and Economic Development Canada by Wall Communications Inc., Executive Summary, p. 4.

⁴ These companies are Saskatchewan Telecommunications (“SaskTel”), Xplornet Communications Inc. (“Xplornet”), Québecor Média inc. (“Videotron”) and Bragg Communications Inc. (“EastLink”). Freedom Mobile, identified in the Price Comparison (see above footnote) did not provide comments to this consultation.

⁵ See Comments of the Agricultural Producers Association of Saskatchewan, undated, at p. 1; Comments of the BC Lions Football Club, undated, at p. 2; Comments of the BC Tech Association, dated February 15, 2022, at p. 1; Comments of the Canadian Aquaculture Industry Alliance, dated February 14, 2022, at p. 2; Comments of the Canadian Federation of Agriculture, dated February 15, 2022, at p. 1; Comments of the Cariboo Chilcotin Coast Tourism Association, dated February 14, 2022, at p. 1; Comments of the Edmonton Chamber of Commerce, dated February 15, 2022, at p. 1; Comments of the Forest Products Association of Canada, dated February 15, 2022, at p. 1; Comments of the Government of Northwest Territories, dated February 15, 2022, at p. 1; Comments of the Kootenay Rockies Tourism Association, dated February 10 2022, at p. 1; Comments of the Rural Municipalities of Alberta, dated January 20, 2022, at p.. 4; Comments of the Telus World of Science Edmonton, dated February 14, 2022, at p. 1.

6. First Nations communities in particular are disproportionately under-connected, as noted by the National Chiefs Coalition⁶ and the Nisga’a Lisims Government⁷.

7. The digital divide has not yet been solved in rural Canada. CanWISP members across the country also know this first-hand, since they serve communities that have been overlooked by Canada’s NMSPs and RMSPs.

8. Enabling locally based service providers to access spectrum through the primary market remains the best way to stimulate investment into wireless broadband infrastructure in rural and remote communities.

9. Having reviewed the comments of other parties, CanWISP stands by the submissions made in its comments in this Consultation. The failure by CanWISP to address the submissions of any party should not be construed as agreement with those submissions, where doing so would be contrary to CanWISP’s submissions or interests.

2.0 PRO-COMPETITIVE MEASURES

2.1 Pro-competitive measures are necessary

10. Competitive measures, including both a meaningful set-aside and a cross-band spectrum cap, are critical to ensuring a competitive telecommunications market in Canada.

11. The operators which dominate the Canadian market today have both the incentive and the financial means to foreclose on the 3800 MHz spectrum, and will do so in the absence of pro-competitive measures, as discussed by Vidéotron⁸, Xplornet⁹, Sasktel¹⁰, Iristel, Inc.(“Iristel”)¹¹, and Comcentric Networking Inc.(“Comcentric”)¹².

⁶ Comments of the National Chiefs Coalition, dated February 8, 2022, at p. 2.

⁷ Comments of the Nisga’a Lisims Government, dated February 14, 2022, at p. 2.

⁸ Observations de Québecor Média inc., déposées en son nom et en celui de Vidéotron ltée, dated February 15, 2022 (“Vidéotron Comments”), at paras. 20-27.

⁹ Comments of Xplornet Communications Inc., dated February 15, 2022 (“Xplornet Comments”), at para. 29.

¹⁰ Comments of Saskatchewan Telecommunications, dated February 15, 2022 (“Sasktel Comments”), at paras. 20-21.

¹¹ Comments of Iristel, Inc., on behalf of itself and its affiliates Ice Wireless Inc. and i-MobileCA Inc., dated February 15, 2022 (“Iristel Comments”), at para. 26.

¹² Comments of Comcentric Networking Inc., dated February 15, 2022 (“Comcentric Comments”), at para. 17.

12. Auction foreclosure occurs at every level of the competitive scale. Just as Canada's NMSPs can and will prevent RMSPs from winning spectrum, these same RMSPs can and will prevent small, locally based service providers from winning spectrum.

13. The small, locally based operators are a vital part of Canada's connectivity landscape and telecommunications marketplace, especially in remote and rural communities. For this reason, additional pro-competitive measures, as proposed by CanWISP, are necessary in rural service areas to support investment into rural broadband connectivity. These measures are

- a. A total set-aside of 160 MHz; with
- b. 80 MHz of this set-aside further reserved for small carriers (i.e. not RMSPs); and
- c. A cross-band cap of 80 MHz¹³

14. Should ISED choose to implement a smaller set-aside of 100 MHz in rural service areas, 40 MHz of this set-aside should be reserved for small telecommunications service providers (i.e. not RMSPs) in these areas.

