

September 25, 2019

Via Electronic Filing

Marlene H. Dortch
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Written *Ex Parte* Presentation of Speedcast Americas Inc.,
IB Docket No. 18-314, Further Streamlining Part 25 Rules Governing Satellite
Services; IB Docket No. 18-315, Facilitating the Communications of Earth
Stations in Motion with Non-Geostationary Orbit Space Stations

Dear Ms. Dortch:

Speedcast Americas Inc. (“Speedcast”) submits this written *ex parte* presentation in the above-captioned proceedings that seek (i) to revise the Commission’s rules governing earth stations in motion (“ESIMs”) by permitting communications with non-geostationary satellite orbit (“NGSO”) systems operating in the fixed-satellite service (“FSS”);¹ and (ii) to streamline the Commission’s satellite and earth station licensing rules by creating a process for obtaining a single “unified license” for both geostationary satellite orbit (“GSO”) space stations and associated earth stations in certain bands.²

Speedcast Americas is a subsidiary of Speedcast International, Ltd, an international telecommunications service provider. The Speedcast group of companies provide a wide range of advanced satellite services to the oil and gas, mining, and maritime industries. In these remote applications, mobile broadband connectivity is essential to ensuring operational efficiency, personnel safety, and crew welfare. To facilitate such connectivity offerings, Speedcast holds blanket license authority from the Commission to operate various ESIM terminals with both GSO and NGSO systems. Thus, Speedcast has a direct and substantial interest in both proceedings.

With respect to the *NGSO ESIM NPRM*, Speedcast urges the Commission to ensure the NGSO ESIM application process is clearly defined and evenly applied. Applicants should be fully aware of what is required before submitting an application,

¹ See Facilitating the Communications of Earth Stations in Motion with Non-Geostationary Orbit Space Stations, Notice of Proposed Rulemaking, IB Docket No. 18-315 (rel. November 16, 2018) (“*NGSO ESIM NPRM*”).

² See Further Streamlining Part 25 Rules Governing Satellite Services, Notice of Proposed Rulemaking, IB Docket No. 18-314 (re. November 15, 2018) (“*Unified License NPRM*”).

and only be required to provide technical information applicable to earth stations communicating with NGSO systems.

Prior NGSO ESIM applications have referenced rules applicable to earth station operations with GSO satellites.³ For example, the antenna performance requirements in Section 25.209 of the Commission's rules and the power spectral density mask in Section 25.228 applicable to earth stations operating with GSO satellites should not be applied to NGSO ESIMs. These masks were designed to protect GSO satellites operating in a 2°-spacing environment and are not applicable to NGSO system operations. Although the NGSO ESIM rules proposed in the *NGSO ESIM NPRM* do not appear to require compliance with any such mask, Speedcast believes it is important to confirm that no particular showing is required in this regard.

Similarly, proposed Section 25.115(f)(1) references the requirements of Section 25.146(a)(2), but the equivalent power flux density ("EPFD") provisions embodied in Section 25.146(a)(2) (and related non-interference provisions of Section 25.289) apply to *NGSO satellite system operators*, and EPFD compliance information is not available to NGSO ESIM applicants. ESIM operators do not have access to NGSO system network control functionalities and aggregate operational parameters to enable them to independently satisfy requirements that are appropriately imposed on NGSO system operators. Accordingly, Speedcast urges the Commission to delete or modify proposed Section 25.115(f)(1) to ensure such requirements are not imposed on NGSO ESIM licensees.

Such clarifications will not limit the information the Commission needs to facilitate NGSO ESIM licensing given FCC Form 312 contains the full particulars of proposed NGSO ESIM operations. In addition, proposed Section 25.115(o) requires information regarding geographic service area, network control and point of contact, and potential radiofrequency hazards.⁴

With respect to the *Unified License NPRM*, although the unified license proposal was limited to earth stations communicating with GSO satellites, commenters asked the Commission to clarify that the unified licensing option be available to both fixed earth stations and ESIMs, suggested that earth stations owned by others but operated pursuant to agreements with unified licensees be included in unified licenses, and urged the Commission to make the unified license available to earth stations communicating with

³ See, e.g., O3b Limited, File No. SES-LIC-20130528-00455 (Call Sign E130098).

⁴ See *NGSO ESIM NPRM* at Appendix A.

NGSO systems.⁵ Speedcast supports these important clarifications to the Commission’s unified license proposal.

From an interference prevention standpoint, ESIM terminals operate with the same fundamental technical approaches to ensure compatibility with other satellite networks as fixed earth station terminals. Furthermore, user terminal blanket licensing is generally limited to bands where there is little or no spectrum sharing with other systems and services (*e.g.*, Ku and Ka bands). As a result, there is no basis to exclude ESIMs from unified licenses.

In addition, in the *Unified License NPRM*, the Commission acknowledged that a satellite operator can “use contractual agreements with earth station end users to ensure it has the technical and administrative means to guarantee compliance with its network parameters and authorization”⁶ when communicating with earth stations under different ownership. Thus, the Commission envisions earth stations that are not owned by unified licensees to operate pursuant to such licenses.⁷ Establishing a single license for satellite and earth station networks, even when some earth station may be separately owned, would relieve burdensome requirements on earth station applicants and the Commission.⁸

Finally, unified licensing can be extended to NGSO systems. In bands where user terminal blanket licensing is available for NGSO systems, these NGSO terminals can be included in unified licenses for NGSO systems and associated terminals. Similarly, NGSO gateway earth stations can be included in NGSO unified licenses, subject to appropriate showings under the Commission’s rules.

These important clarifications to the Commission’s unified licensing proposal will streamline and accelerate the introduction of new NGSO systems and services and will promote the use of earth station technologies consistent with the Commission’s rules.

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⁵ See, *e.g.*, Comments of WorldVu Satellites Limited (OneWeb), IB Docket No. 18-314 (March 18, 2019); Comments of SES Americom, Inc./O3b Limited, IB Docket No. 18-314 (March 18, 2019); Comments of Maxar Technologies, IB Docket No. 18-314 (March 18, 2019); Reply Comments of Kymeta Corporation, IB Docket No. 18-314 (April 16, 2019) (“Kymeta Reply Comments”).

⁶ See *Unified License NPRM* at ¶7.

⁷ See *id.* (“...if successfully implemented, satellite network licenses could eliminate the need for many, if not most, earth station applications, which make up the bulk of applications received in the satellite services today.”).

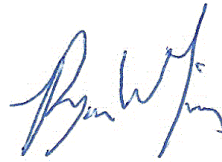
⁸ See, *e.g.*, Kymeta Reply Comments at 3.

Speedcast strongly supports and appreciates the Commission's efforts to facilitate the deployment of NGSO ESIMs and streamline satellite service licensing through adoption of appropriate licensing provisions in the above-referenced proceedings.

Please do not hesitate to contact the undersigned should with questions arise regarding this submission.

Respectfully submitted,

SPEEDCAST AMERICAS INC.



Ryan W. King
Speedcast Americas Inc.
Vice President & Head of Legal, Americas
4400 S. Sam Houston Parkway East
Houston, TX 77048