

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	FCC OPENS ACCESS TO NEW SPECTRUM FOR WIRELESS BROADBAND IN THE 3650 MHZ BAND	
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Re:	Call for Contributions, IEEE 802.16 License-Exempt Task Group, 2005-02-10, IEEE 802.16h-05/006	
Abstract	Propose fairness criteria for traffic scheduling and avoidance of interference	
Purpose	Information	
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## FCC OPENS ACCESS TO NEW SPECTRUM FOR WIRELESS BROADBAND IN THE 3650 MHZ BAND

WASHINGTON, D.C. – Today, the Federal Communications Commission (FCC or Commission) adopted rules to open access to new spectrum for wireless broadband in the 3650-3700 MHz band (3650 MHz). The Commission adopted a hybrid approach that draws from both the Commission's unlicensed and licensed regulatory models and provides for nationwide, non-exclusive licensing of terrestrial operations in the band utilizing technologies employing contention-based protocols. This streamlined licensing mechanism with minimal regulatory entry requirements will encourage multiple new entrants and stimulate the rapid expansion of wireless broadband services --especially in rural America -- by Wireless Internet Service Providers (WISPs) and other entities with limited resources. The Commission also provided an opportunity for the introduction at 3650 MHz of a variety of new wireless broadband technologies, such as Wi-Max, into the band.

Under the Commission's approach, there is no limit on the number of licenses that can be granted, and each licensee will be authorized to operate on a shared basis with other licensees on all 50 megahertz of the band, subject to restrictions in geographic areas occupied by grandfathered Fixed Satellite Service (FSS) and Federal Government stations. Licensees will also be required to register all system base stations electronically with the Commission. Base station registration will enable licensees to locate each other's operations and will facilitate protection of grandfathered stations from interference. This type of licensing and registration will enable the Commission to monitor the use of this spectrum as new technologies and services develop.

The Commission found that the public record developed in this proceeding supports multiple users sharing this spectrum through the use of "contention-based" protocols to minimize interference among fixed and mobile operations. New fixed and mobile stations will therefore be required to use contention-based protocols, which will reduce the possibility of interference from co-frequency operation by managing each station's access to spectrum. The Commission concluded that this approach is a reasonable, cost-effective method for ensuring that multiple users can access the spectrum.

The Commission gave all licensees the mutual obligation to cooperate and avoid harmful interference to one another. Mobile stations also will be required to positively receive and decode an enabling signal transmitted by a base station. The Commission determined that this approach will ensure that mobile stations operate within range of registered base stations, thereby avoiding interference to grandfathered FSS and Federal Government stations. Fixed stations will be allowed to operate with a peak power limit of 25 Watts per 25 megahertz bandwidth, and mobile stations with a peak power limit of 1 Watt per 25 megahertz bandwidth.

The Commission kept the existing allocations for the band, grandfathering previously licensed primary incumbent FSS earth station operations and three Federal Government radiolocation stations, entitling them to interference protection from new wireless licensees. To protect these incumbent operations, the Commission established circular protection zones around them – 150 km for FSS earth stations and 80 km for Federal Government stations - and prohibited new terrestrial licensees from operating within these zones unless they negotiate agreements with the incumbents. The Commission determined that new FSS stations should be allowed on a secondary basis and denied several petitions for reconsideration of an earlier decision in this proceeding that established the existing FSS, FS and MS allocations.

The Commission also concluded that there should be no eligibility restrictions (other than the statutory foreign ownership restrictions) and no in-band or out-of-band spectrum aggregation limits. Licensees will receive a 10-year license with the right to renew and will be free to assign and transfer their non-exclusive nationwide licenses and to assign, transfer, or share base stations. The initial filing

date for the 3650 MHz band licenses will be announced in a future Public Notice. The licensing and operating provisions for the 3650 MHz band will be located in Part 90 of the Commission's rules. Action by the Commission, March 10, 2005, by Report and Order and Memorandum Opinion and Order (FCC 05-56). Chairman Powell, Commissioners Abernathy, Copps, Martin, and Adelstein. Separate statements issued by Chairman Powell, Commissioners Copps and Adelstein..

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