



Federal Communications Commission  
Washington, D.C. 20554

May 13, 2019

DA 19-409

## **SMALL ENTITY COMPLIANCE GUIDE**

### **Use of Spectrum Bands Above 24 GHz For Mobile Radio Services**

**FCC 18-180**  
**GN Docket No. 14-177**  
**Released: December 12, 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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## **I. OBJECTIVES OF THE PROCEEDING**

In the *Fourth Report and Order* in FCC 18-180, GN Docket No. 14-177, released December 12, 2018,<sup>1</sup> the Commission: (1) modified the Upper 37 GHz (37.6-38.6 GHz), 39 GHz (38.6-40 GHz), and 47 GHz (47.2-48.2 GHz) band plans from 200 megahertz blocks to 100 megahertz blocks to be licensed by Partial Economic Area (PEA); (2) adopted an incentive auction mechanism that will offer contiguous blocks of spectrum throughout the Upper 37 GHz and 39 GHz bands, and offer contiguous blocks within the 47 GHz band, while preserving spectrum usage rights for existing 39 GHz licensees; and (3) adopted a pre-auction process that allows incumbent licensees to rationalize their holdings. The incentive auction approach promotes the flexible-use wireless service rules that the Commission has adopted for these bands, and allows an incumbent 39 GHz licensee to choose to relinquish the spectrum usage rights provided by its existing licenses in exchange for a share of the proceeds from the auction of new licenses. Alternatively, the incumbent may choose to receive modified licenses after the auction that are consistent with the new band plan and service rules and equivalent to its existing authorizations to operate in the 39 GHz band.

Along with specific procedures to be adopted in the forthcoming Auction Comment and Auction Procedures Public Notices, the Commission's actions in the *Fourth Report and Order* will enable the Commission to move forward with an auction of the Upper 37 GHz, 39 GHz, and 47 GHz bands by the end of 2019. The *Fourth 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. Upper 37 GHz, 39 GHz, and 47 GHz Band Plan (47 C.F.R. §§ 30.4 (f), (d), and (g))<sup>2</sup>**

- The *Fourth Report and Order* modified the Upper 37 GHz, 39 GHz, and 47 GHz band plans from 200 megahertz channels to 100 megahertz channels. The Upper 37 GHz band and the 47 GHz band now consist of ten 100 megahertz channels each, and the 39 GHz band consists of fourteen 100 megahertz channels. Maintaining the same channel width across these bands will allow the contiguous Upper 37 GHz and 39 GHz bands to function effectively as one 2,400 megahertz band of spectrum.

### **B. Upper 37 GHz, 39 GHz, and 47 GHz Incentive Auction**

#### **1. Incentive Auction Background<sup>3</sup>**

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<sup>1</sup> *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al., Fourth Report and Order*, FCC 18-180, rel. Dec. 12, 2018 (*Fourth Report and Order* or *4<sup>th</sup> R&O*).

<sup>2</sup> See *4th R&O*, paras. 11-14.

<sup>3</sup> See *4th R&O*, paras. 3-6.

- The eleven (11) incumbent licensees holding about 5,880 active licenses in the 39 GHz band will require transitioning to the new band plan.<sup>4</sup> The Upper 37 GHz and 47 GHz bands do not currently have commercial terrestrial wireless incumbent licensees.
- Incumbent 39 GHz licensees can but are not required to participate in the incentive auction that the Commission will conduct to clear existing 39 GHz licenses and offer new spectrum licenses in the Upper 37 GHz, 39 GHz, and 47 GHz bands.
- Incumbent 39 GHz licensees will be allowed to relinquish their existing licensed spectrum usage rights in exchange for a payment amount determined by the auction and/or replace existing licenses with new unencumbered licenses that will be assigned contiguous frequencies within license areas.
- Each incumbent 39 GHz licensee that does not wish to participate in the auction will be provided modified licenses for contiguous 100 megahertz blocks covering full PEAs (with possibly up to one partial PEA, i.e., covering a smaller geographic area than the entire PEA license area), leaving these incumbents better able to provide next-generation services.
- Both incumbent 39 GHz license holders and prospective Upper 37 GHz, 39 GHz, and 47 GHz auction participants should closely follow developments and upcoming deadlines related to this proceeding. The Commission will develop and detail all of the procedures necessary to implement the decisions in the *Fourth Report and Order* in a pre-auction process framed by an Auction Comment Public Notice and Auction Procedures Public Notice.

