

SUPPORTING STATEMENT

A. Justification:

- 1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitates this collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

The Commission is conducting a two-sided auction where broadcast television stations are able to give up their spectrum for compensation and wireless operators are able to purchase the vacated spectrum. Following the auction, the remaining broadcast television stations will be relocated mainly in the lower portion of the band and the wireless operators will be issued licenses in the upper portion of the band. However, the Commission's proposed band plan provides that a number of broadcast television stations may remain in the portion of the spectrum repurposed for wireless licensees so as to avoid unnecessarily limiting the amount of spectrum repurposed for wireless services nationally.

On October 21, 2015, the Commission adopted a Third Report and Order and First Order on Reconsideration, *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive et al.*, GN Docket No. 12-268, ET Docket No. 13-26, ET Docket No. 14-14, 30 FCC Rcd 12049 (2015) ("*ISIX R&O*"). The *ISIX R&O* adopted rules for avoiding interference between the wireless licensees and the broadcast television stations that remain in the portion of the band that is being repurposed for wireless services.

The Commission is requesting OMB approval for Section 27.1310(b) of its rules. Under this rule, to avoid interference to broadcast television stations wireless licensees are required to conduct an interference study using the methodology specified in OET Bulletin No. 74 (which was included in the *ISIX R&O*) prior to deploying or operating a wireless base station within a specified distance of the coverage contour of a broadcast television station that is co-channel or adjacent channel to their spectrum.¹ They are also required to conduct an interference study when modifying a base station in a way that results in an increase in energy in the direction of a co-channel or adjacent channel broadcast television station within the specified distance. The wireless licensee is required to maintain a record of the latest interference study for each base station and make the study available to the Commission upon request. They must also provide the interference study to a requesting broadcast television station upon a claim of harmful interference.

The Commission has authority for this information collection pursuant to Sections 1, 4, 301, 303, 307, 308, 309, 316, 319, 332, and 403 of the Communications Act of 1934, as amended, and sections 6402 and 6403 of Middle Class Tax Relief and Job Creation Act of

¹ By "coverage contour" we mean either the "noise-limited contour" for full power television stations or "protected contour" for Class A television stations. See 47 C.F.R. §§ 73.622(e), 73.6010.

2012, Pub. L. No. 112-96, 126 Stat. 156, 47 U.S.C. §§ 151, 154, 301, 303, 307, 308, 309, 316, 319, 332, 403, 1452, and 1454.

This information collection does not affect individuals or households; thus, there are no impacts under the Privacy Act.

- 2. Indicate how, by whom and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

The requirement that the wireless licensees will be required to conduct these interference studies will help prevent interference occurring to broadcast television stations. If a claim of harmful interference occurs, the information from the interference studies will be used by the Commission and broadcast television stations to help resolve the interference claims. The Commission may request the interference studies to verify compliance with the rule and provide an incentive for wireless licensees to conduct the interference studies in a timely manner.

- 3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

Wireless licensees will be able to conduct the required interference studies using the *TVStudy* software which is available at no cost from the Commission and which will run on commonly available computer equipment. While the rule does not specify whether the information from the interference studies be stored or provided electronically, we presume that because a computer program can be used to conduct the studies that the resulting information will be stored and provided electronically.

- 4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in item 2 above.**

Wireless licensees in this band are not required to provide the Commission with information about their wireless base stations. Consequently, the Commission does not have the information to determine whether interference may occur to broadcast television stations from wireless base stations.

- 5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

In accordance with the Paperwork Reduction Act of 1995, the Commission is making an effort to minimize the burden on all respondents, regardless of size. To reduce the burden of conducting the required interference studies on small businesses, the Commission has

modified its *TVStudy* software so that it can be used to perform the interference studies. To further reduce the burden on small businesses the Commission is not requiring that each interference study be submitted to the Commission.

The Commission acknowledges that there will be an impact on those wireless licensees that are small entities because they will be required to perform interference studies and produce them in certain circumstances. However, this requirement will help prevent harmful interference to the reception of signals from co-channel and adjacent channel television broadcast stations, many of whom are small entities. As an alternative to requiring the interference studies, to prevent interference to television reception the Commission could have specified an exclusion zone around a broadcast television station's coverage contour where wireless base stations could not be located. However, this would have excluded the base stations from a much larger area than the adopted rules because it would not have taken into account the effects that terrain has on signal propagation and the characteristics of the base stations such as transmitted power and antenna height. Requiring an interference study instead of relying on an exclusion zone thereby enables the wireless licensee to use a greater portion of its licensed service area, which is of significant benefit to the wireless licensee.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

The requirement that wireless licensees conduct the interference studies and produce them in certain circumstances is designed to prevent harmful interference to broadcast television stations and to facilitate the investigation of harmful interference that does occur. Requiring the interference studies makes it less likely that harmful interference will occur to the reception of broadcast television stations.

7. Explain any special circumstances that cause an information collection to be conducted in a manner: requiring respondents to report information to the agency more often than quarterly; requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it; requiring respondents to submit more than an original and two copies of any document; requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

This regulation requires the wireless licensee to provide interference studies to the Commission upon request or, upon a claim of harmful interference, to a requesting television broadcast station. This may be more often than quarterly and may require a response sooner than 30 days. However, because the wireless licensee is required to perform the interference study prior to deploying a new base station or modifying an existing base station, the wireless licensee should have the interference study immediately available. The frequency at which the interference studies must be produced will depend on when and if interference complaints occur, which cannot be predicted.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR § 1320.8(d), soliciting comments on the information prior to submission to OMB.

