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SMALL ENTITY COMPLIANCE GUIDE

Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al.

FCC 18-73

WT Docket No. 10-112

GN Docket No. 14-177

Released: June 8, 2018

This Guide is prepared in accordance with the requirements of Section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996. It is intended to help small entities—small businesses, small organizations (non-profits), and small governmental jurisdictions—comply with the revised rules adopted in the above-referenced Federal Communications Commission (FCC or Commission) rulemaking dockets. This Guide is not intended to replace or supersede these rules, but to facilitate compliance with the rules. Although we have attempted to cover all parts of the rules that might be especially important to small entities, the coverage may not be exhaustive. This Guide cannot anticipate all situations in which the rules apply. Furthermore, the Commission retains the discretion to adopt case-by-case approaches, where appropriate, that may differ from this Guide. Any decision regarding a particular small entity will be based on the statute and any relevant rules.

In any civil or administrative action against a small entity for a violation of rules, the content of the Small Entity Compliance Guide may be considered as evidence of the reasonableness or appropriateness of proposed fines, penalties or damages. Interested parties are free to file comments regarding this Guide and the appropriateness of its application to a particular situation. The FCC will then consider whether the recommendations or interpretations in the Guide are appropriate in that situation. The FCC may decide to revise this Guide without public notice to reflect changes in the FCC's approach to implementing a rule, or it may clarify or update the text of the Guide. Direct your comments and recommendations, or calls for further assistance, to the FCC's Consumer Center:

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TABLE OF CONTENTS

I. OBJECTIVES OF THE PROCEEDING.....1

II. COMPLIANCE REQUIREMENTS1

 A. Performance Requirements –Geographic Area Metric (47 CFR § 30.104)1

 B. 24 GHz Operability2

 C. 24 GHz FSS Sharing2

 D. Lower 37 GHz Band Plan.....2

 E. Mobile Spectrum Holdings Policies2

III. RECORDKEEPING AND REPORTING REQUIREMENTS3

IV. IMPLEMENTATION DATE.....3

V. INTERNET LINKS3

I. OBJECTIVES OF THE PROCEEDING

In the *Third Report and Order* in FCC 18-73, GN Docket No. 14-177 and WT Docket No. 10-112, released June 7, 2018¹, the Commission (1) adopted a geographic area metric for Upper Microwave Flexible Use Service (UMFUS) licenses, to be included in the existing list of performance metrics from which licensees may choose, as an additional alternative to meeting the Commission's performance requirements; (2) adopted an operability requirement for the 24.25-24.45 GHz and 24.75-25.25 GHz bands, *i.e.*, any mobile or transportable equipment capable of operating on any frequency between 24.24-24.45 GHz or 24.75-25.25 GHz must be capable of operating on all frequencies in those ranges; (3) modified the rules for the 24.75-25.25 GHz band to provide the Fixed-Satellite Service (FSS) with additional ability to locate earth stations in the band while permitting substantial terrestrial use of the band; (4) adopted a band plan with 100 megahertz channels for the 37-37.6 GHz Band (Lower 37 GHz Band); and (5) eliminated the pre-auction mobile spectrum holdings limit of 1250 megahertz for the 27.5-28.35 GHz (28 GHz), 37.6-38.6 GHz (Upper 37 GHz), and 38.6-40 GHz (39 GHz) bands.. The *Third Report and Order* continues the Commission's efforts to make available millimeter wave (mmW) spectrum, at or above 24 GHz, for fifth-generation (5G) wireless, Internet of Things (IoT), and other advanced spectrum-based services. In doing so, the Commission helps to ensure continued American leadership in wireless broadband, which represents a critical component of economic growth, job creation, public safety, and global competitiveness.

II. COMPLIANCE REQUIREMENTS

A. Performance Requirements –Geographic Area Metric (47 CFR § 30.104)²

- The *Third Report and Order* adopts a geographic area metric for UMFUS licenses, to be included in the existing list of performance metrics from which licensees may choose, as an additional alternative to meeting the Commission's performance requirements.
 - Licensees may fulfill the requirements of this metric either by demonstrating mobile or point-to-multipoint coverage of at least 25% of their license's geographic area, or by showing the presence of equipment transmitting or receiving on the licensed spectrum in at least 25% of the census tracts within the license area.
 - This geographic area metric is an additional alternative for licensees, not a supplemental requirement. If a licensee deploying IoT systems finds that our existing mobile or fixed metrics better fit their needs, it is welcome to use either of those metrics instead.³

¹ *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al., Third Report and Order, Memorandum Opinion and Order, and Third Further Notice of Proposed Rulemaking*, 2018 WL 2932188 (*Third Report and Order or 3rd R&O*).

