**SUPPORTING STATEMENT**

**A. Justification**

1. *Circumstances that make collection necessary.* The Federal Communications Commission requests that the Office of Management and Budget (OMB) approve a revision of the information collection titled “Part 25 of the Federal Communications Commission’s Rules Governing the Licensing of, and Spectrum Usage By, Commercial Earth Stations and Space Stations” under OMB Control No. 3060-0678, as a result of three recent rulemakings, as well as an update to the Commission’s filing system for earth station and space station applications filed pursuant to part 25 of the Commission’s rules, as discussed below.[[1]](#footnote-3)

On September 27, 2019, the Commission released a Report and Order, FCC 19-93, in IB Docket No. 06‑160, titled “Amendment of the Commission’s Policies and Rules for Processing Applications in the Direct Broadcast Satellite Service” (*DBS Licensing Report and Order*). The *DBS Licensing Report and Order* adopted a new licensing process for space stations in the Direct Broadcast Satellite Service (DBS). This new process allows applicants for DBS space station licenses to take advantage of a licensing process that parallels the Commission’s streamlined part 25 satellite licensing rules for geostationary orbit (GSO) space stations in the fixed-satellite service (FSS). The Commission limited the regulatory burdens borne by applicants, while promoting new opportunities for efficient use of orbital spacing and spectrum by DBS licensees. The Commission’s action supports and encourages the increasing innovation in the DBS sector and helps to preserve U.S. leadership in space-based services and operations. This information collection will provide the Commission and the public with necessary information about this area of satellite operations. While this information collection represents an overall increase in the burden hours, the increase is due to an anticipated overall increase in number of applications as a result of additional applications being filed under the process adopted in the *DBS Licensing Report and Order*. This information collection serves the public interest by streamlining the collection of information and allowing the Commission to authorize DBS space stations under the new process established in the Report and Order. Specifically, the *DBS Licensing Report and Order* contains the following new or modified information collection requirements: space station applications for GSO space stations operating in the frequencies of the International Telecommunication Union (ITU) Appendices 30 and 30A (incorporated by reference, see 47 CFR § 25.108) must include a statement that the proposed operation will take into account the applicable requirements of these Appendices of the ITU Radio Regulations and a demonstration that it is compatible with other U.S. ITU filings under Appendices 30 and 30A or, for any affected filings, a letter signed by the affected operator indicating that it consents to the new application. The changes adopted in the *DBS Licensing Report and Order* will result in a very small net annualized increase in burden hours to certain applicants and licensees under part 25.

On November 19, 2020, the Commission released a Report and Order, FCC 20-159, in IB Docket No. 18-314, titled “Further Streamlining Part 25 Rules Governing Satellite Services” (*Satellite Services Report and Order*). The *Satellite Services Report and Order* streamlined the Commission’s rules governing satellite services by creating an optional framework for authorizing both the blanket-licensed earth stations and space stations of a satellite system through a unified license. The *Satellite Services Report and Order* also permitted earth station applicants to certify compliance with relevant satellite licenses in lieu of providing duplicative or unnecessary technical demonstrations, aligned the build-out requirements for earth stations and space stations, and eliminated unnecessary reporting rules. These changes reduce regulatory burdens, simplify the Commission’s licensing of satellite systems, and provide additional operational flexibility. The *Satellite Services Report and Order* affected two information collections: OMB Control Numbers 3060-1215 and 3060-0678. The Commission received OMB approval for changes under OMB Control No. 3060-1215 on August 26, 2021, as reported in 86 FR 52102.[[2]](#footnote-4) The Commission seeks approval for changes under OMB Control No. 3060-0678 through this supporting statement. The changes adopted in the *Satellite Services Report and Order* will result in a net annualized decrease in burden hours to applicants and licensees under part 25. This submission amends the previous submission to the OMB to reflect these changes.

