**3060-1272 September 2020**

**3.7 GHz Band Space Station Operator Accelerated**

**Relocation Elections and Transition Plans; 3.7 GHz**

**Band Earth Station Lump Sum Payment Elections**

SUPPORTING STATEMENT

The Federal Communications Commission (Commission) requests an extension (without change) from the Office of Management and Budget (OMB) for a currently approved information collection under OMB Control Number 3060-1272.

# Justification:

1. *Circumstances that make this collection necessary.* Under this information collection, the Commission will collect information that will be used to determine when, how, and at what cost existing operations in the lower portion of the 3.7-4.2 GHz band will be relocated to the upper portion of the band. This collection will serve as the starting point for planning and managing the process of efficiently and expeditiously clearing of the lower portion of the band, so that this spectrum can be auctioned for flexible-use service licenses.

On February 28, 2020, in furtherance of the goal of releasing more mid-band spectrum into the market to support and enable next-generation wireless networks, the Commission adopted a Report and Order, FCC 20-22, (*3.7 GHz Report and Order*) in which it reformed the use of the 3.7-4.2 GHz band, also known as the C-Band.[[1]](#footnote-1) The 3.7 GHz-4.2 GHz band currently is allocated in the United States exclusively for non-Federal use on a primary basis for Fixed Satellite Service (FSS) and Fixed Service. Domestically, space station operators use the 3.7-4.2 GHz band to provide downlink signals of various bandwidths to licensed transmit-receive, registered receive-only, and unregistered receive-only earth stations throughout the United States. The *3.7 GHz Report and Order* calls for the relocation of existing FSS operations in the band into the upper 200 megahertz of the band (4.0-4.2 GHz) and making the lower 280 megahertz (3.7-3.98 GHz) available for flexible-use throughout the contiguous United States through a Commission-administered public auction of overlay licenses that is scheduled to occur later this year.[[2]](#footnote-2) The Commission adopted a robust transition schedule to achieve an expeditious relocation of FSS operations and ensure that a significant amount of spectrum is made available quickly for next-generation wireless deployments, while also ensuring effective accommodation of relocated incumbent users. The *3.7 GHz Report and Order* establishes a deadline of December 5, 2025, for full relocation to ensure that all FSS operations are cleared in a timely manner, but provides an opportunity for accelerated clearing of the band by allowing incumbent space station operators[[3]](#footnote-3) to commit to voluntarily relocate on a two-phased accelerated schedule (with additional obligations and incentives for such operators), with a Phase I deadline of December 5, 2021, and a Phase II deadline of December 5, 2023.

The Commission concluded in the *3.7 GHz Report and Order* that, before the public auction of overlay licenses commences, it is appropriate for potential bidders to know when they will get access to the spectrum in the 3.7-3.98 GHz band that is currently occupied by incumbent FSS space station operators and earth stations,[[4]](#footnote-4) and to have an estimate of how much they may be required to pay for incumbent relocation costs and accelerated relocation payments should they become overlay licensees.[[5]](#footnote-5) To facilitate this providing this information to potential auction bidders, the Commission is seeking approval for an information collection to permit it to collect the following information from incumbents as adopted in the *3.7 GHz Report and Order*:

*Accelerated Relocation Elections[[6]](#footnote-6)*

The Commission concluded in the *3.7 GHz Report and Order* that overlay licensees would only value accelerated relocation if a significant majority of incumbents are cleared in a timely manner, and therefore determined that at least 80% of accelerated relocation payments must be accepted in order for the Commission to accept accelerated elections and require overlay licensees to pay accelerated relocation payments. Because commitments to early clearing will be crucial components of potential bidders’ decisions to compete for a particular license at auction, the Commission is requiring eligible space station operators[[7]](#footnote-7) to commit to early clearing well in advance of the auction to determine whether there are sufficient accelerated relocation elections to trigger early relocation and in turn provide bidders with adequate certainty regarding the clearing date and payment obligations associated with each license. To that end, the *3.7 GHz Report and Order* calls for an eligible space station operator choosing to commit to clear on the accelerated schedule in exchange for accelerated relocation payments to submit a written, public, irrevocable accelerated relocation election with the Commission by May 29, 2020. The Commission’s Wireless Telecommunications Bureau will issue a public notice prescribing the precise form of the accelerated relocation election no later than May 12, 2020.

