

## **REQUEST FOR SPECIAL TEMPORARY AUTHORITY**

AC BidCo LLC (“AC BidCo”), which holds a license to operate an earth station aboard aircraft (“ESAA”) network,<sup>1</sup> hereby requests special temporary authority (“STA”) for a period of 60 days commencing no later than June 15, 2018, to permit up to 100 AeroSat model HR6400 ESAA terminals and up to 100 ThinKom model 2Ku terminals to communicate in the conventional and extended Ku-band frequencies with the U.S.-licensed Intelsat 37e satellite at 18° W.L.<sup>2</sup> Grant of the requested STA will serve the public interest by allowing AC BidCo to respond to customer demand for additional capacity on flights over Europe. AC BidCo is preparing an application to modify its ESAA license to add Intelsat 37e as an authorized point of communications, and seeks STA pending submission of and action on that modification application.

### Background

AC BidCo is currently authorized to operate two types of Ku-band terminals, AeroSat model HR6400 antennas designated as AES1 on the AC BidCo ESAA License and ThinKom model 2Ku antennas designated as AES2 on the license, with specified satellites for ESAA service in U.S. airspace, foreign airspace, and the airspace over international waters. AC BidCo’s license was issued based on demonstration that the proposed network would enhance competition in the provision of in-flight broadband service to air travelers and airline crew members and that the planned operations were fully consistent with technical standards designed to ensure protection of other authorized communications networks. In order to enhance and expand its ESAA operations, AC BidCo is preparing an application to modify the AC BidCo ESAA License to update the satellites authorized as points of communication for the AC BidCo network.

### STA Request

AC BidCo requests STA to commence communications with Intelsat 37e in the near term while it is completing preparation of the upcoming modification application. AC BidCo seeks authority to use Intelsat 37e capacity for ESAA operations on a primary basis in the 14-14.5 GHz uplink spectrum and on an unprotected basis in the 10.95-11.7 GHz downlink spectrum, consistent with the Intelsat 37e License and with the Commission’s orders in the ESAA

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<sup>1</sup> Call Sign E120106, File No. SES-MFS-20171220-01351, granted Mar. 9, 2018 (the “AC BidCo ESAA License”).

<sup>2</sup> Call Sign S2972, File No. SAT- LOA-20160915-00089, granted June 8, 2018, as corrected June 13, 2017 (the “Intelsat 37e License”).

proceeding.<sup>3</sup> AC BidCo also seeks authority to use Intelsat 37e capacity for ESAA operations on a nonconforming basis in the 12.5-12.75 GHz downlink spectrum. Communications with the satellite will be supported by an Intelsat teleport in Hagerstown, MD, call sign E040414.

Intelsat 37e will provide coverage of Europe. In support of this STA request, AC BidCo is attaching a letter confirming that operation of the AC BidCo ESAA terminals is consistent with coordination agreements with satellites operated within six degrees of Intelsat 37e.

The technical parameters of the proposed operations with Intelsat 37e are provided in the following table:

<b>Antenna</b>	<b>Maximum EIRP Density Per Carrier (dBW/4 kHz)</b>	<b>EIRP (dBW)</b>	<b>Emission Designator</b>
AES 1	14.27	45.0	1M84G7D
AES 2	14.17	45.0	1M84G7D

AC BidCo requires the ability to use additional capacity in Europe on an urgent basis to accommodate increased demand for data capacity that cannot be met by the existing wide-beam spacecraft AC BidCo uses for European coverage. AC BidCo's existing European capacity is heavily utilized, and adding the Intelsat 37e high-throughput satellite will allow AC BidCo to supplement this capacity in order to ensure a high quality of service and allow AC BidCo to continue to compete effectively in the ESAA market. AC BidCo does not propose to use the satellite for ESAA operations in U.S. airspace.

AC BidCo emphasizes that the scope of this STA request is limited. AC BidCo is only seeking authority to add Intelsat 37e as an authorized point of communication for a limited number of ESAA terminals. AC BidCo is otherwise prepared to operate consistently with the terms and conditions set forth in the existing AC BidCo ESAA License. In addition, AC BidCo is willing to operate pursuant to the STA on an unprotected, non-harmful interference basis.

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<sup>3</sup> *Revisions to Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft Communicating with Fixed-Satellite Service Geostationary-Orbit Space Stations Operating in the 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz and 14-14.5 GHz Frequency Bands*, Notice of Proposed Rulemaking and Report and Order, IB Docket Nos. 12-376 & 05-20, 27 FCC Rcd 16510 (2012) ("ESAA Order"); Second Report and Order and Order on Reconsideration, IB Docket No. 12-376, 29 FCC Rcd 4226 (2014) ("ESAA Second Order," and with the ESAA Order, the "ESAA Decisions").