The Commission published a Notice in the *Federal Register* pursuant to 5 CFR § 1320.8 on December 13, 2016 (81 FR 89939) a copy of which is referenced in the submission to the OMB. The Commission did not receive any comments following publication of the Notice.

9. Explain any decision to provide any payment or gift to respondents, other than reenumeration of contractors or grantees.

Respondents will not receive any gifts or payments.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation or agency policy.

Applicants may request that any information supplied be withheld from public inspection, pursuant to 47 CFR § 0.459 of the FCC's rules. This request must be justified pursuant to 47 CFR § 0.457, however, this collection has no confidential information.

11. Provide additional justification for any questions of a sensitive nature.

Information of a sensitive or confidential nature is not required for this collection of information.

12. Provide estimates of the hour burden of the collection of information. The statement should: indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance.

Wireless licensees in the 512-614 MHz band are the potential respondents of the information collection. The wireless licenses will be awarded in 416 partial economic areas ("PEA"). The amount of spectrum which will be awarded in the two-sided auction will depend on willingness of the television broadcast stations to give up spectrum and the demand for spectrum by the wireless licensees. If the maximum amount of spectrum is made available to wireless licensees, a total of 10 licenses will be awarded in each PEA, which will result in a maximum of 4160 wireless licenses.

The wireless licensees will only have to conduct interference studies if there is a broadcast television station that is co-channel or adjacent channel to their spectrum within a specified distance of their base station locations. Under the television channel assignment plan that the Commission intends to adopt, we expect that the vast majority of PEAs will have no

impaired licensed blocks² and, consequently, relatively few wireless licensees will be required to conduct interference studies under this rule. However, until the two-sided auction is complete we will not know how many television broadcast stations will remain in the portion of the band used by wireless licensees and how many of the wireless licensees will be required to conduct interference studies under this rule. As a conservative estimate we shall assume that two wireless licensees in each PEA will be required to conduct the interference studies. This would result in 832 wireless licensees being required to conduct interference studies that they may potentially have to produce for the Commission or television broadcast stations.

Because the interference studies only need to be produced for the Commission upon request and to broadcast television stations when there is an interference complaint, we do not know how often the wireless licensees will have to produce the interference studies. Given that the reason the interference studies are required is to prevent harmful interference to television broadcast stations, we expect that claims of harmful interference will be rare. For purposes of estimating the cost we will assume that each wireless licensee who is required to conduct the interference studies will have to provide them once a year. The actual number of wireless licensees who have to provide the interference studies is likely to be much less than this. We will also assume that the wireless licensee will provide the interference study in electronic format, which will require an hour to accomplish with only negligible cost other than this time.

Total Number of Assumed Respondents: 832 Respondents.

Total Number of Response Annually: 832 Respondents x 1 Response per year = 832

The Commission makes this estimate of the hourly burdens:

We estimate that it will take approximately 1 hour to send an interference study to the Commission or a television broadcast station which will be done on average once per year.

Burden Each Year: 832 responses x 1 hours = 832 hours

13. Provide estimate for the total annual cost burden to respondents resulting from the collection of information. (Do not include the cost of any hour burden shown in items 12 and 14).

We assume that interference studies will be conducted on a computer using the *TVStudy* software provided by the Commission. When the interference study must be provided to the Commission or television broadcast station we assume it will be done electronically and,

² *Broadcast Incentive Auction Scheduled to Begin on March 29, 2016; Procedures for Competitive Bidding in Auction 1000, Including Initial Clearing Target Determination, Qualifying to Bid, and Bidding in Auctions 1001 (Reverse) and 1002 (Forward)*, AU Docket No. 14-252, GN Docket No. 12-268, WT Docket No. 12-269, MB Docket No. 15-146, Public Notice, 30 FCC Rcd 8975, 9003 para. 42 (2015). When we say that a license block is not impaired, we mean that the wireless licensee will not have to restrict the locations and technical parameters of its operations to avoid causing interference to a television broadcast station or will not receive interference from a television broadcast station.

consequently, the cost will be very small: \$10.

Total annual costs (O&M): \$10

14. Provide estimates of annualized costs to the Federal government. Also provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), any other expenses that would not have been incurred without this collection of information.

The cost to the Federal Government will be highly variable depending on how often the Commission chooses to request the interference studies from the wireless licensees. We will assume that this is done once per year for each of the 832 wireless licensees who we are assuming will be required to conduct interference studies. The Commission will use engineering staff at the GS-11 step 5 level (\$36.12/hour) to examine the interference studies. We will assume that the review will take 3 hours for each interference study.

$$3 \text{ hrs.} \times \$36.12/\text{hour} \times 832 \text{ respondents} = \$90,155.52$$

15. Explain the reasons for any program changes or adjustments reported.

As a result of the *ISIX Third R&O*, the Commission is reporting a program change (increase) for this new information collection. There is an increase to the number of respondents of 832, total annual responses of 832, and total annual burden hours of 832.

16. For collections of information whose results will be published, outline plans for tabulation and publication.

This information will not be published.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

There is no form; the expiration date requirement is not applicable.

18. Explain any exceptions to the Certification Statement.

There are no exceptions to the certification statement.

B. Collections of Information Employing Statistical Methods:

This collection of information does not employ statistical methods.