On August 3, 2022, the Commission released a Report and Order, FCC 22-63, in IB Docket Nos. 20-330 and 22-273, titled “Amendment of Parts 2 and 25 of the Commission’s Rules to Enable GSO Fixed-Satellite Service (Space-to-Earth) Operations in the 17.3-17.8 GHz Band, to Modernize Certain Rules Applicable to 17/24 GHz BSS Space Stations, and to Establish Off-Axis Uplink Power Limits for Extended Ka-Band FSS Operations” (*17 GHz Report and Order*).[[3]](#footnote-5) In the *17 GHz Report and Order*, the Commission amended its rules to permit geostationary satellite orbit (GSO) space stations to use the 17.3-17.7 GHz band by geostationary satellite orbit (GSO) space stations in the fixed-satellite service (FSS) in the space-to-Earth direction on a co-primary basis with incumbent services and permit limited GSO FSS (space-to-Earth) use of the 17.7-17.8 GHz band on an unprotected basis with respect to fixed service operations. Specifically, the *17 GHz Report and Order* contains the following new or modified information collection requirements:

* Certification of frequency coordination with the operator of the co-frequency space station or submission of an interference analysis demonstrating the compatibility of the proposed system with the co-frequency space station,
* Information as to earth station antenna characteristics to ensure that antennas are properly aimed and configured and that their signals are not likely to interfere with other systems,
* Information pertaining to implementation of interference detection and mitigation plans to prevent and resolve interference issues.

The changes adopted in the *17 GHz Report and Order* will result in a small net annualized increase in burden hours to certain applicants and licensees under part 25.

Finally, the Commission has updated the International Communications Filing System (ICFS),[[4]](#footnote-6) including updates to the Form 312, including Schedules A, B, and S, and Form 312-R. Applicants will be required to submit Form 312 (including Schedules A, B, and S) and Form 312-R through the updated, integrated web-based program. The updated version of Form 312 (including Schedules A, B, and S) and Form 312‑R will include several minor changes to the information collection designed to provide clarity to applicants and Commission staff, reduce errors, and make overall improvements to the applicants’ experience in completing the forms. Therefore, this supporting statement is being revised to reflect the new requirements, which are include the addition of several questions designed to better convey the overall information being requested in the form. The changes will result in a very small net annualized increase in burden hours to certain applicants under part 25.

The forms that are included in this collection are FCC Forms 312, including Schedules A, B, and S, and Form 312-R.[[5]](#footnote-7)

The statutory authority for this information collection is contained in 47 U.S.C. §§ 154, 301, 302, 303, 307, 309, 310, 319, 332, 605, and 721.

The information collection requirements do not affect individuals or households; therefore, there are no impacts under the Privacy Act.

2. *Use of information.* This collection is used by the Commission’s staff in carrying out its statutory duties to regulate satellite communications in the public interest, as generally provided under 47 U.S.C. §§ 154, 301, 302, 303, 307, 309, 310, 319, 332, 605, and 721. This collection is also used by staff in carrying out United States treaty obligations under the World Trade Organization Basic Telecom Agreement. The information collected is used for the practical and necessary purposes of assessing the legal, technical, and other qualifications of applicants; determining compliance by applicants, licensees, and other grantees with Commission rules and the terms and conditions of their grants; and concluding whether, and under what conditions, grant of an authorization will serve the public interest, convenience, and necessity.

For example, collected information is used by the Commission:

* To determine the qualifications of applicants and petitioners to provide satellite service, including applicants that are affiliated with foreign entities and petitioners that seek to provide service to the U.S. market from non-U.S.-licensed satellites.
* To facilitate technical coordination of systems among applicants and licensees in various frequency bands. Without such information, the Commission could not implement band plans as set forth in the Table of Allocations, 47 CFR § 2.106.
* To facilitate the Commission’s efforts to use spectrum more efficiently and to better accommodate the operational needs of licensees.
* To provide operators with greater flexibility while ensuring that their operations do not cause harmful interference to the operations of other service providers.
* To examine requests for authority to change a controlling interest in the ownership of a space station or earth station licensee.
* To assist the Commission in considering whether its rules require modification to accommodate the changing market.
* To ensure that licensees comply with all Commission rules and the terms and conditions of their licenses.