## 2. Incumbent 39 GHz Licensees<sup>5</sup>

- *Modifying 39 GHz Licenses Based on Reconfigured Spectrum Usage Rights*
  - Prior to the incentive auction, the Commission will offer each incumbent 39 GHz licensee a reconfiguration of its existing spectrum usage rights that will conform more closely with the new band plan. These reconfigurations will reduce the total number of partial PEA block holdings and maintain the overall value of spectrum usage rights by quantifying those rights by weighted MHz-Pops (bandwidth times covered population). As a result of reconfiguration, each incumbent will hold contiguous whole blocks and at most one partial PEA block, in a PEA in which it has existing holdings.
  - Each incumbent will be given an option to choose an alternate reconfiguration, subject to certain constraints (described below), in order to more closely align the reconfiguration with the incumbent's interests, such as current operations.
  - Each incumbent will be provided a proposed modification implementing the decisions in the *Fourth Report and Order* in advance of the auction application window.
  - All existing licenses are subject to change, regardless of the licensee's participation in the incentive auction, in order to implement the Commission's transition to a new band plan and service rules for the 39 GHz band. Such modifications will include both frequency reassignments and, in many cases, geographical reassignments.

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<sup>4</sup> *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services*, GN Docket No. 14-177, Fourth Further Notice of Proposed Rulemaking, FCC 18-110, at para. 4 (Aug. 2, 2018) (*4th FNPRM*). For additional details on existing 39 GHz licenses, see *id.* at paras. 3-7.

<sup>5</sup> See *4th R&O*, paras. 15-36.

- Separate licenses held by entities that control or are controlled by each other and/or have controlling ownership interests in common will be treated as held by one incumbent. For this purpose, we will use the definition of “controlling interest” as an entity with de jure or de facto control that we use with respect to auction applications, specifically the rule prohibiting an individual or entity from having a controlling interest in more than one application to participate in the auction.
- *Incumbent Options Following Reconfiguration*
  - After reconfiguration results are announced, an incumbent 39 GHz licensee will have three options. It can choose to: (1) have its licenses modified based on the Commission’s proposed reconfiguration of its holdings; or (2) have its licenses modified based on its own proposed alternative reconfiguration as long as that alternative reconfiguration satisfies certain specified conditions; or (3) commit to relinquish its licenses in exchange for an incentive payment and/or the ability to bid for new licenses.
  - Once the incumbents have reviewed the results of the Commission’s reconfiguration, each incumbent will be allowed to propose modifications to its existing licenses before it decides whether it will participate in the auction. If the incumbent ultimately decides to participate in the auction, however, any proposed modifications to its existing licenses will not have any effect.
  - An incumbent that chooses to have its licenses modified, either based on the Commission’s proposed reconfiguration or under an acceptable alternative reconfiguration, cannot bid on new licenses in the incentive auction or relinquish any full block licenses in exchange for incentive payments. It will, however, be allowed to relinquish the licensed spectrum usage rights associated with its single partial PEA block holding in exchange for an incentive payment.
  - An incumbent that chooses to accept reconfigured holdings will have frequency-specific licenses assigned for its reconfigured holdings after the incentive auction has concluded.
  - Incumbent 39 GHz licensees that propose an alternate reconfiguration must provide an alternative reconfiguration that meets the following constraints:
    - Aggregate holdings in a PEA can only be reduced to the greatest integer less than or equal to the incumbent’s aggregate initial holdings or increased up to the least integer greater than or equal to the incumbent’s aggregate initial holdings;
    - All holdings may only be in PEAs in which the incumbent has existing holdings; and
    - An incumbent can hold at most one partial PEA block (covering fewer pops than the full population in the entire PEA), within a PEA in which it has existing holdings.
  - Incumbents that commit to relinquishing all their existing licenses will receive “vouchers” sufficient to win blocks in the auction equivalent to their existing PEA holdings.
    - Incumbents are not required to rebid on spectrum blocks equivalent to their existing holdings, unless they want to continue to hold licenses in those areas.
    - Prior to round one of the incentive auction clock phase, incumbent licensees that decide to participate in the auction will have a limited opportunity to redistribute their initial voucher holdings across PEAs in which they hold rights for a partial PEA block (Round Zero), subject to certain restrictions.

