

October 22, 2017

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M. Proulx:

Terrestar Solutions Inc. (Terrestar) is pleased to provide the following comments in relation to Canada Gazette, Part I: Notice No. SMSE-005-17—Proposed Revisions to the Canadian Table of Frequency Allocations which has a Publication Date in the Canada Gazette of August 26, 2017.

Terrestar wishes to comment on section F1 - *Proposed modification to footnote C36 following the AWS-4 decision in the 2 GHz band* and Section B1 (*WRC-15, Agenda item 1.1) – Spectrum for mobile broadband consultation*.

Terrestar fully supports the Department's proposed modification to footnote C36 following the AWS-4 decision in the 2 GHz band. In its decision SLPB-008-14, the Department rightly decided that *"fixed systems that support the MSS or ATC systems of the existing licensee may be permitted as long as they adhere to the technical requirements set out for ATC in this band. Fixed systems that are separate from the MSS or ATC systems would require an application from the MSS/ATC licensee."*¹

By making this decision, the Department has increased the simultaneous use of this spectrum to support MSS, mobile and fixed uses. This is a particularly important decision for Canada's vast rural and remote areas for which there is a critical need for multi-faceted spectrum to provide improved fixed and mobile services.

The Department's decision SLPB-008-14 and the modification to footnote C36 underlines the unique shared use of this band by mobile, fixed and MSS services. To accomplish this complicated sharing many administrations, including Canada have made it mandatory that MSS and terrestrial systems be *"operated by the same licensee or closely coordinated with the MSS/ATC licensee."*² Terrestar wishes to stress the importance of retaining this principle in order to maximize the use of this frequency band and to support Canadian investments in the development of this band.

Terrestar wished to note that the Department's approach of ensuring that one gets maximum use of the AWS-4 spectrum by ensuring that fixed systems adhere to technical requirements of the AWS-4 mobile spectrum has applicability in other bands.

¹ F1 – Proposed modification to footnote C36 following the AWS-4 decision in the 2 GHz band, page 46

² Ibid page 46

Section B1 (WRC-15, Agenda item 1.1) – Spectrum for mobile broadband consultation, states that in Resolution 233 (WRC-12), the ITU-R was asked to study additional spectrum requirements for IMT; one of the bands identified is 1695 – 1710 MHz. Though no modifications are noted in the document for this band, Terrestar would submit that the above noted approach of sharing fixed and mobile use spectrum has particular applicability in the uplink 1695 – 1710 MHz band.

As the Department is well aware, the AWS-4 downlink spectrum has been combined with 1695 – 1710 MHz uplink spectrum and 1995 – 2000 MHz downlink spectrum in band 70 through the 3rd Generation Partnership Project (3GPP). The 3GPP unites seven telecommunications standard development organizations (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC), known as “Organizational Partners” and provides their members with a stable environment to produce the Reports and Specifications that define 3GPP technologies.

Terrestar would therefore submit that:

1. In line with the 3GPP standard for Band 70 and following the recent consultation on Terrestar’s application for the use of 1695 – 1710 MHz band in conjunction with the AWS-4 spectrum³, the Department should add the mobile use for 1695 – 1710 MHz band to the Canadian Table of Frequency Allocations. This would have the additional benefit of harmonizing the Canadian and US frequency allocation plans.
2. The Department has already supported the fixed and mobile use of AWS-4 for downlink transmission in decision SLPB-008-14, as noted on page 1 of this submission. It should therefore do the same for the proposed uplink spectrum as defined in Band 70. Since the 1695 – 1710 MHz band will be used for both fixed and mobile uses in conjunction with AWS-4 spectrum, following the recent consultation on Terrestar’s application for fixed and mobile use of 1695 – 1710 MHz, the fixed use for 1695 – 1710 MHz in the Canadian Table of Frequency Allocations should be similarly modified with a footnote like C36 for AWS-4. This will permit the enhanced use of fixed spectrum in this band as long as it adheres to the technical and protection requirements for mobile use in the 1695 – 1710 MHz band.

Terrestar will also be filing comments on 1695 – 1710 MHz as part of its response to Consultation on the Spectrum Outlook 2018 to 2022.

Sincerely,

Jan Skora

Jan Skora

Vice President
Regulatory Affairs
Terrestar Solutions Inc.

³ <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11297.html>