

September 30, 2021

Senior Director, Space Services and
International Engineering, Planning and Standards Branch
Innovation, Science and Economic Development Canada
235 Queen Street (6th Floor, East Tower)
Ottawa ON K1A 0H5

Re: Iridium Canada comments on Canada Gazette, Part I, Volume 155, No. 33, dated August 14, 2021 “Consultation on Updates to the Licensing and Fee Framework for Earth Stations and Space Stations in Canada” (SMSE-009-21) (“Consultation”)

Iridium Satellite Canada Ltd. (“Iridium Canada”), a wholly owned subsidiary of Iridium Satellite LLC, commends the Department on its Consultation including a proposed change of the current licensing regime from apparatus-based radio licensing for satellite services to a spectrum licensing approach, with a consumption-based fee model for all satellite services. Our comments are targeted to two issues raised respectively in Q6 and Q17.

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.

Iridium Canada Comment:

Paragraph 59 of the Consultation addresses a number of frequency ranges allocated for use by non-GSO and/or GSO fixed satellite services. Some of the paragraphs in Section 6.3.1 (P.48 to P.63) specifically propose provisions applicable to GSO and/or non-GSO FSS or seek comments in this regard; but Paragraph 59 is silent on applicability of its proposed generic spectrum licensing to GSO or non-GSO FSS systems. According to 5.535A, the use of the frequency band 29.1-29.5 GHz (Earth-to-space) by the fixed satellite service is limited to GSO and feederlinks to non-GSO systems in MSS. Due to the unique nature of its allocation and in order to avoid confusion, Iridium Canada suggests that the frequency band 29.25-29.5 GHz be dealt with separately and not as part of other frequency ranges identified as part of Paragraph 59. By doing it this way it will avoid involving non-GSO FSS systems.

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:

- **at or below 3 GHz: \$1500/MHz**
- **above 3 GHz: \$5/MHz**

Iridium Canada Comment:

Iridium Canada supports ISED's proposed simplification of the spectrum license fee calculation for mobile earth stations operating in mobile-satellite service bands. Furthermore, Iridium Canada would like to bring to ISED's attention the fact that its satellite communication design is based on time division duplex (TDD) where the satellite system uses the same frequency band for both uplink and downlink. Such system architecture promotes a very efficient use of spectrum. Iridium Canada therefore proposes that satellite systems utilizing TDD communication design should not be required to pay separate license fees for transmit and receive functions as the transmit and receive transmission are carried out over the same spectrum. Adopting such an approach will be consistent with the policy objectives identified by ISED at para 84 relating to its overall spectrum management responsibilities. It will also encourage efficient use of spectrum.

Conclusion

Thank you for your consideration of these targeted comments. We will look forward to reading the comments of other interested parties. We may provide reply comments.

Sincerely,



Tatiana Lawrence
Vice President, International Regulatory