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Subject: **Canada Gazette Notice No. DGSO-001-18, Consultation on Licence Fees for Fixed Point-to-Point Radio Systems – Reply Comments**

Bell Mobility Inc. is pleased to submit the attached Reply Comments to the Department's above-noted consultation.

Yours truly,

[Original signed by M. MacInnis]

Michael MacInnis
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Attachment

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CANADA GAZETTE NOTICE NO. DGSO-001-18

**CONSULTATION ON LICENCE FEES FOR FIXED POINT-TO-POINT
RADIO SYSTEMS**

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**REPLY COMMENTS
OF
BELL MOBILITY INC.**

25 JANUARY 2019

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1.0 INTRODUCTION

1. In accordance with the procedure set out by Innovation, Science and Economic Development Canada (the Department or ISED), in Notice No. DGSO-001-18, *Consultation on Licence Fees for Fixed Point-to-Point Radio Systems*, dated 15 November 2018 (the Consultation), we are providing our Reply Comments on the proposal to modernize the spectrum licence fee model for point-to-point radio systems.

2. We appreciate the Department's initiative to reduce licence fees for fixed point-to-point radio systems, and concur with the objective to reward spectral efficiency and encourage innovation. The Department's proposal rectifies many issues with the current point-to-point licence fee structure.

2.0 COMMENTS

Q1. *ISED invites comments on the proposed consumption-based fee model for the radio licence fees under consideration.*

2.1 Cost-Recovery Fee Model

3. In our Comments filed on 4 January 2019, we recommended that aggregate radio and spectrum licence fees should be set to only recover the cost associated with managing spectrum resources. This recommendation was echoed by the Canadian Wireless Telecommunications Association (CWTA), Rogers and Ecotel.¹ As we indicated in our initial Comments, a cost-recovery approach would be consistent with that taken by the Federal Communications Commission (FCC) in the U.S. Several commenters noted that taking this approach in the U.S. has resulted in significantly lower fees than those proposed in this Consultation, and therefore, recommended using the U.S. as a model for ISED's fee structure.² Rogers and Xplornet, in particular, advocated for broadly aligning with the FCC's principle of administrative cost-recovery as well as their 10-year terms for fixed services with a one-time fee. We have no objection to this recommendation.

¹ CWTA Comments, paragraph 7; Rogers Comments, paragraph 15; and Ecotel Comments, paragraph 22.

² For example, Alliance Corporation Comments, page 1; Rogers Comments, paragraphs 17 to 20; and Xplornet Comments, paragraph 18.

4. As explained by Rogers, the radio licence fee for a bi-directional link in the 70 GHz band using a 750 MHz channel would be just C\$85 annually under the U.S. fee model.³ Under the proposed ISED model, this fee would be \$1,500 annually, or 17 times more.⁴

5. Xplornet presented a similar example demonstrating how much lower fees would be under a U.S.-based fee model:

Under the Schedule of Application Fees maintained by the Federal Communications Commission ("FCC"), in order to establish a typical 50 MHz link using 18 GHz spectrum, a carrier would be required to pay only \$305 per call sign. As a link requires two call signs (one for uplink and one for downlink), the entire fee is \$610. This fee provides the carrier with access to the spectrum for 10 years.

In contrast, under ISED's proposed new fee model, in order to establish the same 50 MHz link using 18 GHz spectrum, a carrier would be required to pay an annual fee of \$2,400. Over a 10-year period, this means that under ISED's proposed model, a carrier would be required to pay almost 40x more than under the FCC's model, without considering any periodic increases as proposed in relation to the Service Fees Act.⁵

6. These examples demonstrate the impact a cost-recovery approach would have on the Canadian licence fee regime. As Rogers pointed out, aligning with the FCC's cost-recovery fee regime would result in more capital being available to invest in network capacity and deploy next-generation technologies.⁶ Given the Department's overarching objective to "maximize the economic and social benefit that Canadians derive from the use of the radio frequency spectrum in light of the challenges of a rapidly changing technological environment,"⁷ keeping fees as low as possible is essential.

2.2 Reduced Base Rates

7. The CWTA and Cogeco noted that the Department provided no explanation as to how the proposed base rates were determined.⁸ If these rates were based on current usage, then it is clear that the proposed rates do not accommodate potential growth. We, along with others, expressed concern that the current base rates proposed in the Consultation are too high. As Rogers argued in their Comments: "while the rates ISED proposes will assist in the deployment

³ Rogers Comments, paragraph 18.

⁴ Rogers Comments, paragraph 17.

⁵ Xplornet Comments, paragraphs 20 to 21.

⁶ Rogers Comments, paragraph 15.

⁷ The Consultation, paragraph 9.

⁸ CWTA Comments, paragraph 4; and Cogeco Comments, paragraph 20.

of 4G technology, they will not sufficiently address the sheer number of additional sites that will result from 5G."⁹ If there is significant growth in the number of sites and the amount of spectrum used, the proposed base rates may not be appropriate in the future. To avoid creating a new deterrent to spectrum usage, base rates should be set at levels where the anticipated growth in bandwidth usage and the number of point-to-point systems are fully considered.