- Participating incumbents can apply the vouchers toward payments for blocks in other PEAs and receive a cash incentive payment if the value of their vouchers exceeds their net auction obligations.
- Auction participants can also relinquish their holdings and choose not to bid on any new licenses, in which case they will receive a cash payment for their vouchers.

### 3. Incentive Auction Structure<sup>6</sup>

- *Eligibility*
  - Any party eligible to hold a license in these bands will be eligible, subject to meeting the Commission's application requirements, to participate in the auction for new licenses, except for incumbent 39 GHz licensees that accept modified licenses as reconfigured and decline to relinquish all existing licenses.
- *Other Structural Issues*
  - Incumbents may seek designated entity bidding credits as small businesses or rural service providers.

### 4. Incentive Auction Bidding<sup>7</sup>

- *The Bidding Process Overview* – Comprehensive information on the bidding process will be detailed in the Auction Comment and Auction Procedures Public Notices.
  - A two-phase auction procedure will be used where in the first phase, participants will bid for generic spectrum blocks by PEA in the Upper 37, 39, and 47 GHz Bands using an ascending clock auction. The second phase will assign frequency-specific licenses to the winners of generic blocks in the bands.
  - In the Auction Clock Phase bidders will indicate their demand for quantities of spectrum blocks in two generic bidding categories in each PEA.
  - In the Auction Assignment Phase winning bidders for generic blocks will have an opportunity to submit sealed bids by PEA specifying additional amounts, if any, that they would be willing to pay for licenses on particular frequencies.
  - Winning clock phase bidders will not be required to bid in the assignment phase or otherwise pay more than the price for generic blocks in the clock phase and will still be assured to have contiguous frequencies assigned to all of their licenses in the same category in a PEA.
  - Incumbents that elect to receive modified licenses instead of bidding for new licenses in the auction will be assigned frequencies in the assignment phase but cannot bid for particular frequencies in the assignment phase.

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<sup>6</sup> See 4th R&O, paras. 37-43.

<sup>7</sup> See 4th R&O, paras. 52-58.

## **5. Post-Auction Transition<sup>8</sup>**

- 39 GHz incumbents will retain their existing licenses until after the incentive auction, when either the existing licenses are modified or relinquished, and new licenses are issued. Modified licenses will be assigned frequencies in the incentive auction. New licenses will be assigned based on the results of bidding in the incentive auction.

### **III. RECORDKEEPING AND REPORTING REQUIREMENTS**

The Commission's actions in the *Fourth Report and Order* did not create any new recordkeeping or reporting requirements, although it did set forth procedures under which the Commission would auction new Upper 37 GHz, 39 GHz, and 47 GHz spectrum licenses and rationalize current licenses in the 39 GHz band. The Commission will provide public notice of the procedures necessary for implementing and participating in the auction which will include any filing, recordkeeping and reporting requirements. Incumbent 39 GHz licensees and those interested in participating in the incentive auction should review forthcoming items in this docket carefully and without delay.

### **IV. IMPLEMENTATION DATE**

The rules in the *Fourth Report and Order* became effective on March 7, 2019, thirty (30) days after publication of the text or summary thereof in the Federal Register.

### **V. INTERNET LINKS**

A copy of the *Fourth Report and Order* is available at:  
<https://docs.fcc.gov/public/attachments/FCC-18-180A1.pdf>

A copy of the Federal Register Summary of the *Fourth Report and Order* is available at:  
<https://www.govinfo.gov/content/pkg/FR-2019-02-05/pdf/2018-27975.pdf>

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<sup>8</sup> See *4th R&O*, paras. 59-61.