

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

In the Matter of )  
 )  
Service Rules and Procedures to Govern the )  
Use of Aeronautical Mobile Satellite Service ) IB Docket No. 05-20  
Earth Stations in Frequency Bands )  
Allocated to the Fixed Satellite Service )

**COMMENTS OF SES AMERICOM, INC.**

SES Americom, Inc. (“SES Americom”), by its attorneys and pursuant to Section 1.415 of the Commission’s Rules, submits these Comments in response to the Commission’s Notice of Proposed Rulemaking (“*Notice*”) in the above-captioned proceeding.<sup>1</sup>

SES Americom welcomes the Commission’s efforts to develop rules that will permit the regular operation of aircraft earth station (“AES”) terminals using fixed satellite service networks. Facilitating the deployment of AES terminals will result in significant public interest benefits. As the Commission noted, AES terminals can be used to provide broadband telecommunications services to commercial and government aircraft, enabling important new service offerings for passengers and crew. *Notice* at ¶ 1. Using existing FSS network facilities to support AES deployment furthers the Commission’s objectives of

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<sup>1</sup> *Service Rules and Procedures to Govern the Use of Aeronautical Mobile Satellite Service Earth Stations in Frequency Bands Allocated to the Fixed Satellite Service*, Notice of Proposed Rulemaking, IB Docket No. 05-20, FCC 05-14 (rel. Feb. 9, 2005).

encouraging market-based broadband solutions and efficient use of spectrum resources. *Id.* at ¶ 2. Finally, the Commission notes that its proposals are consistent with the decision reached at the 2003 World Radiocommunication Conference (“WRC-03”) regarding AES operation. *Id.* at ¶ 2.

SES Americom’s experience in providing capacity to AES system operators indicates that these terminals can be deployed without creating harmful interference for incumbent operations. We strongly support Commission action to implement in the United States the international agreement on AES operations reached at WRC-03 in order to permit AMSS operators to take advantage of a global spectrum designation. Accordingly, we urge the Commission to adopt policies that will facilitate the deployment of AES terminals and provide greater regulatory certainty to AMSS networks and providers of FSS capacity. We make specific recommendations below regarding some of the technical and policy issues raised in the *Notice*.

**I. TECHNICAL RULES FOR AES TERMINALS SHOULD BE BASED ON CURRENT PART 25 REQUIREMENTS**

In order to obtain the public benefits of AES terminal deployment, the Commission should ensure that the requirements imposed on AES operators to obtain licenses under the new system are not unduly burdensome. As far as possible, AES terminal licensing requirements should be consistent with the Commission’s current rules, and additional requirements should be imposed only where they are necessary to prevent harmful interference.

The *Notice* seeks comment on technical rules for AES terminals to ensure that their operations in FSS spectrum are consistent with FCC policies for two-degree spacing. SES Americom supports the adoption of technical standards that permit routine licensing of AES terminals that comply with power limits comparable to those applicable to VSAT networks under current rules.

The *Notice* requests comment on two alternative formulas for off-axis EIRP limits for AES operations: aggregate EIRP density limits proposed by Boeing and individual EIRP limits developed by the Commission. *Id.* at ¶¶ 35-37. The Commission notes that PanAmSat has suggested that instead of establishing general standards, the Commission should develop power limits for AES terminals on a case-by case basis. *Id.* at ¶ 36.

SES Americom urges the Commission to adopt rules that permit routine processing of applications for AES terminals that meet the aggregate power density limits Boeing has put forth. As the Commission observes, aggregate power limits provide flexibility by permitting a network control center to assign power limits to individual terminals provided the overall limit is not exceeded. *Id.* We believe this flexibility is important for AES networks, and that operators should be given the opportunity to use dynamic power assignment to maximize the overall efficiency of their systems. However, we recognize that the Commission's proposed individual terminal limits may be easier for some systems to administer. Thus, we believe that the rules should permit systems the option to use variable power

assignment or employ the Commission's individual limits for terminals, provided that the aggregate limits are met in each case. *See id.* at ¶ 37.

These standards will provide certainty to AES applicants, while providing adequate protection from interference to operators of adjacent satellites. In contrast, application of a case-by-case analysis would unnecessarily delay action on AES terminal applications and would be contrary to the Commission's goal of facilitating deployment of aeronautical services.

The *Notice* also seeks comment on standards for AES receive terminal operations in the 11.7-12.2 GHz downlink band. *Id.* at ¶ 39. We agree that because these terminals will be operating on a secondary basis and cannot claim protection from other users, there is no need to impose antenna performance standards on receive operations. In the extended Ku-band downlink bands (10.95-11.2 and 11.45-11.7 GHz), AES terminals should be permitted to operate on a non-protected basis, and the prohibition on domestic service in Footnote NG104 should be waived. *See id.* at ¶ 18.

SES Americom supports the use of a certification procedure permitting AES applicants whose proposals are not eligible for routine processing to coordinate their operations with adjacent satellite systems. *Id.* at ¶ 40. This approach is already used for other types of satellite terminals that do not comply with applicable EIRP standards, and permits adjacent operators to make individualized determinations regarding non-compliant AES system operations.

For protection of terrestrial fixed services, adoption of power flux density limits for AES emissions is appropriate. SES Americom supports the Commission's proposal to impose the limits set forth in paragraph 46 of the *Notice* unless a stricter limit is imposed by an affected foreign administration.

## **II. BLANKET LICENSING OF AES TERMINALS SHOULD BE AVAILABLE**

Processing rules for AES terminal applications should also be designed to facilitate aeronautical services deployment while ensuring that standards to prevent harmful interference are met. The Commission proposes a blanket licensing system for AES terminals, noting that “the number and mobility of AES locations would make it impractical to license AES terminals on a site-by-site basis.” *Notice* at ¶ 49.

SES Americom strongly supports this proposal. Until now, AES terminals have been permitted to operate only pursuant to case-by-case waiver of the Commission rules or on an experimental basis, and only a relatively small number of terminals has been authorized. *Id.* at ¶¶ 5-6. This process of obtaining operating authority has been burdensome both for operators and for the Commission itself. A blanket licensing framework will substantially ease licensing burdens by allowing AES terminals to operate under a single network-wide license and will provide greater regulatory certainty to AES operators.

## CONCLUSION

SES Americom respectfully requests that the Commission adopt licensing rules that facilitate AES terminal deployment and implement the WRC-03 agreement, consistent with the recommendations made in these comments.

Respectfully submitted,

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