8. Further, as Xplornet noted in their comments, the base rate for the reference band 10.55-19.7 GHz is modelled on current rates and therefore will provide few benefits for all of the licensees who use this band for longer transport requirements, despite this range being the most frequently assigned spectrum for point-to-point systems.¹⁰ Given these concerns, Rogers recommended a significant reduction to the base rates proposed by ISED.¹¹ We support this proposal. As we indicated in our Comments, high spectrum licence fees can act as a drag on investments in wireless networks, applications and services, and therefore, on innovation.

9. In addition to reducing the proposed rates, we recommended that the Department impose an overall cap on the total amount of fees that would be paid by the Industry. This will ensure that the quantum of fixed point-to-point radio system licence fees will not lessen innovation and will support network deployment and the Government's objective of increasing broadband services to rural areas.

2.3 Uncongested Areas

10. Many commenters expressed concerns that rising fees would present an obstacle to providing service in less heavily populated areas. Alliance Corporation, BCBA, CWTA, CanWISP, Ecotel, QMI, RABC, SaskTel, Seaside Wireless and Telus all proposed that the Department significantly reduce the proposed base rates for licences outside congested or high population density areas.¹² As stated above, we continue to recommend a reduction to base rates regardless of location or congestion level. However, we have no objection to the reduction of rates in uncongested areas so long as it is not accompanied by an increase in fees for

⁹ Rogers Comments, paragraph 48.

¹⁰ Xplornet Comments, paragraphs 14 to 15.

¹¹ Rogers Comments, Table 1 on page 12. In our Comments we recommended cutting the base rates in half, while Xplornet recommended reducing rates by one third (Xplornet Comments, paragraph 29).

¹² Alliance Corporation Comments, page 2; BCBA Comments, paragraph 3; CWTA Comments, paragraph 8; CanWSIP Comments, paragraph 9; Ecotel Comments, paragraph 16; QMI Comments, paragraph 13; RABC Comments, paragraph 35; SaskTel Comments, paragraph 12; Seaside Wireless Comments, paragraph 12; and Telus Comments, paragraph 17.

congested areas, as suggested by Telus and Ecotel.¹³ As we stated above, high fees act as a drag on investment so we do not support any increases to the base rates in urban or rural areas.

2.4 Modifying the Frequency Ranges and Additional Frequencies

11. Rogers and RABC both submitted proposals for an alternative schedule of frequency ranges that better align with propagation characteristics and add several further high frequency spectrum band delineations.¹⁴ TeraGo supported the RABC proposal.¹⁵ Both proposals improve upon the initial ISED table and either would be acceptable to us. In addition, the rates proposed by Rogers would incent the use of higher frequencies, which we support as a way to facilitate investment in new network technologies.

2.5 Treatment of Point-to-Multipoint Systems

12. In our Comments we observed that the Department's proposed framework does not encourage the efficiency of point-to-multipoint systems and would hinder their further implementation. Many other commenters expressed similar concerns, including Alliance Corporation, CWTA, CanWISP, CEA, QMI, RABC, Rogers, SaskTel and TeraGo.¹⁶ Applying the base rate to each individual link of a point-to-multipoint system will result in operators being charged multiple times for use of the same frequency pair. As many commenters pointed out, this approach effectively "penalizes" point-to-multipoint systems for being "inherently spectrum efficient,"¹⁷ and cautioned that it would "stifle" innovative uses of these systems.¹⁸

13. Use-cases for point-to-multipoint radio systems have a wide profile of beneficiaries. Rogers, QMI, RABC and CWTA, for example, described the potential of using very high frequency point-to-multipoint clusters for 5G mobile wireless fronthaul connections.¹⁹ In

¹³ Telus Comments, paragraph 22; and Ecotel Comments, paragraph 16.

¹⁴ See Rogers Comments, Table 1 and RABC Comments, Table 1.

¹⁵ TeraGo Comments, paragraph 9.

¹⁶ Alliance Comments, page 2; CWTA Comments, paragraph 9; CanWISP Comments, paragraph 12; CEA Comments, page 2; QMI Comments, paragraph 12; RABC Comments, paragraphs 27 to 31; Rogers Comments, paragraphs 57 to 58; SaskTel Comments, paragraph 30; and TeraGo Comments, paragraph 8.

¹⁷ CEA Comments, page 2. See also: SaskTel Comments, paragraph 30; and Alliance Corporation, page 2.

¹⁸ CWTA Comments, paragraph 9. See also: Rogers Comments, paragraph 57; RABC Comments, paragraph 27; CanWISP Comments, paragraph 12; and QMI Comments, paragraph 12.