3. *Technological collection techniques.* Applicants are required to complete and file the FCC Form 312, including associated Schedules A, B, or S where appropriate)or FCC Form 312-R with the Commission electronically via ICFS. Applicants seeking to assign an authorization, or to transfer control of an authorization holder, must complete FCC Form 312, Schedule A. Earth station applicants (except for assignments/transfers) must complete Form 312, Schedule B. Space station applicants (except for assignments/transfers) must complete Form 312, Schedule S. In addition, applicants are required to submit narrative information that describes how they have met or will meet certain requirements. The majority of this narrative information can be filed electronically in ICFS.

In December 2006, the Commission received approval for mandatory electronic filing of surrenders of authorizations under part 25 of the Commission’s rules. In September 2007, the OMB approved mandatory electronic filing of consummations of assignments and transfers of control of licenses for all satellite services. A total of 100% of that collection involves the use of electronic collection techniques. In addition, Satellite Digital Audio Radio Service (SDARS) licensees may provide required notification of terrestrial repeater deployment to Wireless Communications Services licensees via email or other electronic media. If requested to do so, SDARS licensees may also transmit inventories of their repeater networks to Commission staff via email or other electronic media. Consequently, 100% of the information provided under those rules can be submitted electronically.

4. *Efforts to identify duplication.* This collection includes, among other things, information collected under the Commission’s orbital debris mitigation rules adopted before 2020 for space station applicants under part 25 of the Commission’s rules. The Commission is also currently seeking OMB approval for an information collection titled “Part 25 Rules Addressing the Mitigation of Orbital Debris,” under OMB Control No. 3060-XXXX, as a result of three Commission rulemaking decisions in IB Docket No. 18-313 updating our orbital debris mitigation requirements.[[6]](#footnote-8) Once the Commission receives OMB approval for that collection, we plan to consolidate the information collections related to orbital debris mitigation for part 25 applicants into that information collection. Otherwise, the Commission does not impose similar information collection requirements on the respondents.

5. *Impact on small entities*. In conformance with the PRA, the Commission is making an effort to minimize the burden on all respondents, regardless of size. The Commission has endeavored to limit the information collection requirements to those that are necessary to evaluate and process an application, to deter possible abuses of the licensing process, and otherwise to fulfill the Commission’s statutory obligations. Concerning the information collection in the *DBS Licensing Report and Order*, the *17 GHz Report and Order*, the *Satellite Services Report and Order*, and updates to ICFS, the Commission considered the burden of the collection on small entities and minimized the scope of the information collection to the extent possible.

6. *Consequences if information is not collected.* If the various data in this collection were collected less frequently or not filed in accordance with our rules, then, among other harms:

* The Commission would not be able to carry out its mandate to determine that grant of an application is in the public interest, as required by statute.
* The Commission would not be able to ensure that licensees are operating in accordance with Commission rules.
* The Commission would not be able to determine whether a satellite system could operate without causing harmful interference to stations in other services.
* The Commission would not be able to advance its goals of managing spectrum efficiently and promoting broadband technologies to benefit American consumers throughout the United States.
* The Commission would not be able to mitigate the potential harmful effects of orbital debris accumulation. Without such information collection requirements, the growth in the orbital debris population may limit the usefulness of space for communications and other uses in the future by raising the costs and lowering the reliability of space-based systems.
* The Commission would not have essential information to determine whether approval of a change in a controlling interest in the ownership of a license serves the public interest, as required by statute.

7. *Special circumstances.* The Commission does not have any new or amended information collection requirements that are inconsistent with the general information collection guidelines in 5 CFR § 1320.5.

8. *Federal Register notice; efforts to consult with persons outside the Commission*. On May 5, 2023, the Commission published a notice (*see* 88 FR 29129) in the Federal Register seeking comment from the public on the information collection requirements contained in the *DBS Licensing Report and Order*, the *Satellite Services Report and Order*, the *17 GHz Report and Order*, and updates to ICFS. No comments were received from the public with regard to that notice.