15. This additional set-aside that excludes RMSPs (Freedom, SaskTel, Xplore Mobile, Videotron and EastLink) is necessary to facilitate investment in broadband infrastructure in rural and remote communities.

16. The potential participation of Freedom Mobile in this auction further strengthens the case for an additional set-aside for small operators in rural service areas. Naturally, the NMSPs and RMSPs will invest predominantly in densely populated urban centers. Rural consumers depend on the telecommunications facility investments of small, locally based operators. In turn, those investments are dependent on adequate opportunities for small operators to win spectrum at auction.

17. A diversity of operators and a variety of competitors will strengthen the telecommunications market in Canada. However, certain intervenors in this consultation disagree and instead endorse a self-serving approach that would exclude important competitors from the marketplace.

18. For example, Rogers makes the self-serving and unsubstantiated claim that:

¹³ Comments of the Canadian Association of Wireless Internet Service Providers, dated February 15, 2022 ("CanWISP Comments"), at para. 34.

There is no rationale, however, for any competition policy aimed at intervening in the market to support the entry of an economically unviable fifth operator.¹⁴

19. Rogers seeks to justify this claim using the unrelated observation that:

The U.S. only sustains three major operators. European countries with much less challenging geo-demographics sustain three or at most four operators.¹⁵

20. Rogers' comments wilfully disregards both the significance of this band to fixed wireless operations and the existence of numerous fixed wireless internet service providers (WISPs) operating today across Canada, including members of CanWISP. Rogers' comments imply that these companies do not exist, and that there is no need for these companies to exist. On the contrary, the existence of fixed wireless operators is vital to the Canadian telecommunications market. These operators bring broadband connectivity to rural areas that are not served by NMSPs or RMSPs, and they bring competition and consumer choice to underserved communities.

21. Rogers' claim that the U.S. market sustains only three major operators, again, wilfully overlooks the presence of numerous local and regional network operators across the U.S. In 2020, FCC auction 105 of 3 GHz spectrum, garnered over 200 licence winners¹⁶. The U.S. market for wireless services illustrates the market vitality that is possible when numerous operators, from small to large, are able to win spectrum in auctions.

22. Rogers' statement regarding the EU is not accurate either. For example, in Italy, in addition to four major carriers (namely, Telecom Italia,¹⁷ Vodafone,¹⁸ WINDTre¹⁹ and Illiad²⁰), there are at least three other significant operators (namely, Linkem,²¹ Fastweb,²² EOLO²³ and OpenFiber) providing fixed wireless services.

¹⁴ Comments of Rogers Communications Canada Inc., dated February 15 2022 ("Rogers Comments"), at para. 137.

¹⁵ Rogers Comments, at para. 37(2).

¹⁶ Public Notice DA 20-1009, "Auction of Priority Access Licenses in the 3550-3650 MHz Band Closes", September 2, 2020.

¹⁷ <https://www.tim.it/>.

¹⁸ [https://www.vodafone.it/common-offerte-telefonia-mobile?=&](https://www.vodafone.it/common-offerte-telefonia-mobile?=).

¹⁹ <https://www.windtre.it/>.

²⁰ <https://www.iliad.it/offerte-iliad-mobile.html>.

²¹ <https://www.linkem.com/>.

²² https://www.fastweb.it/adsl-aziende/info_codice_comunicazioni_elettroniche/?gclsrc=aw.ds&.

²³ https://www.eolo.it/page/eolo-piu/?gclid=Cj0KCQjw29CRBhCUARIsAOboZbKeOpJvpIH844Q_2i1OpgRAkwoBYyW87A6eo_QygInSEd07wDZyz4AaAmpCEALw_wcB&gclsrc=aw.ds.

23. Finally, Canada's challenging geo-demographics constitutes an argument for, not against, more competitors. Companies of different sizes, each with a different business focus, provide services to different geographic and demographic markets. Canadian consumers will be better served, and more broadly served, by a robust and competitive market underpinned by a diverse group of competitive spectrum-holders, rather than a small group of large companies with similar business and network structures.

