TELUS COMMUNICATIONS INC.

Comments for

CONSULTATION on UPDATES to the LICENSING and FEE FRAMEWORK for EARTH STATIONS and SPACE STATIONS in CANADA

SMSE-009-21
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Spectrum Management and Telecommunications

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Table of Contents

Executive summary

1. TELUS appreciates the opportunity to submit comments on the *Consultation on Updates to the Licensing and Fee Framework for Earth Stations and Space Stations in Canada* ("the Consultation")[1]. TELUS firmly believes that meaningful industry consultation is an important component to developing smart, evidence-based public policy to the betterment of Canadians and Canadian society.

2. TELUS is generally supportive of the proposals in the Consultation to modernise the licensing framework for satellite services and to remove the distortions that result from applying the existing, dated regime to modern satellite deployments for broadband Internet.

3. TELUS is supportive of the specific proposal to allow generic licensing of fixed earth stations and ESIMs (on a no protection and non interference basis) where applicable in the specific bands described in the Consultation with one exception. TELUS has concerns with the potential interference from introducing generic licensing for maritime and aeronautical ESIMs in the 27.5-28.35 GHz (28 GHz) band.

4. TELUS recommends maintaining a case-by-case approval process for maritime and aeronautical ESIMs in the 28 GHz band until there are sufficient studies globally and associated technical analysis for Canada that demonstrate that there is no interference risk to future 28 GHz flexible use systems and fixed earth stations. In short, TELUS recommends against generic licensing of ESIMs in the 28 GHz band at this time because

[1] *Consultation on Updates to the Licensing and Fee Framework for Earth Stations and Space Stations in Canada*, published August 2021, Canada Gazette SMSE-009-21.
Link: https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11723.html

of the interference risk that cannot be mitigated through coordination of unregistered devices.

5. Further in support of ISED's goal to structure fees to be clear, predictable, and relatively easy to adjust to reflect changing markets and technological advances, TELUS proposes extending the proposed fee regime to include ATC spectrum licensing. Such a modification would reflect the essential nature of ATC mobile service as an integral part of mobile-satellite service offerings. TELUS recommends that the same consumption-based fees that are proposed for MSS earth station spectrum licences be applied to ATC spectrum licences so as to make fees clear and predictable for all licensees. The interim and outdated site-specific radio station based fee structure for ATC licenses should be retired.

6. The details behind TELUS' recommendations and TELUS' comments in response to various questions raised by ISED follow in the main body of this document.

Introduction

7. TELUS is generally supportive of the proposals in the Consultation to modernise the licensing framework and has nothing to add in response to many of the questions posed. As an operator of spectrum that is shared and coexists with satellite services, TELUS will respond to only a subset of questions where coexistence is a concern and where the fees framework affects ATC licences.

Frequency bands where generic spectrum licences will be available

Q6. ISED is seeking comments on its proposals to allow generic spectrum licensing systems of identical fixed earth stations and ESIMs in the frequency bands discussed above.

8. TELUS supports the specific proposals discussed in paragraphs 48 to 59 to allow generic spectrum licensing of identical fixed earth stations and ESIMs where applicable in the frequency bands proposed. TELUS supports the requirements in Annex A and Annex B, for potential licensees in the proposed bands. TELUS highlights its support of the location filing of all earth stations that would be under a generic spectrum licence as referenced in requirement A9 (indirectly) and B1a and that the filing information be available publicly on the Spectrum Management System database.

9. Regarding the proposal in paragraph 60, TELUS agrees that there is a high potential of harmful interference to flexible use systems from land ESIMs in the 27.5-28.35 GHz (28 GHz) band, as outlined by ISED in the Consultation. TELUS holds similar concerns

regarding the use of maritime ESIMs in coastal areas (e.g., near ports and docks) and of aeronautical ESIMs operating at low altitudes. For this reason, TELUS opposes generic spectrum licensing of aeronautical and maritime ESIMs in the 28 GHz band at this time. TELUS recommends that licence approvals should continue to follow the decision in SLPB-003-19 that states licensing would be 'permitted on a case-by-case basis with the condition of no-interference, no protection with respect to flexible use stations'.

10. TELUS' concerns expressed above and subsequent recommendation applies to all ESIMs operating in the 28 GHz band, regardless of whether they intend to communicate with GSO or NGSO satellites.

Additional conditions of licence for generic spectrum licences for ESIMs

Q8. ISED is seeking comments on its proposals to:

a. issue generic spectrum licences for ESIMs on a no-interference, no-protection basis
b. require ESIM licensees to provide a contact that would be available to respond to interference issues 24 hours a day, 7 days a week, as per the licence conditions in annex A
c. require applicants to submit technical information needed to confirm compliance with SRSP-101 when they apply for generic spectrum licences for ESIMs and for fixed earth stations intended for self-installation by consumers

11. TELUS supports the three requirements outlined in Question 8, and would emphasise that ISED should continue to issue the spectrum licences for ESIMs on a case-by-case basis when there is potentially interference with primary service allocations in the band.

12. TELUS' response to Question 6 notes that maritime ESIMs operating in coastal areas and aeronautical ESIMs operating at low altitudes may still pose interference concerns in areas where future flexible use may be deployed in the 28 GHz band and the proposed conditions on ESIM licensing are necessary.

MSS earth station spectrum licences

Q17. ISED is seeking comments on its proposal to modify the existing consumption-based fee for spectrum licences for MSS earth stations operating in bands allocated to MSS as follows:

a. at or below 3 GHz: $1500/MHz
b. above 3 GHz: $5/MHz

13. TELUS generally agrees with modernising the consumption-based fee structure of spectrum licences for MSS earth stations. To further modernise the proposed fee structure related to MSS, TELUS recommends to apply the same fee structure for the ancillary terrestrial component (ATC) spectrum licence as an 'integral part of mobile-satellite service offerings under a licensing process guided by a set of spectrum and licensing policy principles'[2] (i.e. modernising the licensing framework). TELUS' recommendation equally applies to the MSS and ATC services in the bands 2000-2020 MHz and 2180-2200 MHz under the revised framework to 'provision[ing] of wireless communications services to Canadians'[3] despite the bands being moved out from under the RP-023 framework. MSS and ATC spectrum licences are today linked under the same licensing regime, and hence the ATC licences should also be addressed in the Consultation. TELUS proposes the ATC spectrum licences fees below and thus replaces the interim and outdated site-specific radio station based licence fees[4][5] for the two current

[2] Section 5. Decisions, *Spectrum and Licensing Policy to Permit Ancillary Terrestrial Mobile Services as Part of Mobile-Satellite Service Offerings*, published December 2014, RP-023 Issue 2. Link: https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08174.html
[3] Decisions, *Decision on a Policy, Technical and Licensing Framework for Mobile Satellite Service and Advanced Wireless Service (AWS-4) in the Bands 2000-2020 MHz and 2180-2200 MHz*, published December 2014, Canada Gazette SLPB-008-14. Link: https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10899.html
[4] Ibid
[5] Decision D7, *Decision on Globalstar Canada's Application for Ancillary Terrestrial Component (ATC) Authority in the 2.4 GHz Band (2483.5-2500 MHz)*, published November 2020, SMSE-009-20. Link: https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11646.html

(and any future) ATC licensed bands.

Proposed ATC Spectrum Licence fees (Tier 1)

a. at or below 3 GHz: $1500/MHz
b. above 3 GHz: $5/MHz

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