9. *Payments or gifts to respondents.* No payment or gift will be given to respondents in connection with these information collection requirements.

10. *Assurances of confidentiality*. There is no need for confidentiality pertaining to the information collection requirements in this collection. Personally identifiable information (PII) such as names, addresses, phone numbers, email addresses, or citizenship, ownership, or financial information that is relevant to a filing will be collected and maintained in accord with the FCC/IB-1, International Bureau Filing System,[[7]](#footnote-9) system of records notice (SORN). A Privacy Impact Assessment (PIA) has also been performed for this system. The SORN and the PIA are both posted at <https://www.fcc.gov/managing-director/privacy-transparency/privacy-act-information>.

11. *Questions of a sensitive nature.* This information collection does not address any matters of a private or sensitive nature.

12. *Estimates of the hour burden of the collection to respondents.* The following represents the frequency of response,[[8]](#footnote-10) time per response, total annual burden hours, and an explanation for the estimated **3,515** respondents and **3,567** responses to this information collection. To provide these estimates, we reviewed filings with the Commission over the past several years and also estimated how many applications we are likely to receive under different categories, and made some significant updates to the prior estimates. We also updated the estimated totals to reflect the new rules and updates to the Commission’s ICFS application filing system. In addition, review of the previous information collection, approved by OMB on July 16, 2021, revealed a few miscalculations of the total number of respondents, responses, and total burden hours. The calculation that follows has also been revised to correct those numbers.

**I. Applications for Initial Licenses or Registrations and Requests for U.S. Market Access**

1. **Space Stations** (Form 312, Schedule S)
2. **General requirements** (47 CFR §§ 25.110(b), 25.111(b) or (c), (d), 25.114(a)-(c), (d)(1)-(6), (d)(14); *see also* 47 CFR § 0.457(d)(1)(vii)(C))
3. Number of respondents: 24.14 applications per year for U.S. space station licenses, eight requests per year to serve the U.S. market with a non-U.S.-licensed space station, and two applications per year for a U.S. earth station to communicate with a non-U.S.-licensed space station that has not been previously granted U.S. market access.
4. Number of responses: 24.
5. Frequency of response: One time.
6. Annual hour burden: The total annual burden is 1,488 hours (24 responses x 62 hours/response = 1,488 hours).
7. **Additional Service-Specific Requirements**
	1. **Geostationary-Satellite Orbit (GSO) Fixed-Satellite Service (FSS) Applications** (47 CFR § 25.140(a))
8. Number of respondents: 9.
9. Number of responses: 9.
10. Frequency of response: One time.
11. Annual hour burden: The total annual hour burden is 18 hours (9 responses x 2 hours/response = 18 hours).
12. **NGSO FSS Applications** (47 CFR §§ 25.114(d)(12), 25.146)
13. Number of respondents: 8.
14. Number of responses: 8.
15. Frequency of response: One time and on occasion.
16. Annual hour burden: The total annual hour burden is 32 hours (8 responses x 4 hours/persons = 32 hours).
17. **Direct Broadcast Satellite (DBS) Applications** (47 CFR §§ 25.114(d)(11), (13), (18), 25.148)
18. Number of respondents: 1.
19. Number of responses**:** 1.
20. Frequency of response: One time.
21. Annual hour burden: The total annual hour burden is 9 hours (1 responses x 9 hours/response = 9 hours).
22. **17/24 GHz Broadcasting-Satellite Service (BSS) Applications** (47 CFR §§ 25.114(d)(7), (15)-(18), 25.140(a), (b), (c), 25.203(3), 25.264)
23. Number of respondents: 2.
24. Number of responses**:** 2.
25. Frequency of response: One time.
26. Annual hour burden: The total annual hour burden is 156 hours (2 responses x 78 hours/response = 156 hours).
27. **17 GHz GSO FSS Applications** (47 CFR §§ 25.114(d)(7), (15), (18), 25.140(a)(2), (3)(iii), (4), (5), (7), (d), 25.203(3), 25.264)
28. Number of respondents: 2.
29. Number of responses**:** 2.
30. Frequency of response: One time.
31. Annual hour burden: The total annual hour burden is 156 hours (2 responses x 78 hours/response = 156 hours).
32. **SDARS Applications** (47 CFR § 25.144(a))
33. Number of respondents: 2.
34. Number of responses: 2.
35. Frequency of response: One time.
36. Annual hour burden: The total annual hour burden is 2 hour (2 response x 1 hour/response = 2 hour).
37. **GSO MSS Applications** (47 CFR § 25.143(b))
38. Number of respondents: 1.
39. Number of responses: 1.
40. Frequency of response: One time.
41. Annual hour burden: The total annual hour burden is 4 hours (1 response x 4 hours/response = 4 hours).
42. **NGSO MSS Applications** (47 CFR §§ 25.142(a), (b)(2)(ii), 25.143(b), 25.250(b), 25.279)
43. Number of respondents: 4.
44. Number of responses: 4.
45. Frequency of response: One time.
46. Annual hour burden: The total annual hour burden is 24 hours (4 responses x 6 hours/response = 24 hours).
47. **Ancillary Terrestrial Component (ATC) Applications** (47 CFR §§ 25.149, 25.253, 25.254)
48. Number of respondents: 1.
49. Number of responses: 1.
50. Frequency of response: One time.
51. Annual hour burden: The total annual hour burden is 50 hours (1 response x 50 hours/response = 50 hours).
52. **Request for Filing of Advance Publication Information** (Letter, 47 CFR § 25.111(e); *see also* 47 CFR § 0.457(d)(1)(vii)(C))

