

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Parts 2 and 25 of the	)	IB Docket No. 17-95
Commission's Rules to Facilitate the Use of Earth	)	
Stations in Motion Communicating with	)	
Geostationary Orbit Space Stations in Frequency	)	
Bands Allocated to the Fixed Satellite Service	)	

**COMMENTS OF SES AMERICOM, INC. AND O3B LIMITED**

SES Americom, Inc. and its affiliate O3b Limited (collectively, “SES”) submit these comments regarding the Further Notice of Proposed Rulemaking in the above-captioned proceeding, which seeks input on allowing Earth Stations in Motion (“ESIMs”) to operate with geostationary orbit (“GSO”) fixed-satellite service (“FSS”) spacecraft “in all of the frequency bands in which earth stations at fixed locations operating in GSO FSS satellite networks can be blanket-licensed.”<sup>1</sup> SES strongly supports the proposals in the Further Notice to make additional frequencies available for GSO ESIM use.

SES, which operates both GSO FSS and non-geostationary orbit (“NGSO”) FSS networks, has been a vocal proponent of Commission policies that would allow both types of satellite systems to meet growing customer requirements for ESIMs communications capacity.<sup>2</sup> In these pleadings, SES urged the Commission to authorize ESIM operations with GSO FSS

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<sup>1</sup> *Amendment of Parts 2 and 25 of the Commission's Rules to Facilitate the Use of Earth Stations in Motion Communicating with Geostationary Orbit Space Stations in Frequency Bands Allocated to the Fixed Satellite Service*, Report and Order and Further Notice of Proposed Rulemaking, IB Docket No. 17-95 (rel. Sept. 27, 2018) (the “Further Notice”) at ¶ 91.

<sup>2</sup> See, e.g., Comments of SES S.A. and O3b Limited, IB Docket No. 17-95, filed July 31, 2017 (“SES 2017 Comments”); Reply Comments of SES S.A. and O3b Limited, IB Docket No. 17-95, filed Aug. 30, 2017 (“SES 2017 Reply Comments”).

spacecraft in segments of the Ku- and Ka-bands that had not been addressed in the original Notice, including 10.7-10.95 GHz, 11.2-11.45 GHz, and 17.8-18.3 GHz, explaining that ESIM use of these bands would help meet demand for increased mobility service and would be fully compatible with other authorized operations.<sup>3</sup> The Further Notice proposes rules to implement the expanded spectrum access SES sought,<sup>4</sup> and the Commission should promptly adopt these provisions to facilitate more intensive use of these bands in response to customer requirements.

The Further Notice also seeks comment on allowing GSO ESIM operations in additional spectrum not addressed in the SES 2017 Comments: the 19.3-19.4 GHz and 19.6-19.7 GHz band segments that were assigned to FSS use in the Commission's 2017 decision updating rules for NGSO systems<sup>5</sup> and the 18.8-19.3 GHz and 28.6-29.1 GHz bands in which NGSO systems have sole primary status.<sup>6</sup> SES supports allowing GSO ESIM use of these bands as well, provided that the Commission adopts its proposal to specify that GSO operations in the 18.8-19.3 GHz and 28.6-29.1 GHz band segments are "on an unprotected, non-interference basis with respect to NGSO FSS satellite systems"<sup>7</sup> to ensure NGSO use of these critical frequencies is not impaired.

Existing terrestrial fixed service ("FS") use in band segments such as 17.8-18.3 GHz, where GSO FSS is secondary, does not present an obstacle to designating the spectrum for operations with ESIMs. Aeronautical and maritime ESIMs are unlikely to be materially affected

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<sup>3</sup> SES 2017 Comments at 6-9; SES 2017 Reply Comments at 3-4.

<sup>4</sup> Further Notice at ¶ 91 and Appendix E, proposed footnote NG527A to Section 2.106 and proposed revisions to Section 25.202.

<sup>5</sup> *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 7809, 7815-16, ¶ 19 (2017).

<sup>6</sup> Further Notice at ¶ 91.

<sup>7</sup> *Id.*

by interference from FS transmissions. Even on land, interference to moving satellite terminals from FS transmissions would be transitory and could be adequately managed by the ESIM network operator.

For the reasons discussed herein and in the prior SES submissions, the Commission should act expeditiously to adopt the rules proposed in the Further Notice to authorize ESIM operations with GSO FSS systems in additional spectrum bands.

Respectfully submitted,

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