*Transition Plans[[8]](#footnote-8)*

The *3.7 GHz Report and Order* requires each eligible space station operator to submit to the Commission by June 12, 2020, and make available for public review, a detailed transition plan describing the necessary steps and estimated costs for the eligible space station operator to complete the transition of existing operations in the lower portion of the 3.7-4.2 GHz band to the upper 200 megahertz of the band and its individual timeline for doing so consistent with the regular relocation deadline or by the accelerated relocation deadlines, as applicable.[[9]](#footnote-9) Specifically, the transition plan must detail:

(1) all existing space stations with operations that will need to be relocated into the upper 200 megahertz of the 3.7-4.2 GHz band;

(2) the number of new satellites, if any, that the space station operator will need to launch in order to maintain sufficient capacity post-transition, including detailed descriptions of why such new satellites are necessary;

(3) the specific grooming plan for migrating existing services into the upper 200 megahertz of the 3.7-4.2 GHz band, including the pre- and post-transition frequencies that each customer will occupy;

(4) any necessary technology upgrades or other solutions, such as video compression or modulation, that the space station operator intends to implement;

(5) the number and location of incumbent earth stations antennas currently receiving the space station operator’s transmissions that will need to be transitioned to the upper 200 megahertz of the 3.7-4.2 GHz band;

(6) an estimate of the number and location of incumbent earth station antennas that will require retuning and/or repointing in order to receive content on new transponder frequencies post-transition;

(7) the specific timeline by which the space station operator will implement the actions described in its plan, including any commitments to satisfy an early clearing; and

(8) a range of estimated costs for the transition, such as engineering, equipment, site and FCC fees, and other reasonable, additional costs incumbent space station and earth station operators may incur as a result of relocation, with appropriate itemization.

Because there may be a need for an eligible space station operator to make changes to its transition plan to update certain information or to cure any defects that may be identified by the Commission or by relevant stakeholders during the comment window, space station operators will be permitted to make any necessary updates or resolve any deficiencies in their individual transition plans until August 14, 2020, after which they may only make further adjustments to their individual plans with the approval of the Commission.

*Incumbent Earth Station Lump Sum Payment Elections*[[10]](#footnote-10)

The *3.7 GHz Report and Order* provides an incumbent earth station operator with the option of accepting reimbursement payments for its reasonable relocation costs for the transition, or opting out of the formal relocation process and accepting a lump sum reimbursement payment for allof its incumbent earth stations based on the average, estimated costs of relocating all of their incumbent earth stations in lieu of actual relocation costs. The *3.7 GHz Report and Order* directs the Wireless Telecommunications Bureau to announce the lump sum that will be available per incumbent earth station as well as the process for electing lump sum payments and requires that no later than 30 days after this announcement, an incumbent earth station operator that wishes to receive a lump sum payment make an irrevocable lump sum payment election that will apply to all of its earth stations in the contiguous United States.

In March 2020, Commission sought approval from OMB under its Paperwork Reduction Act (PRA) emergency processing provisions, 5 U.S.C. § 1320.13, to permit the collection of information that will be used to determine when, how, and at what cost existing operations in the lower portion of the 3.7-4.2 GHz band will be relocated to the upper portion of the band in order to implement the framework adopted by the Commission for reforming the 3.7-4.2 GHz band. On May 5, 2020, the Commission received emergency approval from OMB for the information collection under OMB Control Number 3060-1272. The information collection requirements under OMB Control Number 3060-1272 have not changed since the Commission’s emergency PRA request was approved by OMB on May 5, 2020. The Commission is requesting continued OMB approval for the information collection requirements that were approved in the Commission’s emergency submission.

Statutory authority for this information collection is contained in sections 1, 2, 4(i), 4(j), 5(c), 201, 302, 303, 304, 307(e), and 309of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 154(j), 155(c), 201, 302, 303, 304, 307(e), 309.