¹⁹ Rogers Comments, paragraph 58; QMI Comments, paragraph 11; RABC Comments, paragraph 28; and CWTA Comments, paragraph 10.

addition, CanWISP highlighted the possibility of using wideband point-to-multipoint systems as last mile solutions in areas where fibre is too costly.²⁰

14. Given the above potential use-cases and the basic spectral efficiency of point-to-multipoint systems, we recommended, as did CanWISP, CEA, SaskTel and TeraGo,²¹ that all such systems be treated as a single frequency pair rather than charging the base rate to each individual link. Other commenters advocated applying this treatment solely to short-distance small cell clusters.²² We agree that this modification would be beneficial to short-distance point-to-multipoint systems, but we disagree that it should be limited to this specific type of deployment. As stated above, point-to-multipoint solutions can be used to meet a wide range of network needs in both high and low population density areas. If the Department were to single out certain types of point-to-multipoint systems, they might inadvertently disadvantage other innovative use cases, including those that have not yet emerged. The Department should seek to ensure that their annual fees are reflective of the inherent spectral efficiency of all point-to-multipoint systems, which aligns with the objective of the proposed regime to reward spectrally efficient operations.

15. CanWISP, RABC, and Rogers suggested as an alternative to the above proposal that ISED could issue spectrum licences that cover the entire area of a geographically contained point-to-multipoint system.²³ We are concerned, however, that this would reproduce some of the current issues faced by point-to-multipoint systems operating on auctioned spectrum. Namely, this model may be more difficult to administer and result in high costs for systems designed to cover larger geographic areas. We therefore prefer our recommended approach of charging fees on a single frequency pair.

16. The Canadian wireless industry is about to make major investments in network equipment and spectrum to implement 5G technologies and services. By reducing licence fees for fixed point-to-point radio systems, the Department will be supporting innovation and the efficient use of spectrum.

²⁰ CanWISP Comments, paragraph 13.

²¹ CanWISP Comments, paragraph 15; CEA Comments, page 3; SaskTel Comments, paragraph 31; and TeraGo Comments, paragraph 8.

²² CWTA Comments, paragraph 11; QMI Comments, paragraph 12; RABC Comments, paragraph 33; and Rogers Comments, paragraph 63.

²³ CanWISP Comments, paragraph 16; RABC Comments, paragraph 34; and Rogers Comments, paragraph 64.

2.6 Timing of Implementation

17. Alliance Corporation, QMI, Rogers, Shaw and Ecotel indicated their preference for the proposed regime to be implemented sooner than 1 April 2020.²⁴ We would not object to ISED implementing the proposed fee changes as soon as possible.

Q2. ISED invites proposals for a fee escalator that takes into account fee predictability for the radio licence fees under consideration.

18. Responses to Question 2 were varied. CCI, CEA, E-Comm and SaskTel advocated for the fee escalator to remain tied to CPI²⁵, while CanWISP, supported by Seaside Wireless, proposed a fixed rate increase every five years.²⁶ Shaw recommended periodic reviews²⁷, and Rogers, Ecotel and TeraGo argued that fee increases will quickly become prohibitively high and must be kept minimized.²⁸ Several other commenters chose to reserve their comments until the Department's planned consultation on the implementation of the *Service Fees Act*.²⁹ We continue to recommend that the Department postpone any decision on a licence fee escalator for fixed point-to-point radio systems until the Department has completed its announced consultation on this specific matter.

Q3. ISED invites comments on the proposals for minimum fees, short-duration licence fees and prorated fees.

19. Commenters generally expressed support for the Department's proposed minimum, short duration and prorated fees. We continue to support these proposals. In addition, TeraGo echoed our proposal that the Department allow for the prorated reimbursement of fees for returned licences.³⁰ This would align with the Department's prorated fee proposal.

²⁴ Alliance Corporation Comments, page 1; Ecotel Comments, paragraph 25; QMI Comments, paragraph 16; Rogers Comments, paragraph 26; and Shaw Comments, paragraph 6.

²⁵ CCI Comments, pages 2 to 3; CEA Comments, page 3; E-Comm Comments, page 2; and SaskTel Comments, paragraph 25.

²⁶ CanWISP Comments, paragraphs 17 and 18; and Seaside Wireless Comments, paragraph 17.

²⁷ Shaw Comments, paragraph 13.

²⁸ Rogers Comments, paragraph 71; Ecotel Comments, paragraphs 22 and 23; and TeraGo Comments, paragraphs 10 and 11.

²⁹ CWTA Comments, paragraph 12; QMI Comments, paragraph 17; and Telus Comments, paragraph 26.

³⁰ TeraGo Comments, paragraph 13.

3.0 CONCLUSION

20. We recommend that the Department: (i) reduce the proposed base rates; (ii) apply the rates on a frequency pair basis for point-to-multipoint systems; and (iii) allow for the prorated reimbursement of fees for returned licences. We also support the proposals from other commenters to modify the proposed list of frequency ranges to add more granularity at the high frequency end. The Canadian wireless industry is about to make major investments in network equipment and spectrum to implement 5G technologies and services. By reducing licence fees for fixed point-to-point radio systems, the Department will be supporting innovation and the efficient use of spectrum in the years to come.

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