

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of

Procedures to Govern the Use of Satellite
Earth Stations on Board Vessels in the 5925-
6425 MHz/3700-4200 MHz Bands and
14.0-14.5 GHz/11.7-12.2 GHz Bands

IB Docket No. 02-10

REPLY COMMENTS OF ALCATEL

Alcatel respectfully submits the following brief reply comments in response to the Commission's Notice of Proposed Rulemaking (NPRM) in the above-captioned proceeding.¹

Alcatel manufactures communications equipment, including microwave radio products, and provides communications solutions to a wide range of commercial and government users.

Alcatel is a member of the Fixed Wireless Communications Coalition (FWCC) and fully supports its comments in this proceeding. One of the services that Alcatel provides is the transmission systems engineering of microwave radio links that meet the performance level specified by its customers. At considerable expense, most systems installed today are engineered to achieve 99.999% availability. Some critical services or route segments are engineered to meet 99.9999% availability or even better. These designs take into account all known sources of interference, including fixed earth stations, at the time of their transmission system design phase.

Alcatel takes this opportunity to emphasize that the availability of service depends on designing and maintaining an adequate fade margin on the FS microwave radio links. It appears that a number of the parties to this proceeding are not well versed in the engineering methodology for designing microwave radio links that require a high level of availability, or with

¹ *Use of Satellite Earth Stations on Board Vessels*, 18 FCC Rcd 25248 (2003).

the correlation between the FS receiver noise threshold and the availability of the link. Briefly stated, an incoming interference signal at the same power level of the FS receiver's noise floor would cause a 3 dB degradation of the FS receiver threshold. This in turn would double the outage time on a non-diversity link.

A detailed engineering statement on this subject was included as a supplement to FWCC's Reply to Opposition filed June 15, 2000 re "Application of Maritime Telecommunications Network, Inc. for Renewal of Experimental Authorization" (call sign KI2XEE; file no. 0100-EX-RR-1999.) That statement is still relevant to this proceeding, in that it emphasizes the detrimental effect that interference can cause in an FS microwave radio receiver. It is for this reason that the level of service availability should be rigorously protected from external sources of interference.

Respectfully submitted,

Mitchell Lazarus
FLETCHER, HEALD & HILDRETH, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, VA 22209
703-812-0440
Counsel for Alcatel

March 24, 2004

SERVICE LIST

Chairman Michael K. Powell
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Kathleen Q. Abernathy
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Michael J. Copps
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Kevin J. Martin
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Jonathan S. Adelstein
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Donald Abelson, Bureau Chief
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Anna M. Gomez, Deputy Bureau Chief
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Roderick Porter, Deputy Bureau Chief
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Jackie Ruff, Associate Bureau Chief
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Linda L. Haller, Associate Bureau Chief
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Jacqueline M. Ponti, Associate Bureau Chief
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

John Gusti, Associate Bureau Chief
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Richard Engelman, Chief Engineer
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Steven Spaeth, Legal Advisor
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554
David Strickland, Legal Advisor
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Jim Ball, Chief
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

JoAnn Ekblad, Assistant Division Chief
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Alexandra Field, Assistant Division Chief
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Howard Griboff, Assistant Division Chief
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Breck Blalock, Deputy Chief
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Claudia Fox, Deputy Chief
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

George Li, Deputy Chief, Operations
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Lisa Choi, Senior Legal Advisor
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

David Krech, Senior Legal Advisor
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Belinda Nixon, Attorney
Policy Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554