2.2 Set-asides and spectrum caps are not responsible for high spectrum and consumer prices

24. Bell²⁴ and Rogers²⁵ have suggested that pro-competitive measures raise spectrum prices, which in turn raise consumer prices. CanWISP suggests that this causality chain is disputable. It is equally plausible that Canada's high consumer prices for mobile service²⁶, which are possible only due to the market power of the three NMSPs, drive extraordinarily high valuations of spectrum.

25. More importantly, evidence provided by TELUS suggests that high spectrum prices have been caused by Rogers and Bell's motivation to maintain their spectrum advantage.²⁷ Accordingly, the bidding wars among the incumbents will drive up the prices even if additional spectrum is released from set-asides. Indeed, a study by Hyndman & Parmeter (2015) of Canada's 2008 AWS auction, suggests that removal of set-asides would have *increased* total spectrum costs. Specifically, they found that, in the absence of set-asides, the auction revenue would have increased by as much as \$1.28 billion in that auction.²⁸ Specific examples,²⁹ as opposed to a broad-based analysis, and "expert" claims³⁰ not supported by rigorous analysis used to argue that set-asides increase spectrum costs should be given no weight.

²⁴ Comments of Bell Mobility Inc., dated February 15 2022 ("Bell Comments"), at paras. 34-37.

²⁵ Rogers Comments, at para. 93-97.

²⁶ Intervention of the Competition Bureau of Canada to Telecom Notice of Consultation CRTC 2019-57, dated May 15, 2019, at para. 38.

²⁷ Comments of TELUS Communications Inc., dated February 15 2022 ("Telus Comments"), at para. 44.

²⁸ Kyle Hyndman & Christopher F. Parmeter, 2015. "Efficiency or Competition? A Structural Econometric Analysis of Canada's AWS Auction and the Set-Aside Provision," *Production and Operations Management*, vol. 24(5), May, at pp. 821-839.

²⁹ E.g., the Halifax example provided in para 41 of the Bell Comments.

³⁰ Such as that made by Dr. Robert Crandall as recited at para 37 of the Bell Comments.

26. Furthermore, spectrum prices are determined by the bidders in an auction, not by the auctioneer. ISED has not created an artificial spectrum scarcity as alleged by Rogers³¹; rather, there is a scarcity of spectrum to support a competitive market. ISED is right to ensure that spectrum policy supports a competitive market in spite of this scarcity.

2.3 A meaningful set-aside and cross-band cap are necessary to support competition

27. The proposed 50 MHz set-aside is simply not sufficient to support meaningful competition. Vidéotron³², Sogetel Inc. (“Sogetel”)³³, Eastlink³⁴, Iristel³⁵, Comcentric³⁶, and TerreStar Solutions Inc. (“TerreStar”)³⁷ all called for a set-aside of 100 MHz.

28. Meanwhile, Canada’s NMSPs were unsupportive of meaningful competitive measures. Rogers proposed that there should be no spectrum cap if Bell-Telus spectrum pooling is permitted,³⁸ though conceded that a cross-band cap of at least 150 MHz would be acceptable³⁹. Rogers also did not support any set-aside, positing instead that 50 MHz set-aside would be less harmful than a cross-band cap⁴⁰. Bell also does not support either caps or set-asides, but concedes that a 100 MHz cross-band cap would be acceptable⁴¹. Telus supports a 110 MHz cross-band cap⁴², and does not support the use of any set aside⁴³.

29. The proposal of Rogers to abolish spectrum caps, or the proposals of Bell or Telus to abolish set-asides, would cause lasting harm to competition in Canada, particularly in rural communities.

³¹ Rogers Comments, at paras. 13-14.

³² Vidéotron Comments, at paras. 77-79.

³³ Comments of Sogetel Inc, on behalf of itself and its affiliate Sogetel Mobilité Inc., dated February 15 2022 (“Sogetel Comments”), at para. 29

³⁴ Comments of Bragg Communications Inc., operating as Eastlink, dated February 15 2022 (“Eastlink Comments”), at para. 7.

³⁵ Iristel Comments, at para. 35b.

³⁶ Comcentric Comments, at para. 31.

³⁷ Comments of TerreStar Solutions Inc., dated February 15 2022 (“TerreStar Comments”), at para. 24.

³⁸ Rogers Comments, at para. 4.

³⁹ Rogers Comments, at para. 35.

⁴⁰ Rogers Comments, at para. E4.

⁴¹ Bell Comments, at paras. 6, 48.

⁴² Telus Comments, at para. 53.

