June 19, 2020

VIA ECFS

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

Re: Transition Plan of SES Americom, Inc.  
Expanding Flexible Use of the 3.7 to 4.2 GHz Band, GN Docket No. 18-122  
Eligible Satellite Operator Transition Plans for the 3.7-4.2 GHz Band, GN Docket No. 20-173

Dear Ms. Dortch:

SES Americom, Inc. (“SES”) hereby provides its initial Transition Plan describing the necessary steps that SES, its customers, and its associated incumbent earth stations need to implement for an accelerated transition of the C-band for 5G use.¹

The next generation of mobile communications technology, 5G, will bring ground-breaking services to consumers and businesses and will be one of the most important drivers of innovation and economic growth over the next two decades, generating millions of new, high-paying jobs. Ubiquitous 5G deployment – a vital national security interest – will unleash the potential of next generation wireless networks poised to “transform our economy, boost economic growth, and improve our quality of life.”² Repurposing 300 megahertz of C-band spectrum is “the next critical step in advancing American leadership in 5G and implementing [the Commission’s] comprehensive 5G FAST Plan.”³ Moreover, the transition process itself will involve substantial U.S. investment and provide many U.S. jobs during a critical period for the economy over the next three years.

On June 1, 2020, another critical transition milestone was met by the Wireless Telecommunications Bureau, which confirmed that a sufficient number of eligible space station operators filed accelerated relocation elections, triggering the accelerated relocation of

¹ See Expanding Flexible Use of the 3.7 to 4.2 GHz Band, Report and Order and Order of Proposed Modification, 35 FCC Rcd 2343 (2020) (“C-Band R&O”).
² Id. ¶ 3.
³ Id. ¶ 4.
operations in the band under the accelerated clearing schedule set out in the C-Band R&O.\footnote{Wireless Telecommunications Bureau Announces Accelerated Clearing in the 3.7-4.2 GHz Band, Public Notice, GN Docket No. 18-122, DA 20-578 (rel. June 1, 2020).} And by electing to accelerate clearing, SES is committed to relocating its services and the associated incumbent earth stations out of the 3.7-4.0 GHz band. Under the Commission’s accelerated clearing timeline, 100 megahertz of mid-band spectrum will be available for commercial 5G deployment by the end of 2021, and another 180 megahertz will be made available only two years later.

SES’s Transition Plan details the robust technical and logistical solutions needed to meet the aggressive clearing timeline while also protecting incumbent earth stations from harmful interference. Clearing both the C-band ground and space segments without delay requires stakeholders to undertake interdependent actions in a carefully orchestrated fashion.\footnote{See, e.g., Letter from Jennifer D. Hindin, Counsel, C-Band Alliance, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122 (filed Jan. 23, 2020) (explaining the interdependent ground and space segment clearing activities required for satellite spectrum grooming).} To that end, SES developed its Transition Plan based on fulsome input from a broad array of affected stakeholders. In particular, this plan reflects extensive rounds of discussions with SES’s customers and has been communicated to all of SES’s customers affected by the C-band transition.\footnote{SES has worked to incorporate customers’ individualized needs as much as possible.}

This Transition Plan complies with the Commission’s rules and contains all of the required information, including:\footnote{See 47 C.F.R. § 27.1412(d)(i)-(vii).} (1) how every C-band service on every affected SES satellite will be transitioned; (2) the procurement and launch of satellites to ensure SES maintains sufficient capacity with only 40% of the available spectrum; (3) every SES-associated incumbent earth station throughout the contiguous United States (“CONUS”) that must be relocated (which includes the shipment of tens of thousands of antenna filters for thousands of earth stations)\footnote{SES understands that the Commission will publish an “official” list of earth stations that must be cleared. If SES’s list of associated earth stations must be revised, SES will do so.}; (4) the necessary technology upgrades that an SES customer and its affiliated incumbent earth stations require; (5) the consolidation of SES’s telemetry, tracking and control (“TT&C”) and international gateway operations into only two remote sites; and (6) estimated cost ranges for SES’s transition.
Below is the high-level timeline of SES’s transition components:

**Phase I**: By December 5, 2021, SES will:

- Relocate all of its CONUS-exclusive commercial services out of the 3.70-3.82 GHz band;\(^9\)
- Make necessary equipment changes on all associated Incumbent Earth Station antennas located in 46 of the top 50 Partial Economic Areas (“PEAs”) and the surrounding areas in CONUS;\(^10\)
- Supplement its TT&C operations to enhance two earth stations located in Hawley, PA (“Hawley”), and Brewster, WA (“Brewster”) to comply with the *C-Band R&O*;\(^11\) and
- Begin to consolidate its gateway services (e.g., international feeder link, data, and other services) currently located at other SES gateway locations as well as any customer or user gateway services to Hawley and/or Brewster; these gateway services will operate on an unprotected basis in the 3.70-3.82 GHz band.\(^12\)

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\(^9\) A certain number of services, most notably from SES’s international satellite fleet, will continue to be downlinked in the 3.70-3.82 GHz band into CONUS. These services will be received at the Hawley or Brewster teleports in accordance with the Commission’s rules and *C-Band R&O*. 47 C.F.R. § 25.203(n); *C-Band R&O* ¶¶ 379-81. Some services will also be received at SES’s teleports in Manassas, VA and Woodbine, MD between the Phase I and Phase II clearing deadlines. The continued limited operations in the 3.70-3.82 GHz band at the Woodbine and Manassas facilities will not impact the introduction of 3.7 GHz Services because both teleports are located in PEA 5, which is not subject to clearing in Phase I. To the extent necessary, SES will seek a waiver to continue unprotected international gateway operations at the Woodbine and Manassas facilities until the Phase II deadline.

\(^10\) See 47 C.F.R. § 27.1411(b)(5) (defining “Earth station filtering”).

\(^11\) *C-Band R&O* ¶ 375.

\(^12\) See supra note 9.
Phase II: By December 5, 2023, SES will:

- Relocate all of its CONUS-exclusive commercial services out of the 3.7-4.0 GHz band;\(^\text{13}\)
- Make necessary equipment changes on all associated Incumbent Earth Station antennas located in all CONUS PEAs;
- Continue TT&C operations in the lower portion of the band on a protected basis at Hawley and Brewster and in the upper portion (4.2 GHz) of the band at SES’s other teleports; and
- Complete gateway consolidation to the Hawley and Brewster sites; the gateway services will operate on an unprotected basis in the 3.7-4.0 GHz band at Hawley and Brewster.\(^\text{14}\)

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SES appreciates the many hours dedicated by the hard-working Commission staff to ensure that this accelerated C-band transition process moves forward in a timely manner. SES looks forward to input from interested stakeholders,\(^\text{15}\) expeditious Commission approval of a finalized Transition Plan, and ultimately an accelerated relocation of this band to achieve the goal of U.S. leadership in 5G.

Pursuant to Section 1.1206(b) of the Commission’s Rules, this letter is being filed in ECFS in the above-referenced dockets.\(^\text{16}\) Please do not hesitate to contact the undersigned with any questions.

Very truly yours,

/s/ Brian D. Weimer

Brian D. Weimer
for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

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\(^\text{13}\) See supra note 9.
\(^\text{14}\) The gateway services will operate on an unprotected basis in the 3.7-4.0 GHz band at Hawley and Brewster.
\(^\text{15}\) Id. ¶ 305.
\(^\text{16}\) See 47 C.F.R. § 1.1206(b).