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VIA ELECTRONIC FILING

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Re: *Ex Parte Communication*, GN Docket No. 18-122

Dear Ms. Dortch:

Recently, Ericsson filed an *ex parte* letter¹ addressing the Transition Implementation Process submitted by the C-Band Alliance (“CBA”) for consideration by the Commission and industry stakeholders.² In response to that *ex parte*, the CBA met with Ericsson to clarify that the two-tranche, expedited spectrum clearing proposed in the Transition Implementation Process will not result in co-frequency operations between satellite services and terrestrial mobile services in the same geographic area. As such, the interference concern raised by Ericsson in its *ex parte* will not exist with respect to the CBA proposal. Below, we provide for the record the explanation we discussed with Ericsson. In addition, we explain that, while inapplicable to the CBA’s proposal, the concern raised by Ericsson certainly *would* apply to any proposal that contemplates clearing different amounts of spectrum in different PEAs.

The Transition Implementation Process contains details about the CBA’s proposed approach to clear 200 MHz (inclusive of a 20 MHz guard band) of the C-Band in 18-36 months for terrestrial 5G use should the CBA’s proposal be adopted by the Commission.³ One aspect of this approach is an option to expedite 5G access to C-band spectrum by clearing it in two tranches, the first of which would be available within 18 months of a final order.⁴ The first tranche would consist of

¹ See Letter from Mark Racek, Sr. Director, Spectrum Policy, Public Affairs and Regulations, Ericsson, GN Docket No. 18-122 (Apr. 26, 2019) (“Ericsson *Ex Parte*”).

² See Letter from Jennifer D. Hindin, Counsel for the C-Band Alliance, GN Docket No. 18-122 (Apr. 9, 2019) and Attachment, the “CBA Transition Implementation Process.”

³ Ericsson criticizes the CBA’s proposal to clear 200 MHz for terrestrial mobile use – asserting that it is an insufficient amount of spectrum. Ericsson *Ex Parte* at 4. The CBA has explained on the record why clearing more than 200 MHz within 36 months would result in existing users losing access to C-band spectrum for content distribution. See, e.g., Reply Comments of the C-Band Alliance, GN Docket No. 18-122 et al., at 15-16 (Dec. 7, 2018).

⁴ CBA Transition Implementation Process at 9. The CBA notes that it continues to meet with industry stakeholders and gain input regarding a proposed band plan and market-based clearing process.

80 MHz (including a 20 MHz guard band) of spectrum for use by terrestrial 5G operators in 46 of the top 50 PEAs.⁵

In its *ex parte*, Ericsson raises concerns regarding interference resulting from a two-tranche approach, stating that “[b]ecause only select PEAs would have access to spectrum in the first tranche, co-channel co-existence between 5G and satellite earth stations would be a concern.”⁶ The CBA clarifies that the 80 MHz of spectrum would be cleared at the satellite level throughout CONUS.⁷ To accomplish this clearing, incumbent customers will be limited to operations in 420 MHz of C-band spectrum (3780-4200 MHz) within 18 months of a final order.⁸

On the ground, the CBA would install filters on earth stations located in the 46 PEAs and areas proximate to those PEAs. Such filters will attenuate signals beyond 3760 MHz and mitigate harmful interference that would be caused by new terrestrial 5G operations in those areas. Outside of the 46 PEAs, there would be no terrestrial mobile operations, and thus, filter installation in the vast majority of areas would not be necessary until the second tranche deployment.

As clarified above, co-frequency interference is not a concern in the CBA’s proposed Transition Implementation Process. However, Ericsson correctly identifies that there is a very real technical concern with respect to proposals put forth by T-Mobile and others that seek more spectrum for 5G operations in some PEAs than in others. The CBA agrees with Ericsson that attempts to clear spectrum at the earth station level on the ground would likely produce uneven geographic clearing and result in interference into fixed satellite service (“FSS”) earth stations.⁹ Indeed, the CBA has articulated on numerous occasions in this proceeding that co-frequency operations in the same geographic area between terrestrial mobile and FSS earth stations is

⁵ Spectrum would be made available for terrestrial mobile operations in only 46 PEAs because of the time and labor required to order, manufacture, install, and test filters. The CBA has calculated the number of filters that can be deployed in 18 months and determined that there is sufficient time and labor available to complete deployment only in a limited number of PEAs. Given the quantity of antennas at issue and time and labor constraints, 46 PEAs is the maximum number that can be handled in 18 months.

⁶ Ericsson *Ex Parte* at 2.

⁷ 80 MHz is the maximum amount of spectrum that can be cleared without the launch of additional satellites.

⁸ Customers providing service to Alaska or to offshore remote terminals would remain in the 80 MHz of spectrum (including a 20 MHz guard band) otherwise cleared for 5G operations.

⁹ See, e.g., Letter from Henry Gola, Counsel for the C-Band Alliance, GN Docket No. 18-122 (Mar. 7, 2019).

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infeasible.¹⁰ Ericsson correctly notes that large separation distances would be required to protect FSS earth stations from harmful interference.¹¹ These separation distances would likely severely restrict terrestrial mobile operations in terms of power level and deployment flexibility, thus reducing their ability to provide 5G services.¹²

Also in its *ex parte*, Ericsson expresses concerns regarding ecosystem challenges in a two-tranche environment.¹³ For example, Ericsson states that “products designed and delivered to support the first tranche must be replaced when the second tranche of spectrum is delivered to support the new passband. Costly development of an interim solution could have a detrimental impact on the timing and availability of 5G products to support the first tranche.” Here, the CBA emphasizes that only a limited number of 3700-3760 MHz filters will need to be manufactured and installed—all of which will be done at the CBA’s expense.

Please contact the undersigned with any questions regarding this letter.

Respectfully submitted,

/s/

Jennifer D. Hindin

Counsel for the C-Band Alliance

¹⁰ See, e.g., Comments of the C-Band Alliance, GN Docket No. 18-122 at 16-17 (stating that “co-frequency sharing between FSS and terrestrial mobile service in the C-band Downlink is also infeasible”); *id* at Technical Appendix.

¹¹ Ericsson *Ex Parte* at 2.

¹² The CBA previously explained how this would result in the amount of spectrum usable for 5G services in any given PEA to be effectively dictated by the least amount sold in any adjacent PEA. See, e.g., Letter from Henry Gola, Counsel for the C-Band Alliance, GN Docket No. 18-122, at 5 (Mar. 7, 2019).

¹³ Ericsson *Ex Parte* at 3-4.