2. *Use of Information.* The information that will be collected under this information collection is designed to ensure that the framework adopted by the Commission in the *3.7 GHz Report and Order* for reforming the 3.7-4.2 GHz band by transitioning incumbents from the lower portion of the band into the upper 200 megahertz portion and making overlay licenses in the vacated spectrum available through an auction will occur in a timely, transparent, and efficient manner. Using the information collected under this information collection will provide the Commission and affected and interested parties with information they need to begin the transition process and carry out their transition obligations, and understand when the spectrum in the lower portion of the band will be accessible by overlay licensees and an estimate of how much such licensees may be required to pay for incumbent relocation costs, thereby furthering the goal of releasing more mid-band spectrum into the market to support and enable next-generation wireless networks.

The information provided in the accelerated relocation elections will enable the Commission to identify whether relocation will proceed on the regular or an accelerated schedule, and will also provide potential bidders with valuable information about when they will get access to the spectrum in the band that is currently occupied by incumbent FSS space stations and earth stations and an estimate of how much they may be required to pay for accelerated relocation costs should they become overlay licensees. The information in earth station operators’ lump sum payment elections will help inform the Commission and eligible space station operators regarding which earth stations space station operators they will or will not be responsible for in their respective transitions. It will also provide additional clarity regarding relocation costs to prospective flexible-use service licensees. The information submitted by eligible space station operators in their transition plans will provide necessary information about a space station operator’s specific plans for accomplishing its transition of existing operations in the lower portion of the band into the upper 200 megahertz of the band. With this information, the Commission can reasonably confirm that the space station operators have considered the necessary aspects and costs of the transition and appear on track to meet the regular relocation deadline or accelerated relocation deadlines, as applicable. This information will also provide potential bidders with valuable information regarding the operators’ ability to successfully clear and to do so by the specified date, their costs for transitioning, and anticipated payment obligations associated with the overlay licenses they could potentially win the auction.

3. *Technological collection techniques.* Entities required to submit information under this information collection will file the required information electronically using the Commission’s existing systems. This collection mechanism is being used to reduce the technological burden on the public and the Commission. The Wireless Telecommunications Bureau will issue public notices in advance of the deadlines by which incumbents must submit their accelerated relocation elections and lump sum payment elections that provides additional guidance and other information about making their submissions.