⁴³ Telus Comments, at para. 54.

30. A meaningful set-aside and spectrum cap are particularly important in rural telecommunications markets where large companies are slow to build new infrastructure and local service providers have historically had little to no access to licensed spectrum.

31. Bell also suggests that set-asides distort spectrum prices by allowing set-aside eligible bidders to inflate the costs of non-set-aside licences⁴⁴. The example provided by Bell of Videotron's bidding in Halifax⁴⁵ during the 3500 MHz auction does not, as Bell argues, demonstrate gaming in Videotron's bidding choices. There is no reason to suppose that Videotron's bidding patterns represent anything other than rational bidding to express its demand for the Halifax licences and other licences in the Atlantic provinces.

32. For these reasons, we re-iterate our proposal that, in rural areas, ISED should establish a total set-aside of 160 MHz, with 80 MHz of that set-aside reserved for small operators, together with an 80 MHz cross-band cap. We note that Iristel⁴⁶ and ECOTEL Inc. ("Ecotel")⁴⁷ also support a cross-band cap of 80 MHz. Without these measures, rural consumers will not benefit from investments into new broadband network infrastructure. The proposed 160 MHz set-aside (with 80 MHz reserved for small operators) is necessary in rural communities to ensure that the cross-band cap performs the desired function, that is, to enable small operators to obtain spectrum.

33. Spectrum auctions should serve rural consumers by bringing Canada's spectrum resources to bear on the digital divide facing rural communities. Previous auctions have failed to achieve this. For the 3800 MHz spectrum auction to achieve this, ISED must establish both a substantial set-aside (of 160 MHz, with 80 MHz reserved for small operators) and a reduced cross-band cap (of 80 MHz) in rural service areas.

34. In our initial comments, we proposed a set-aside of 80 MHz in urban service areas⁴⁸. Following our review of the above-cited comments of Vidéotron, Sogetel, Eastlink, Iristel, Comcentric, and Terrestar, we fully support the recommendation of a 100 MHz set-aside combined with a 100 MHz cross-band cap in urban service areas.

⁴⁴ Bell Comments, at paras. 39-40.

⁴⁵ Bell Comments, at para. 41.

⁴⁶ Iristel Comments, at para. 35a.

⁴⁷ Comments of ECOTEL Inc., dated February 15, 2022 ("Ecotel Comments"), at para. 20a.

⁴⁸ CanWISP Comments, at para. 34.

35. The pro-competitive measures that CanWISP has proposed will ensure that a diversity of operators obtains spectrum in each service area, maximising the opportunity for rural consumers to gain access to broadband connectivity and 5G services on a timeline that matches urban consumers.

2.4 A meaningful set-aside and cross-band cap will support the secondary market

36. Iristel⁴⁹ and Ecotel⁵⁰ proposed mandatory subordination as a condition of licence. CanWISP agrees that more subordination from large spectrum holders to smaller operators should be supported. However, CanWISP believes that it will be sufficient to empower small operators to negotiate with large spectrum holders by ensuring that the small operators have their own spectrum holdings with which to bargain. If actual experience does not lead to sufficient voluntary licence subordination by the larger operators, then ISED should consider mandatory subordination.

37. A diversity of spectrum-holders will further support deployments by generating activity in the secondary market. As ISED heard in the comments to the Access Licensing Consultation⁵¹, smaller operators have been frustrated by large carriers' reluctance to negotiate subordinate licences⁵². If small carriers hold primary spectrum licences, then large spectrum holders will have an incentive to negotiate spectrum agreements with small carriers, since the small carriers would have spectrum with which to negotiate. Small carriers would then be in a position to gain access to more spectrum in the rural areas where the NMSPs and RMSPs do not plan to invest.

38. By empowering a diversity of operators to participate in the secondary market through their primary spectrum holdings, ISED will foster more efficient allocation of spectrum in all regions of Canada. This efficient allocation can only be achieved through the use of both a substantial set-aside and a meaningful spectrum cap in rural service areas.

⁴⁹ Iristel Comments, at para. 29.

⁵⁰ Ecotel Comments, at para. 20e.

⁵¹ *Consultation on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment*, SLPB-004-21, August 2021.

⁵² Reply Comments of the Canadian Association of Wireless Internet Service Providers to SLPB-004-21 *Consultation on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment*, dated December 7, 2021, at paras. 16-21.

