

**XO LMDS Holdings No. 1, Inc.  
Request for Experimental Authorization  
Special Temporary Authority**

**Questions 4 and 5**

**Purpose of Operation, Description of Experiment and Justification for STA**

XO LMDS Holdings No. 1, Inc. (“XO”), by the attached application, pursuant to Section 5.61 of the rules and regulations of the Federal Communications Commission (“FCC” or “Commission”) hereby seeks special temporary authorization (“STA”) to test equipment in the 3.5 GHz band. XO is a wholly owned subsidiary of XO Communications, Inc., which is a full-service provider of communications services for small & growing businesses, larger enterprises and carriers. XO Communications, Inc. possesses a wealth of local fiber, DSL, fixed wireless, data networking, Internet and long-haul network assets.

This request for STA contemplates a test of equipment in the 3.5 MHz band. STA is appropriate because XO contemplates that its test will occur over approximately six months. Therefore, XO has not requested a full term experimental license. The 3.5 GHz spectrum is used internationally to offer WiMax services, employing the IEEE 802.16 protocol. As XO contemplates adding WiMax capabilities to its suite of customer services, it wishes to evaluate the transmission and propagation characteristics of the band using links from an access point to a remote unit about ¼ mile away. Voice and data transmission over the wireless link will be tested. This test will use equipment manufactured by Redline Communications and Airtspan.

While XO recognizes that the 3.5 GHz band is not available, and will not be available, in the United States for WiMax operations, it expects that the propagation and transmission characteristics of the 3.5 GHz band will be similar to the band 3650-3700 MHz, recently designated by the FCC for fixed and mobile operations. Moreover, because the 3.5 GHz band is available for use in other countries for WiMax operations, the equipment that XO desires to test is commercially available today. Nevertheless, XO recognizes that no equipment may be developed in this band for use in the United States because it is designated for Federal government radiolocation operations. XO appreciates that development must occur in a band approved for WiMax use and that the 3300-3650 MHz band is not approved for WiMax use. XO also recognizes that it may receive interference from Federal government stations using mobile radar and is willing to accept such interference.

Should there be any questions regarding this application, the Commission is asked to contact communications counsel for XO, Russell Fox of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. at 202-434-7483 or [rfox@mintz.com](mailto:rfox@mintz.com).