(1) Number of respondents: 1.

(2) Number of responses: 1.

(3) Frequency of response: One time.

(4) Annual hour burden: The total annual hour burden is 2 hour (1 response x 2 hours/response = 2 hour).

**B. Small Satellites or Small Spacecraft** (Form 312, Schedule S, 47 CFR § 25.122 or 47 CFR § 25.123)

(1) Number of respondents: 5.

(2) Number of responses: 5.

(3) Frequency of response: One time.

(4) Annual hour burden: The total annual hour burden is 190 hours (5 responses x 38 hours/response = 190 hours).

**C. Earth Stations** (Form 312, Schedule B)

* + - 1. **General Requirements** (47 CFR §§ 25.110, 25.115(a)(1)(ii), (a)(5)-(10), (b)(1)-(9), 25.209, 25.211, 25.212, 25.218, 25.220, 25.203, 25.204(e)(1))
1. Number of respondents: 226.
2. Number of responses: 226.
3. Frequency of response: One time and Third Party Disclosure in accordance with 47 CFR § 25.203.[[9]](#footnote-11)
4. Annual hour burden: The total annual hour burden is 1,808 (226 responses x 8 hours/response = 1,808 hours).
	* + 1. **Applications Eligible for Autogrant Licensing** (47 CFR § 25.115(a)(2))
5. Number of respondents: 50.
6. Number of responses: 50.
7. Frequency of response: One time.
8. Annual hour burden: The total annual hour burden is 300 hours (50 responses x 6 hours = 300 hours).
	* + 1. **Applications Not Eligible for Autogrant Licensing** (47 CFR § 25.115(a)(1), (f); *see also* General Requirements above)
9. Number of respondents: 176
10. Number of responses: 176.
11. Frequency of response: One time.
12. Annual hour burden: The total annual hour burden is 1,056 hours (176 responses x 6 hours/response = 1,056 hours).
	* + 1. **Applications Requesting Market Access for Non-U.S. Licensed Space Stations** (Form 312, Schedule S, 47 CFR §§ 25.114, 25.137)
13. Number of respondents: 10.
14. Number of responses: 10.
15. Frequency of response: One time.
16. Annual hour burden: The total annual hour burden is 80 hours (10 responses x 8 hours/response = 80 hours).
	* + 1. **Applications to Register Receive-Only Earth Stations** (47 CFR§ 25.115(b))
17. Number of respondents: 2.
18. Number of responses: 2.
19. Frequency of response: One time.
20. Annual hour burden: The total annual hour burden is 8 hours (2 responses x 4 hours/response = 8 hours).
	* + 1. **Additional Application Requirements for Other Types of Earth Stations**
	1. **Blanket Licensed Earth Station Networks in the 3700-4200 MHz and 5925-6425 MHz Bands** (47 CFR § 25.115(c)(2)(i))
21. Number of respondents: 10.
22. Number of responses: 10.
23. Frequency of response: One time.
24. Annual hour burden: The total annual hour burden is 400 hours (10 responses x 40 hours/response = 400 hours).
25. **Blanket Licensed Earth Station Networks within the 10.7-20.2 GHz Bands** (47 CFR § 25.115(c)(1), (e), (f))
26. Number of respondents: 50.
27. Number of responses: 50.
28. Frequency of response: One time.