39. In order to make the opportunity for small carriers to negotiate subordination agreements to gain access to more spectrum in rural areas more meaningful, we re-iterate our support for ISED's proposals that:

- a. An exception to the five-year prohibition on the transfer of set-aside licences to a set-aside-ineligible be provided for subordinate licences in support of a spectrum sharing arrangement⁵³ where both the primary and secondary licensees are operating actively and independently; and
- b. Subordinate licences will not count towards the subordinate licensee's spectrum cap where both the primary and secondary licensees are operating actively and independently⁵⁴.

2.5 Bell-Telus radio access network sharing is inconsistent with fair competition

40. CanWISP agrees with the concern of Rogers⁵⁵ that a combined Bell-Telus joint radio access network with a pooled 200 MHz of spectrum, where other competitors are limited to 100 MHz, is not consistent with equitable competition in Canada. CanWISP agrees with Rogers' argument that spectrum pooling will enable significantly higher mobile download speeds, which constitutes a competitive advantage that cannot be matched by other carriers⁵⁶. CanWISP agrees with Rogers' proposal that ISED should articulate a general policy to prevent anti-competitive spectrum pooling⁵⁷.

2.6 Use of Tier 5 service areas supports efficient spectrum use

41. CanWISP supports Cogeco Connexion Inc's ("Cogeco") proposal that the Tier-4 service areas of Toronto (4-077), Montreal (4-051), and Vancouver (4-152) should be divided into their constituent Tier-5 service areas for the purpose of this spectrum auction⁵⁸. This proposal will lower the price of individual spectrum licences in these service areas, lowering the barrier to entry in these cities, thus supporting a wider diversity of competitors in these cities. This will ultimately benefit consumers, providing more competition and consumer choice.

⁵³ Consultation on a Policy and Licensing Framework for Spectrum in the 3800 MHz Band, SLPB-006-21, December 2021 ("3800 MHz Consultation"), at para. 170.

⁵⁴ 3800 MHz Consultation, at para. 171.

⁵⁵ Rogers Comments, at para. E2.

⁵⁶ Rogers Comments, at para. 87.

⁵⁷ Rogers Comments, at para. E6.

⁵⁸ Comments of Cogeco Connexion Inc., dated February 15 2022 ("Cogeco Comments"), at paras. 12-13.

42. Indeed, Cogeco’s proposal should be extended to all 24 urban Tier 4 areas. This would add 141 service areas to the auction. This measure would separate these 24 urban centres from the surrounding rural areas, enabling rural-focused operators to obtain spectrum in these rural areas, thereby promoting investment in infrastructure serving rural Canadians.

2.7 Prohibition of transfers of set-aside licences to set-aside-ineligible entities should be extended to 7 years

43. CanWISP partially supports the Ecotel proposal⁵⁹ to extend the prohibition on the transfer of set-aside licences to set-aside-ineligible entities. In rural service areas, such transfers should be prohibited for a period of 7 years, rather than 5 years. This measure will further reduce speculation by making spectrum warehousing for the purpose of resale less attractive.

44. CanWISP does not support Ecotel’s proposal that this prohibition should be indefinite in rural service areas. An indefinite prohibition does not enable the secondary market to adapt to unforeseeable future market conditions.

3.0 COEXISTENCE WITH RADIO ALTIMETERS

45. Bell⁶⁰, Rogers⁶¹, and the Canadian Wireless Telecommunications Association⁶² opposed, with extensive justification, all mitigation measures in the 3800 MHz band.

46. CanWISP supports these objections.

47. CanWISP also supports the proposal by Sasktel to delay the 3800 MHz auction until this issue is fully resolved⁶³. It is unreasonable to expect bidders to determine the appropriate value of spectrum licences when the rules governing the use of those licences have not been finalized.

⁵⁹ Comments of Ecotel, at para. 20.

⁶⁰ Bell Comments, at Section 2.0 (paras. 16-30).

⁶¹ Rogers Comments, at paras. 53-69.

⁶² Comments of the Canadian Wireless Telecommunications Association, dated February 15 2022 (“CWTA Comments”), entirety of submission.

⁶³ Sasktel Comments, at para. 2.

4.0 IMPLICATIONS OF RADIOALTIMETER COEXISTENCE MEASURES ON WBS TRANSITION

48. Exolink inc. called on ISED to allow WISPs to regain permanent access to the WBS band (3650-3700 MHz)⁶⁴.

49. While recognizing that a reversal of the decision to transition WBS users is not within the scope of this proceeding, CanWISP stresses that the impending transition from the 3650-3700 MHz band to the as-yet-unavailable 3900-3980 MHz band is inflicting severe and ongoing harm to rural operators, and the rural communities they serve.