1. *Efforts to identify duplication.* There will be no duplicative information collected. This information collection will collect specific information needed to implement the framework for reforming the 3.7-4.2GHz band recently adopted by the Commission in the *3.7 GHz Report and Order*. Thus, the information being collected under this collection is not already available.
2. *Impact on small entities*. In conformance with the Paperwork Reduction Act of 1995, the Commission has made an effort to minimize the burden on all respondents regardless of size by limiting the information collected under this collection to that which is necessary to obtain the information needed to implement the framework for reforming the3.7-4.2 GHz band recently adopted by the Commission in the *3.7 GHz* *Report and Order*. Moreover, the requirement to submit information under this collection is limited to only eligible space station operators and incumbent earth station operators that operate in the 3.7-4.2 GHz Service band. In addition, the Wireless Telecommunications Bureau will issue public notices in advance of the deadlines by which eligible space station operators must submit their accelerated relocation elections and incumbent earth station operators must submit their lump sum payment elections to provide additional guidance and other information about making their submissions, thereby further minimizing the burden on all respondents, including small entities, related to this information collection.
3. *Consequences if information is not collected.* This information collection is critical for the Commission to be able to initiate the process of planning and managing the efficient and expeditious clearing of the lower portion of the band, so that this spectrum can be auctioned for flexible-use service licenses. The Commission will use the information collected to determine whether relocation of incumbents will occur on the regular or an accelerated schedule, ensure that incumbents are prepared to transition efficiently and expeditiously to the upper portion of the 3.7-4.2 GHz band, and provide potential bidders with information regarding the overlay licenses on which they may bid in the auction, including when they will get access to that spectrum and an estimate of how much they may be required to pay for incumbent relocation costs should they become overlay licensees. Without this information, the framework the Commission adopted in the *3.7 GHz Report and Order* will not be able to be efficiently or expeditiously implemented and the transition will be challenging to accomplish and is likely to take significantly longer, which would delay auction winning bidders from gaining access to their new overlay licenses and deploying services—resulting in a corresponding delay in enabling the consumers and businesses to take advantage of next-generation communications services.
4. *Special circumstances.* This information collection as currently approved does not have any of the characteristics that would require separate justification under 5 C.F.R. § 1320.5(d)(2).
5. *Federal Register notice; efforts to consult with persons outside the Commission.* Pursuant to 5 C.F.R. § 1320.8, the Commission published a 60-day notice in the Federal Register on July 8, 2020 (*see* 85 FR 41035) regarding the extension of the information collection requirements under OMB Control Number 3060-1272 prior to its submitting its extension request to OMB. No comments were received in response to this notice.
6. *Payments or gifts to respondents.* Respondents will not receive any payments or gifts.
7. *Assurance of confidentiality.* The information collected under this collection will be made publicly available, however, to the extent information submitted pursuant to this information collection is determined to be confidential, it will be protected by the Commission. If a respondent seeks to have information collected pursuant to this information collection withheld from public inspection, the respondent may request confidential treatment pursuant to section 0.459 of the Commission’s rules for such information. See 47 C.F.R. § 0.459.
8. *Questions of a sensitive nature*. The information collection requirements do not ask questions of a sensitive nature.
9. *Estimates of the hour burden of the collection to respondents.* The Commission estimates that there are five eligible space station operators in the 3.7-4.2 GHz band. Because all eligible space station operators are required to submit a transition plan concerning their respective relocation plans and costs, we expect that five eligible space station operators will submit transition plans. The decision regarding whether to elect to commit to clear on the accelerated relocation schedule in exchange for an accelerated relocation payment rests exclusively with eligible space station operators and, therefore, these eligible space station operators exclusively determine the number of accelerated payment elections that may be received under this information collection.  For this reason, it is difficult to know the exact number of eligible space station operators that will elect to commit to clear on the accelerated schedule and submit such an election. The Commission therefore estimates that up to five eligible space station operators may submit an accelerated relocation election. The Commission estimates that there are as many as 3,000 incumbent earth station operators that could request a lump sum payment for relocation costs. The decision regarding whether to elect to receive a lump sum payment rests exclusively with the earth station operators and, therefore, earth station operators exclusively determine the number of elections that may be received under this information collection.  For this reason, it is difficult to know the number of earth station operators that will submit a lump sum payment election and and/or for how many antennas. The Commission therefore estimates that up to 3,000 earth station operators could file lump sum payment elections. Based on this, the following represents the Commission’s estimated hour burden for this information collection:
   1. Number of estimated annual respondents: Approximately **3,010 respondents** (five filing transition plans, up to five filing accelerated payment elections, and up to 3,000 filing lump sum payment elections).
   2. Total number of annual responses**: 3,010 responses**.
   3. Frequency of response: One-time.
   4. Total estimated annual burden: 109,680 hours, calculated as follows:

*Accelerated Relocation Elections*

16 hours per respondent for up to 5 respondents filing once. Total estimated annual hours burden is calculated as follows:

**5 estimated responses x 16 hours per response = 80 total estimated burden hours.**

*Transition Plans*

We expect that respondents will use both in-house staff and outside engineering consultants to prepare and submit their transition plans. We estimate the hours burden for each respondent to prepare and submit its transition plan will be 2,720 hours of in-house staff time and 600 hours of time from an outside consulting engineer which is accounted for under question 13 of the supporting statement. Total estimated annual hours burden is calculated as follows:

**5 estimated responses x 2,720 hours per response = 13,600 total estimated burden hours.**

*Incumbent Earth Station Lump Sum Payment Elections*

32 hours per respondent for up to 3,000 respondents filing once. Total estimated annual hours burden is calculated as follows:

**3,000 estimated responses x 32 hours per response = 96,000 total estimated burden hours.**

* 1. Total estimate of annual in-house cost to respondents for the estimated hours burden: **$7,071,782.**
  2. Explanation of calculation of in-house costs to respondents for the estimated hours burden:

*Accelerated Relocation Elections*

The Commission estimates that it will take one in-house attorneys approximately 16 hours to prepare and submit the required information at a rate equivalent to the hourly rate of a GS-13, Step 5 government staff member ($55.75/hour). Therefore, the estimated annual in-house cost is as follows:

1 attorney at $55.75/hour x 16 hours per response x 5 estimated respondents/responses = $4,460

