



May 23, 2016

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al.*, GN Docket No. 14-177, IB Docket Nos. 15-256 and 97-95; RM-11664; and WT Docket No. 10-112

Dear Ms. Dortch:

AT&T and EchoStar Satellite Operating Corporation, Hughes Network Systems, LLC and Alta Wireless, Inc. (collectively “EchoStar”) recently submitted proposed guidelines under which new Upper Microwave Flexible Use (“UMFU”) licensees would accommodate post-auction deployment of individually-licensed Fixed-Satellite Service (“FSS”) earth stations communicating with geostationary orbit satellites in the 28 GHz band.¹ Among other things, that proposal included a two-tiered safe harbor approach. Tier 1 could be invoked only after attempts to coordinate have failed, and was designed to better align the parties’ incentive to negotiate to a successful conclusion. Tier 2 could be invoked by an FSS applicant as of right, ensuring that there would be at least some locations available for earth station deployment, but most likely in areas of where UMFU operators would be unlikely to serve. In both cases, the proposal further limited deployment of FSS earth stations to no more than two per individual satellite network in a given UMFU license area.

Because AT&T and EchoStar could not yet agree on appropriate levels, however, the draft proposal left open the population density cut-offs that would apply to each tier. According to the Census Bureau, the population-weighted density of the United States – which can be thought of as the density at which the average person lives – was 5,369 people per square mile in 2010.² EchoStar recognizes that the most densely populated areas will likely be the most attractive to UMFU licensees, but submits that a safe harbor that allows earth station deployment in areas with less than 30% of the average population-weighted density under certain

¹ See Letter from Stacey Black and Jennifer Manner to Marlene H. Dortch, GN Docket No. 14-177, *et al.* (May 19, 2016).

² See United States Census Bureau, “Patterns of Metropolitan and Micropolitan Population Change: 2000 to 2010,” at 23 (Sep. 2012) (“The densities at which most people reside are revealed as much higher when the population-weighted density measure is used. While the overall U.S. density stood at 87 people per square mile, population-weighted density shows that people actually lived at an average of 5,369 people per square mile.”), available at <http://www.census.gov/prod/cen2010/reports/c2010sr-01.pdf>.

circumstances, and with less than 20% as of right, should not impose an undue burden on UMFU operations. Accordingly, EchoStar proposes that the safe harbor levels should be set at 1500 people per square mile for the Tier 1 and 1000 people per square mile for the Tier 2 safe harbor. For ease of reference, the attachment hereto provides the full text of the safe harbor proposal with those figures included.

These cut-off levels strike an appropriate balance between the desire of UMFU licensees to preserve opportunities to serve densely populated areas while creating incentives to accommodate individually-licensed FSS earth stations in areas of less interest. EchoStar urges the Commission to adopt these proposed levels.

Respectfully submitted,

/s/ Jennifer Manner

Jennifer A. Manner
Sr. Vice President, Regulatory Affairs
ECHOSTAR CORPORATION
11717 Exploration Lane
Germantown, MD 20876
(301) 428-5893

Attachment

cc: Michael Ha
Jose Albuquerque
Brian Regan
Robert Nelson



EXHIBIT 1: 28 GHz SAFE HARBORS

- Tier 1 Safe Harbor
 - For those cases where the GSO FSS earth station applicant and UMFU licensee engaged in, but could not successfully complete, a good faith coordination agreement, an individual GSO FSS earth station with a maximum EIRP density toward the horizon of 12.2dBm/MHz may be deployed provided that the population density (based on the 2012 Census Tracts) is below 1500 persons per square mile and there is no current UMFU deployment within that area. No more than 2 FSS uplink locations per individual satellite network shall be deployed under this Tier 1 Safe Harbor approach in a given UMFU license area. Notice shall be provided to the UMFU licensee of the FSS earth station deployment, and the FSS earth station shall be identified as a Tier 1 Safe Harbor deployment in the FCC application.

- Tier 2 Safe Harbor
 - For those cases where an individual GSO FSS earth station with a maximum EIRP density toward the horizon of 12.2dBm/MHz is to be deployed without engaging in good faith coordination, the population density (based on the 2012 Census Tracts) within the area around the earth station must be below 1000 persons per square mile. No more than 2 FSS earth stations per individual satellite network shall be deployed under this Tier 2 Safe Harbor approach in a given UMFU license area. Notice shall be provided to the UMFU licensee of the FSS earth station deployment, and the FSS earth station shall be identified as a Tier 2 Safe Harbor deployment in the FCC application.