29. Annual hour burden: The total annual burden hours is 1,000 hours (50 responses x 20 hours/response = 1,000 hours).
30. **Blanket Licensed Earth Station Networks within the 27.5-30 GHz Bands** (47 CFR § 25.115(c)(1), (e), (f))
31. Number of respondents: 12.
32. Number of responses: 12.
33. Frequency of response: One time.
34. Annual hour burden: The total annual burden hours is 240 hours (12 responses x 20 hours/response = 240 hours).
35. **Earth Stations In Motion (ESIM)** (47 CFR § 25.228)[[10]](#footnote-12)
	1. **Earth Stations on Vessels (ESV)** (47 CFR § 25.228)
36. Number of respondents: 5.
37. Number of responses: 5.
38. Frequency of response: One time.
39. Annual hour burden: The total annual hour burden is 300 hours (5 responses x 60 hours/response = 300 hours).
	1. **Vehicle-Mounted Earth Stations (VMES)** (47 CFR § 25.228)
40. Number of respondents: 4.
41. Number of responses: 4.
42. Frequency of response: One time.
43. Annual hour burden: The total annual hour burden is 240 hours (4 responses x 60 hours/response = 240 hours).
	1. **Earth Stations aboard Aircraft (ESAA)** (47 CFR § 25.228)
44. Number of respondents: 10.
45. Number of responses: 10.
46. Frequency of response: One time.
47. Annual hour burden: The total annual hour burden is 800 hours (10 responses x 80 hours/response = 800 hours).
48. **Temporary-Fixed** (47 CFR §§ 25.110, 25.277)
49. Number of respondents: 115.
50. Number of responses: 115.
51. Frequency of response: One time.
52. Annual hour burden: The total annual hour burden is 920 hours (115 responses x 8 hours/response = 920 hours).
53. **MSS** (47 CFR §§ 25.115(d), 25.129(c), 25.135, 25.257, 25.258(c))
54. Number of respondents: 4.
55. Number of responses: 4.
56. Frequency of response: One time.
57. Annual hour burden: The total annual hour burden is 32 hours (4 responses x 8 hours/response = 32 hours).
58. **17/24 GHz BSS** (47 CFR § 25.115(g))
59. Number of respondents: 3.
60. Number of responses: 3.
61. Frequency of response: One time.
62. Annual hour burden: The total annual hour burden is 24 hours (3 responses x 8 hours/response = 24 hours).
63. **12/17 GHz DBS** (47 CFR §25.203(m))
64. Number of respondents: 3.
65. Number of responses: 3.
66. Frequency of response: One time.
67. Annual hour burden: The total annual hour burden is 27 hours (3 responses x 9 hours/response = 27 hours).
68. **17 GHz FSS** (47 CFR §25.115)
69. Number of respondents: 3.
70. Number of responses: 3.
71. Frequency of response: One time.
72. Annual hour burden: The total annual hour burden is 24 hours (3 responses x 8 hours/response = 24 hours).
73. **SDARS Terrestrial Repeaters** (47 CFR §§ 25.144(e), 25.263(b), (c), 25.403, 25.404; *see also* FCC 10-82, para. 278)
74. Number of respondents: 1.
75. Number of responses: 1.
76. Frequency of response: One time.
77. Annual hour burden: The total annual hour burden is 4 hours (1 response x 4 hours/response = 4 hours).