**Total In-House Cost for Accelerated Relocation Elections: $4,460.**

*Transition Plans*

The Commission estimates that it will take four in-house engineers approximately 600 hours each to prepare the required information, with one of these engineers at a rate equivalent to the hourly rate of a GS-15, Step 5 government staff member ($77.49/hour) and three at a rate equivalent to the hourly rate of a GS-11, Step 5 government staff member ($39.12/hour), and that it will take four in-house attorneys approximately 80 hours each to prepare the required information, with one of these attorneys at a rate equivalent to the hourly rate of a GS-15, Step 5 government staff member ($77.49/hour) and three at a rate equivalent to the hourly rate of a GS-12, Step 5 government staff member ($46.88/hour). Therefore, the estimated annual in-house cost is as follows:

1 engineer at $77.49/hour each x 600 hours per engineer per response x 5 estimated respondents/responses = $232,470

3 engineers at $39.12/hour each x 600 hours per engineer per response x 5 estimated respondents/responses = $352,080

1 attorney at $77.49/hour x 80 hours per response x 5 estimated respondents/responses = $30,996

3 attorneys at $46.88/hour x 80 hours per attorney per response x 5 estimated respondents/responses = $56,256

**Total In-House Cost for Transition Plans: $232,470 + $352,080 + $30,996 + $56,256 = $671,802.**

*Incumbent Earth Station Operator Lump Sum Payment Elections*

The Commission estimates that it will take two in-house attorneys approximately 16 hours each to prepare and submit the required information, with one at a rate equivalent to the hourly rate of a GS-15, Step 5 government staff member ($77.49/hour) and the other at a rate equivalent to the hourly rate of a GS-13, Step 5 government staff member ($55.75/hour) . Therefore, the estimated annual in-house cost is as follows:

1 attorney at $77.49/hour x 16 hours per response x 3,000 estimated respondents/responses = $3,719,520

1 attorney at $55.75/hour x 16 hours per response x 3,000 estimated respondents/responses = $2,676,000

**Total In-House Cost for Incumbent Earth Station Operator Lump Sum Payment Elections: $3,719,520 + $2,676,000 = $6,395,520.**

1. *Estimates of the annual cost burden of the collection to respondents*. There is no external cost to respondents for preparing and submitting their accelerated payment elections and their incumbent earth station operator lump sum payment elections, and these respondents should not incur any other capital and start-up costs or operation and maintenance of purchase of services in connection with responding to this information collection as the information collected should be available and maintained as part of the customary and usual business or private practice of the respondent.

The Commission expects that each respondent will require the assistance of one outside engineering consultant in addition to in-house staff to prepare and submit its transition plan, and estimates that each respondent will require 600 hours of time from an outside consulting engineer at a rate of $300 per hour:

1 engineering consultant at $300/hour x 600 hours per response x 5 estimated respondent/responses = $900,000

The Commission does not believe respondents should incur any other capital and start-up costs or operation and maintenance of purchase of services in connection with responding to this information collection as any additional information being collected with respect to the transition plans should be available and maintained as part of the customary and usual business or private practice of the respondent.

**Total Annual External Cost: $900,000.**

1. *Estimates of the annual cost burden to the Commission.* This information collection will be administered by Commission attorneys and engineers.  Based on its experience managing similar collections, the Commission estimates that its costs for administering this collection will be as follows, and does not envision other costs, e.g., personnel or other resources from other government agencies or from the private sector:

*Accelerated Relocation Elections*

The Commission estimates that it will take one Commission staff attorney at the GS-13, Step 5 level approximately 4 hours to review each submitted accelerated relocation election.

5 responses x 4 hours x $55.75/hour (Attorney, GS-13, Step 5) = **$1,115.**

*Transition Plans*

The Commission estimates that it will take two Commission engineers at the GS-14, Step 5 level approximately 80 hours each to review each submitted transition plan, and that it will take one attorney at the GS-15, Step 5 level and three attorneys at the GS-13, Step 5 level approximately 64 hours each to review each submitted transition plan.

5 responses x 160 hours x $65.88/hour = **$52,704.**

5 responses x 64 hours x $77.49/hour (Attorney, GS-15, Step 5) = **$24,796.80.**

5 responses x 192 hours x $55.75/hour (Attorney, GS-13, Step 5) = **$53,520.**

*Incumbent Earth Station Operator Lump Sum Payment Elections*

The Commission estimates that it will take one Commission attorney at the GS-15, Step 5 level and one Commission attorney at the GS-13, Step 5 level approximately 4 hours each to review each submitted incumbent earth station operator lump sum payment election.

