

# SES AMERICOM, INC. C-BAND TRANSITION QUARTERLY REPORT (published 03/31/23)



## Overall Highlights

- **We remain on track and in some cases ahead of schedule for completing our Phase II transition activities in advance of the December 5, 2023 clearing deadline.**
  - As of March 31, 2023, SES has completed approximately **94%** of Phase II satellite transitions.
  - We have completed the installation of “blue” bandpass filters at approximately **82%** of the Incumbent Earth Station (IES) locations associated with SES satellites.<sup>1</sup>
  - We have installed nearly **100%** of the antennas associated with our Phase II transition schedule.
  - TT&C / Gateway antenna construction and other upgrades are complete.
  - Gateway services (i.e., platforms and SES-provided customer uplinks/downlinks) associated with Phase II are complete.



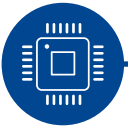
## Satellite Manufacture and Launch Procurement

- **Satellite procurement and launch programs nearly complete, with five satellites launched.**
  - On March 17, 2023, SES launched SES-18 and SES-19.
  - SES-18 is expected to start operations at 103° W.L. by the end of May 2023, which will mark SES’s final satellite deployment milestone.
  - SES-22 began operations at 135° W.L. on August 2, 2022. SES-21 began service at 131° W.L. on December 1, 2022. SES-20 arrived at 103° W.L. at the end of December 2022, where it operates as an in-orbit spare.
  - All services are expected to be transitioned by the end of July 2023.



## Satellite Service Migrations

- **As of March 31, 2023, SES has completed approximately 94% of Phase II service transitions on our satellites.**
  - Based on our performance completing our Phase I service transitions, we anticipate completing all Phase II service transitions on time.



## Compression Technology

- **All compression activities were completed as of October 31, 2021.**



## Incumbent Earth Station Migration

- **As of March 31, 2023, SES has installed filters at approximately 82% of the IES locations identified for Phase II clearing, as well as nearly 100% of the new antennas needed to complete the transition.**
  - SES continues to conduct virtual site surveys for IESs subject to our Phase II activities to identify the information needed to prepare the sites for satellite service transitions and the eventual installation of filters.
  - We will continue to conduct individualized on-site testing at IES sites in cases where the performance of an antenna must be assessed to determine if that antenna can support a higher adjacent satellite interference environment associated with the repacked satellite spectrum.
  - SES will continue to identify IESs that require new antennas through our outreach efforts.



## TT&C/Gateway Construction/Service Transition

- **Construction of our TT&C/Gateway facilities in Brewster, WA and Hawley, PA is complete.**
  - The full motion TT&C antenna installations, along with the associated ground equipment, are complete at Hawley and at Brewster, and both antennas are in operation and supporting TT&C operations for SES’s C-band satellites.
  - All four gateway antenna systems planned for the Hawley facility have been fully installed, tested, and put into operation.
  - All Phase II gateway services have been transitioned.
  - All services from international satellites received at SES teleports that could not be relocated to frequencies above 3820 MHz have now been transitioned to the Hawley facility.
  - Phase II TT&C antenna construction and the modification of existing antennas to be utilized for TT&C purposes for the new C-band spacecraft has been completed at SES’s Hawley, Manassas, Woodbine, South Mountain, and Hawaii locations.
  - The last task is to install the permanent shelter in the Brewster, WA facility, which arrived onsite during the first week of January 2023.

<sup>1</sup>“Blue” filters block the lower 300 MHz of the C-band (3700 – 4000 MHz).  
A description of the filter specifications is available [here](#).