**D.** **Space Stations and Earth Stations** (Form 312, Schedules B and S, Schedule B, 47 CFR § 25.124(b))

(1) Number of respondents: 1.

(2) Number of responses: 1.

(3) Frequency of response: One time.

(4) Annual hour burden: The total annual hour burden is 59 hours (1 responses x 59 hours/response = 59 hours).

**II. Modifications of Existing Licenses and Market Access Grants** (Form 312)

1. **Space Station** (47 CFR § 25.117)
2. Number of respondents: 38.
3. Number of responses: 38.
4. Frequency of response: On occasion.
5. Annual hour burden: The total annual hour burden is 608 hours (38 responses x 16 hours/response = 608 hours).
6. **Earth Station** (47 CFR § 25.117)
7. Number of respondents: 165.
8. Number of responses: 165.
9. Frequency of response: On occasion.
10. Annual hour burden: The total annual hour burden is 3,300 hours (165 responses x 20 hours/response = 3,300 hours).

**III. Amendments of Pending Applications and Petitions** (Form 312)

1. **Space Station** (47 CFR §§ 25.116, 25.137(e))
2. Number of respondents: 10.
3. Number of responses. 10.
4. Frequency of response: On occasion.
5. Annual hour burden: The total annual hour burden is 55 hours (10 responses x 5.5 hours/response = 55 hours).
6. **Earth Station** (47 CFR §§ 25.116, 25.137(e))
7. Number of respondents: 34.
8. Number of responses: 34.
9. Frequency of response: On occasion.
10. Annual hour burden: The total annual hour burden is 136 hours (34 responses x 4 hours/response = 136 hours).

**IV. Transfers of Control or Assignments** (Form 312 and Schedule A)

1. **Transfers of Control** (47 CFR §§ 25.119, 25.137(g))
	* + 1. **Space Station**
2. Number of respondents: 4.
3. Number of responses: 4.
4. Frequency of response: On occasion.
5. Annual hour burden: The total annual hour burden is 36 hours (4 responses x 9 hours/response = 36 hours).
	* + 1. **Earth Station**
6. Number of respondents: 155.
7. Number of responses: 155.
8. Frequency of response: On occasion.
9. Annual hour burden: The total annual hour burden is 1,395 hours (155 responses x 9 hours/response = 1,395 hours).
10. **Assignments** (47 CFR §§ 25.119, 25.137(g))
	* + 1. **Space Station**
11. Number of respondents: 3.
12. Number of responses: 3.
13. Frequency of response: One time.
14. Annual hour burden: The total annual hour burden is 27 hours (3 operators x 9 hours/response = 27 hours).
	* + 1. **Earth Station**
15. Number of respondents: 81.
16. Number of responses: 81.
17. Frequency of response: One time.
18. Annual hour burden: The total annual hour burden is 729 hours (81 responses x 9 hours/response = 729 hours).

**V. Applications for Special Temporary Authority** (Form 312) (47 CFR § 25.120)

1. **Space Station**
2. Number of respondents: 77.
3. Number of responses: 77.
4. Frequency of response: On occasion.
5. Annual hour burden: The total annual hour burden is 616 hours (77 responses x 8 hours/response = 616 hours).
6. **Earth Station**
7. Number of respondents: 753.
8. Number of responses: 753.
9. Frequency of response: On occasion.
10. Annual hour burden: The total annual hour burden is 6,024 hours (753 responses x 8 hours/response = 6,024 hours).