² See *3rd R&O*, paras. 5-10.

³ Specifically, UMFUS licensees relying on mobile or point-to-multipoint service must show that they are providing reliable signal coverage and service to at least 40 percent of the population within the service area of the licensee, and that they are using facilities to provide service in that area either to customers or for internal use. Licensees relying on point-to-point service must demonstrate that they have four links operating and providing service, either to customers or for internal use, if the population within the license area is equal to or less than 268,000. If the population within the license area is greater than 268,000, a licensee relying on point-to-point service must demonstrate it has at least one link in operation and is providing service for each 67,000 population within the

B. 24 GHz Operability⁴

- Any mobile or transportable equipment capable of operating on any frequency between 24.24-24.45 GHz or 24.75-25.25 GHz must be capable of operating on all frequencies in those ranges. This operability requirement does not dictate the use of any particular technology or air interface. Additionally, this operability requirement is specific to the 24 GHz band, although there are separate operability requirements that apply to other bands..

C. 24 GHz FSS Sharing⁵

- *The Third Report and Order* adds the 24.75-25.25 GHz band to Section 25.136 of the Commission's rules; that rule allows for sharing between terrestrial operations and FSS earth stations in UMFUS bands. A footnote to the U.S. Table of Allocations adopted in the order specifies the relative interference protection obligations of FSS and UMFUS stations in this band.
- The 24.75-25.25 GHz band can be shared by UMFUS and FSS earth stations, including BSS feeder link earth stations.
 - Three FSS earth stations per county (maximum of 15 in each Partial Economic Area) are permitted to deploy without having to protect UMFUS stations.
 - The permitted aggregate population limits within the specified earth station Power Flux Density contour apply on a per-county basis.
 - FSS licensees in the 24.75-25.25 GHz band who request earth station authorizations pursuant to the provisions noted above must coordinate their proposed operations with co-channel UMFUS licensees and must provide sufficient information in their applications to demonstrate compliance with the siting criteria contained in Section 25.136 of the Commission's rules.

D. Lower 37 GHz Band Plan⁶

- Licensing of the Lower 37 GHz Band will be permitted as six 100 megahertz channels.

E. Mobile Spectrum Holdings Policies⁷

- Entities will no longer be subject to the pre-auction, bright line limit of 1250 megahertz for the 28 GHz, 37 GHz and 39 GHz bands adopted in the *First Report and Order*.⁸
- Before granting any initial licenses, the Commission will conduct a post-auction, case-by-case review of the market holdings of the UMFUS auction-winning license applicants, using

license area. 47 CFR § 30.104(a). Showings that rely on a combination of multiple types of service will be evaluated on a case-by-case basis. 47 CFR § 30.104(c).

⁴ See *3rd R&O*, paras. 11-15.

⁵ See *3rd R&O*, paras. 16-25.

⁶ See *3rd R&O*, paras. 26-28.

⁷ See *3rd R&O*, paras. 29-36.

⁸ *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014 (2016).

the approach it takes when reviewing applications for secondary market transactions. Under this approach, applications for initial licenses filed post-auction will be reviewed on a case-by-case basis to assess the competitive effects of a grant, provided the applicant exceeds the 1850 megahertz threshold that the Commission has used in evaluating such secondary market transactions.⁹

III. RECORDKEEPING AND REPORTING REQUIREMENTS

The Commission's actions in the *Third Report and Order* did not create any new recordkeeping or reporting requirements, although it did increase the number of bands and licensees included within the scope of Section 25.136 of the Commission's rules (outlining criteria under which earth stations may operate in the UMFUS bands).

IV. IMPLEMENTATION DATE

The rules in the *Third Report and Order* became effective on August 20, 2018, except for the changes to Section 25.136, which contain information collection requirements which require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. The rule changes to Section 25.136 shall become effective after the Commission publishes a notice in the *Federal Register* announcing OMB approval and the relevant effective date.

V. INTERNET LINKS

A copy of the *Third Report and Order* is available at:
<https://docs.fcc.gov/public/attachments/FCC-18-73A1.pdf>

A copy of the Federal Register Summary of the *Third Report and Order* is available at:
<https://www.gpo.gov/fdsys/pkg/FR-2018-07-20/pdf/2018-14806.pdf>

⁹ As is the case for the mmW spectrum threshold applied to secondary market transactions, the threshold we will apply to review initial applications for spectrum won at auction merely identifies those markets that may warrant further competitive analysis. Applying a post-auction case-by-case review will provide an opportunity to evaluate whether an applicant's post-auction spectrum holdings would result in excessive concertation of licenses, in a manner consistent with our obligations under Section 309(j)(3)(B) of the Communications Act.