3,000 responses x 4 hours x $77.49/hour (Attorney, GS-15, Step 5) = **$929,880.**

3,000 responses x 4 hours x $55.75/hour (Attorney, GS-13, Step 5) = **$669,000.**

**Total Estimated Annual Cost to the Federal Government**: **$1,598,880.**

1. *Program changes or adjustment.* The Commission is reporting no change in burden for the collection. Therefore, there are no program changes or adjustments to this collection.
2. *Collections of information whose results will be published.* The information collection will not be published for statistical use.
3. *Display of expiration date for OMB approval of information collection.* The Commission seeks continued approval not to display the OMB expiration date for this information collection. The Commission publishes a list of all OMB-approved information collections and their corresponding expiration dates in 47 C.F.R. 0.408 of the Commission’s rules, 47 C.F.R. § 0.408, and will continue to publish the OMB control number and OMB expiration date for this collection in the list contained in section 0.408 of its rules.
4. *Exception to certification statement for Paperwork Reduction Act submissions*. There are exceptions to the certification statement.

# Collections of Information Employing Statistical Methods:

The Commission does not anticipate that this information collection of information will employ statistical methods, and the use of such methods would not reduce the burden or improve accuracy of results.

1. *See* MOBILE NOW Act, Pub. L. No. 115-141, Division P, Title VI, § 601 *et seq.* (2018) (requiring the Commission to evaluate “the feasibility of allowing commercial wireless services, licensed or unlicensed, to use or share use of the frequencies between 3700 megahertz and 4200 megahertz”). [↑](#footnote-ref-1)
2. The 20 megahertz from 3.98-4.0 GHz is being reserved as a guard band. [↑](#footnote-ref-2)
3. The *3.7 GHz Report and Order* defines “incumbent space station operators” to include all C-band space station operators authorized to provide service to any part of the contiguous United States pursuant to an FCC-issued license or grant of market access as of June 21, 2018. [↑](#footnote-ref-3)
4. The *3.7 GHz Report and Order* defines “incumbent earth stations” to be protected from interference from flexible-use licensees to include FSS earth stations that: (1) were operational as of April 19, 2018; (2) are licensed or registered (or had a pending application for license or registration) in the Commission’s International Bureau Filing System (IBFS) database as of November 7, 2018; and (3) have timely certified, to the extent required by the Orderadopted in FCC 18-91 (to include certain renewal applications and license and registration applications filed in the IBFS database through November 7, 2018), the accuracy of information on file with the Commission. [↑](#footnote-ref-4)
5. Overlay licensees are required to pay for the reasonable relocation costs of incumbent space station and incumbent earth station operators that are required to clear the lower portion of the band. [↑](#footnote-ref-5)
6. *See* 47 CFR 27.1412(c) and 47 CFR 27.1412(c)(2). [↑](#footnote-ref-6)
7. An “eligible space station operator” is as an incumbent space station operator that has demonstrated as of February 1, 2020, that it has an existing relationship to provide service via C-band satellite transmission to one or more incumbent earth stations in the contiguous United States. An eligible space station operator may receive reimbursement for relocation costs incurred as a result of transitioning to the upper portion of the 3.7-4.2 GHz band. An eligible space station operator that commits to clear on the accelerated schedule in exchange for an accelerated relocation payment is committing to not only relocate its own services by the applicable accelerated relocation deadlines but also to take responsibility for relocating its associated incumbent earth stations by those same deadlines. [↑](#footnote-ref-7)
8. *See* 47 CFR 27.1412(d)(1). [↑](#footnote-ref-8)
9. An eligible space station operator that elects to receive accelerated relocation payments is responsible for relocating all of its associated incumbent earth stations and must outline the details of such relocation in the transition plan (unless an incumbent earth station owner elects to receive a lump sum payment and assumes responsibility for transitioning its own earth stations). Similarly, an incumbent space station operator that does not elect to receive accelerated relocation payments but nevertheless plans to assume responsibility for relocating its own associated incumbent earth stations must make that clear in its transition plan. [↑](#footnote-ref-9)
10. *See* 47 CFR 27.1419. [↑](#footnote-ref-10)