50. However, given the uncertainty surrounding the availability, usage, and mitigation measures required in the 3900-3980 MHz band, and the lack of availability of equipment for this band, ISED must delay the displacement of users from the 3650-3700 MHz band.

51. CanWISP urges ISED to include the 3900-3980 MHz band in ISED's evaluation of the necessity and extent of any required mitigation measures in the 3 GHz band.

52. Mitigation measures in the 3900-3980 MHz band must not include power level restrictions or uptilt restrictions that are more restrictive than those currently in place in the 3650-3700 MHz band. Displacing WBS licensees to a band with less utility will result in loss of service for rural consumers across Canada.

5.0 AUCTION FORMAT

53. CanWISP is pleased to see broad consensus that the proposed clock auction format is the preferred approach.

54. CanWISP supports Rogers⁶⁵ proposal for the start of the 20-year licence term, the start of the deployment requirement timeline, and the final payment due date should be the date when the spectrum becomes available for use, which is March 31, 2025. CanWISP notes that, in tiers without a population centre of 30,000 or more, the spectrum may not be fully available for use until three years after the issuance of the licence issuance date, which will be later than March 31 2025.

⁶⁴ Comments of Exolink inc., dated February 15 2022, at para. 10.

⁶⁵ Rogers Comments, at para. 244-245.

55. CanWISP also supports the Rogers⁶⁶ proposal that all 3800 MHz spectrum should be made available for use at the same time, that is, March 31 2025 (i.e., not taking into account the later WBS transitions in tiers without a population centre of 30,000 or more). This measure will help ensure that all generic licence products are indeed equivalent in value.

56. As described by Cogeco⁶⁷, ISED's proposal that holders of the 3640-3650 block should automatically be assigned the lowest frequency blocks of the 3800 MHz band provides some spectrum holders with the benefit of cross-band contiguity at no cost.

57. There were no comments agreeing with CanWISP's proposal⁶⁸ that WBS operators be automatically assigned the lowest frequency blocks of the 3800 MHz band. If CanWISP's proposal is not adopted, CanWISP supports Ecotel's proposal that the set-aside include the former WBS band⁶⁹, since this measure would encourage existing WBS operators to participate in the auction. If neither Ecotel's, nor CanWISP's, proposal is adopted, ISED should, at the very least, allow all auction winners the opportunity to bid on the lowest frequency blocks, since existing WBS operators would place a higher value on these blocks.

58. CanWISP supports the proposal of Cogeco⁷⁰ that ISED include an all-or-nothing bid type in the auction, so that a bidder can specify that it has a demand for either a certain non-zero or zero quantity of a product at a particular price point, but not for a number in between zero and that quantity. This would reduce exposure risk by eliminating the possibility that a bidder could win an operationally un-useable single 10 MHz block in a service area.

6.0 CONCLUSION

59. Ecotel⁷¹ observed that the 3800 MHz band is particularly well-suited for two applications: small mobile cells in urban areas and fixed wireless services in rural areas. CanWISP agrees. This band holds the potential to play a key role in furthering rural connectivity in the coming years. At the same time, this band is a crucial part of the emerging 5G ecosystem.

⁶⁶ Rogers Comments, at para. 244.

⁶⁷ Cogeco Comments, at para. 73-76.

⁶⁸ CanWISP Comments, at para. 80

⁶⁹ Ecotel Comments, at para. 16.

⁷⁰ Cogeco Comments, at paras. 59-68.

⁷¹ Ecotel Comments, at para. 14.

60. ISED does not need to choose between competitive 5G networks and expanding rural connectivity. By creating different rules in rural and urban service areas, Canadians can have both.
61. In rural service areas, a 160 MHz set-aside with 80 MHz reserved for small operators, combined with an 80 MHz spectrum cap, will ensure that rural consumers are afforded every opportunity to benefit from investment into wireless infrastructure that will bring reliable high-speed services to under-served communities.
62. In urban service areas, a 100 MHz set-aside with a 100 MHz cross-band cap will support robust competition and 5G deployments.
63. These pro-competitive measures are necessary to ensure sustainable, meaningful competition and connectivity for all Canadians.