### Waiver Requests

AC BidCo seeks a limited waiver of the Commission's rules in connection with its request for an STA to add Intelsat 37e as an authorized point of communication for the AC BidCo ESAA network. Specifically, AC BidCo requests a waiver of the Table of Allocations in Section 2.106 to permit ESAA operations with Intelsat 37e in the 12.5-12.75 GHz spectrum outside the United States. Grant of this waiver is consistent with Commission policy:

The Commission may waive a rule for good cause shown. Waiver is appropriate if special circumstances warrant a deviation from the general rule and such deviation would better serve the public interest than would strict adherence to the general rule. Generally, the Commission may grant a waiver of its rules in a particular case if the relief requested would not undermine the policy objective of the rule in question and would otherwise serve the public interest.<sup>4</sup>

AC BidCo requests waiver of the Table of Allocations in Section 2.106 of the Commission's rules to permit use of downlink spectrum in the 12.5-12.75 GHz band for ESAA operations. The Commission's ESAA Decisions modified the Table of Allocations to permit ESAA operations in the conventional Ku-band, as well as in the 10.95-11.2 GHz and 11.45-11.7 GHz segments of the extended Ku-band. The Commission acknowledged that ESAA operators may also wish to use other downlink spectrum, particularly for reception of transmissions from space stations with little or no U.S. coverage.<sup>5</sup> Although the Commission had not requested comment on changing the allocation status of this downlink spectrum, it specifically contemplated that access to such spectrum could be granted "on a case-by-case basis under Part 25 licensing rules."<sup>6</sup> For example, the Commission has authorized AC BidCo and other ESAA providers to receive signals in the 12.2-12.75 GHz band.<sup>7</sup>

Consistent with these past rulings, AC BidCo requests a waiver of the Table of Allocations to permit its terminals to receive transmissions from Intelsat 37e in the 12.5-12.75 GHz band. As noted above, AC BidCo does not propose to use Intelsat 37e in U.S. airspace, and Intelsat has confirmed that AC BidCo's proposed ESAA operations are consistent with Intelsat's coordination agreements with satellites within six degrees. Authorizing AC BidCo to receive signals from Intelsat 37e will not alter the technical characteristics of the

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<sup>4</sup> *PanAmSat Licensee Corp.*, 17 FCC Rcd 10483, 10492 (Sat. Div. 2002) (footnotes omitted).

<sup>5</sup> *See ESAA Order* at n.43.

<sup>6</sup> *Id.*

<sup>7</sup> *See, e.g.*, AC BidCo Blanket License, Section B (authorizing use of the 12.2-12.75 GHz band); *Panasonic Avionics Corporation*, File No. SES-MFS-20170312-00255, Call Sign E100089, granted July 26, 2017, Section B (authorizing use of the 10.7-12.75 GHz band).

satellite's operations in any way, and therefore will not create harmful interference to other authorized users of the spectrum. Furthermore, AC BidCo will not claim interference protection from such authorized users. Under these circumstances, grant of a Section 2.106 waiver is justified to permit use of the 12.5-12.75 GHz band for downlinks from Intelsat 37e.

Public Interest Showing

Grant of the requested STA is consistent with Commission policy and will not adversely affect other authorized operations. AC BidCo's proposed operations with Intelsat 37e are consistent with Intelsat's coordination agreements with adjacent satellite operators and will also conform to the terms of AC BidCo's agreements with the National Science Foundation and the National Aeronautics and Space Administration. In addition, AC BidCo will comply with power flux density limits to protect terrestrial services outside the U.S.

Grant of the proposed STA will allow AC BidCo to meet immediate demand for additional capacity over Europe, promoting competition in the provision of aeronautical services and expanding the availability of in-flight broadband to air travelers and crew members.

AC BidCo understands that any Commission grant of this STA will be without prejudice to the ultimate determination the Commission will make regarding AC BidCo's future modification application. In addition, AC BidCo acknowledges that any action taken pursuant to a grant of the requested STA will be at AC BidCo's own risk.

May 24, 2018

Federal Communication Commission  
International Bureau  
445 12th Street SW  
Washington, DC 20554

**Re: Engineering Certification of Intelsat for Intelsat 37e Satellite**

To Whom It May Concern:

This letter certifies that Intelsat is aware that AC BidCo LLC ("AC BidCo") is planning to seek a modification to its blanket authorization, from the Federal Communications Commission ("FCC"), to operate the Ku-band transmit/receive terminals AES1 and AES2 for the provision of Aeronautical Mobile Satellite Service (Call Sign E120106). AC BidCo seeks additional authorization for these aeronautical Ku-band earth stations to also utilize Intelsat 37e at 18W, under the current rules for Earth Stations Aboard Aircraft (ESAA), including Section 25.227.

Intelsat certifies that the use of the ESAA transmit/receive terminals AES1 and AES2 by AC BidCo, installed and operated in accordance with the AC BidCo application and the above conditions, is consistent with existing coordination agreements with all adjacent satellite operators within +/- 6 degrees of orbital separation from Intelsat 37e. Intelsat also acknowledges that the use of the above referenced terminals by AC BidCo has the potential to receive harmful interference from adjacent satellite networks that may be unacceptable.

If the FCC authorizes the operations proposed by AC BidCo in its application, Intelsat will include the power density levels, as described above, in all future satellite network coordinations with other adjacent satellite operators. AC BidCo shall comply with all such coordination agreements reached by the satellite operators.

Sincerely,

  
\_\_\_\_\_  
Alexander Gerdenitsch  
Manager, Spectrum Policy, Americas  
Intelsat

5/24/2018

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Date