

STEPTOE & JOHNSON LLP
ATTORNEYS AT LAW

Carlos Nalda
202.429.6489
cnalda@steptoe.com

1330 Connecticut Avenue, NW
Washington, DC 20036-1795
Tel 202.429.3000
Fax 202.429.3902
steptoe.com

April 14, 2004

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

Re: Notice of *Ex Parte* Presentation, IB Docket Nos. 00-248 and 02-10

Dear Ms. Dortch:

On April 13, 2004, representatives of The Boeing Company met with members of the International Bureau staff to discuss issues raised in the above-referenced proceedings. Participants in the meeting included Audrey Allison, Guy Christiansen and Alan Rinker of The Boeing Company; Carlos Nalda of Steptoe & Johnson; and Thomas Tycz, Robert Nelson, Arthur Lechtman, Chip Fleming and William Howden of the International Bureau. The issues discussed at the meeting are set forth in the attached presentation.

Any questions regarding this matter may be directed to the undersigned.

Respectfully submitted,
s/Carlos M. Nalda
Carlos M. Nalda

Attachment
cc (w/ att.): Thomas Tycz
Robert Nelson
Arthur Lechtman
Chip Fleming
William Howden



Connexion by BoeingSM

AMSS and Pending FCC Rulemaking Proceedings

Presentation to the
FCC International Bureau

April 13, 2004



Overview

- Pending FCC earth station rulemaking proceedings
 - Boeing filed a Petition for Rulemaking in July 2003 to initiate a proceeding to develop licensing and service rules for Ku-band AMSS
 - The FCC subsequently released the Earth Stations On Board Vessels (ESV) NPRM in November 2003, which addresses C-band and Ku-band ESV licensing
 - Ongoing Part 25 earth station streamlining proceeding, commenced in late 2000, is nearing completion
- AMSS and ESV systems raise issues distinct from VSATs with respect to control of adjacent satellite interference
- The FCC should adopt separate AMSS and ESV earth station licensing rules to accommodate the unique characteristics of these types of systems

Part 25 Earth Station Licensing

- Section 25.134(a)(1) specifies maximum downlink power density and antenna input power density; Section 25.134(a)(2) references compliance with the antenna gain patterns in Section 25.209.
- Section 25.134(b) provides that applicants may exceed the power levels, but must provide an interference analysis and “shall provide proof by affidavit that all potentially affected parties acknowledge and do not object to the use of the applicant’s higher power density.”
- Section 25.209(f) provides that “[a]n earth station with an antenna not conforming to the standards of paragraphs (a) and (b) of this section will be routinely authorized . . . upon a finding by the Commission that unacceptable levels of interference will not be caused under conditions of uniform 2° orbital spacings.”



AMSS Petition for Rulemaking

- The AMSS Petition for Rulemaking proposes to adopt essential elements of Recommendation ITU-R M.1643
 - Minimum design requirements for AMSS systems, including positive control of AES transmissions, to ensure full protection of primary Ku-band FSS services
 - Protection of Space Research and Radio Astronomy operations (in the U.S. via coordination with NTIA)
- Routine licensing pursuant to a separate AMSS rule based on compliance with an off-axis e.i.r.p. mask
 - Off-axis e.i.r.p. limited to that of a routinely licensed VSAT
 - Approach recognizes sophisticated nature of AMSS antenna systems and networks control technologies (versus traditional VSAT FSS operations)
 - Approach similar to that adopted for new Ka-band earth stations in Section 25.138



FCC's Proposed ESV Rules

- Licensing under the CSAT/VSAT rules based on compliance with Section 25.134 power levels and Section 25.209 antenna performance standards
- Non-conforming Ku-band ESV antennas permitted with technical demonstration under Section 25.134(b) for non-conforming VSATs
- Non-conforming C-band ESV antennas permitted with demonstration that they will not cause unacceptable interference
- Boeing agrees with these fundamental principles, but believes that ESVs should be licensed pursuant to an off-axis e.i.r.p. approach



Part 25 Streamlining

- The FCC proposes to revise Section 25.220 to codify licensing of earth stations that reduce off-axis e.i.r.p. to levels compliant with Sections 25.134 and 25.209
 - Recognition that off-axis e.i.r.p. is the relevant measure of interference into adjacent satellites
 - Boeing fully supports this licensing approach for both AMSS and ESV systems
- The SIA proposals in the Part 25 streamlining proceeding
 - The SIA has opposed licensing of traditional C-band and Ku-band earth stations based on off-axis e.i.r.p. reduction
 - The SIA has proposed licensing of non-conforming CSATs and VSATs in limited circumstances based on a demonstration of enhanced antenna pointing accuracy
 - *The SIA did not contemplate application of its Part 25 proposals to AMSS or ESV systems*



Conclusion

- AMSS and ESV systems are distinct from traditional CSATs/VSATs
 - Fundamentally different services with unique operational characteristics
 - Shoehorning ESV or AMSS rules into the CSAT/VSAT licensing rules is inappropriate
- Preferable to establish separate AMSS and ESV licensing rules based on an off-axis e.i.r.p. approach
 - The AMSS Petition for Rulemaking proposes this approach
 - Adopting this approach for ESVs recognizes the unique operational characteristics of the service and is the same as the approach adopted by the ITU
 - The SIA's Part 25 proposal addressed traditional CSAT/VSAT licensing only; SIA did not contemplate application of the proposed rules to AMSS and ESV systems. *See SIA Ex Parte*, IB Docket No. 00-248 (filed March 23, 2004).