**VI. Earth Station License Renewals** (FCC Form 312-R)(47 CFR §§ 25.115(b)(7), 25.121(e))

1. Number of respondents: 268.
2. Number of responses: 268.
3. Frequency of response: On occasion.
4. Annual hour burden: The total annual hour burden is 536 hours (268 operators x 2 hours/response = 536 hours).

**VII. Surrenders of Authorizations**

1. **Space Station**
2. Number of respondents: 1.
3. Number of responses: 1.
4. Frequency of response: One time.
5. Annual hour burden: The total annual hour burden is 1 hour (1 response x 1 hour/response = 1 hour).
6. **Earth Station**
7. Number of respondents: 208.
8. Number of responses: 208.
9. Frequency of response: One time.
10. Annual hour burden: The total annual hour burden is 208 hours (208 responses x 1 hour/response = 208 hours).

**VIII. Annual Reporting Requirements for Space Station Operators** (47 CFR § 25.171)

1. Number of respondents: 38.
2. Number of responses: 38.
3. Frequency of response: Annual.
4. Annual hour burden: The total annual hour burden is 38 hours (38 responses x 1 hour = 38 hours).

**IX. General Notification Requirements**

1. **Commence Construction at Own Risk** (47 CFR §§ 25.113(b) and (f))
2. Number of respondents: 1.
3. Number of responses: 1.
4. Frequency of response: One time.
5. Annual hour burden: The total annual hour burden is 1 hour (1 response x 1 hour/response = 1 hours).
6. **Bringing In-Orbit Spare into Use** (47 CFR § 25.113(h))
7. Number of respondents: 1.
8. Number of responses: 1.
9. Frequency of response: On occasion.
10. Annual hour burden: The total annual hour burden is .5 hours (1 response x .5 hours/response = .5 hours).
11. **NGSO Replacement Satellites** (47 CFR § 25.113(i))
12. Number of respondents: 5.
13. Number of responses: 5.
14. Frequency of response: On occasion.
15. Annual hour burden: The total annual hour burden is 10 hours (5 responses x 2 hours/response = 10 hours).
16. **Modification of Space Station Operation Not Requiring Prior Authorization** (47 CFR § 25.118(e), (f))
17. Number of respondents: 4.
18. Number of responses: 4.
19. Frequency of response: On occasion.
20. Annual hour burden: The total annual hour burden is 8 hours (4 responses x 2 hours/response = 8 hours).
21. **Modifications of Earth Station Operation Not Requiring Prior Authorization** (47 CFR § 25.118(a))
22. Number of respondents: 5.
23. Number of responses: 5.
24. Frequency of response: On occasion.
25. Annual hour burden: The total annual hour burden is 40 hours (5 responses x 8 hours/response = 40 hours).
26. **Temporary-Fixed Operation Local Coordination Reports** (47 CFR § 25.277(c))
27. Number of respondents: 100.
28. Number of responses: 100.
29. Frequency of response: On occasion.
30. Annual hour burden: The total annual hour burden is 800 hours (100 responses x 8 hours/response = 800 hours).
31. **Completion of Earth Station Construction** (47 CFR §§ 25.133(b) and (d))
32. Number of respondents: 250.
33. Number of responses: 250.
34. Frequency of response: One time.
35. Annual hour burden: The total annual hour burden is 250 hours (250 responses x 1 hour/response = 250 hours).
36. **ATC Service Initiation Notice** (47 CFR § 25.149(f))
37. Number of respondents: 1.
38. Number of responses: 1.
39. Frequency of response: One time.
40. Annual hour burden: The total annual hour burden is 1 hour (1 response x 1 hour/response = 1 hour).
41. **Ka-Band Space Station Operators’ Notification** (47 CFR § 25.258; *see also* FCC 96-311)
42. Number of respondents: 6.
43. Number of responses: 6.
44. Frequency of response: Third party disclosure.
45. Annual hour burden: The total annual hour burden is 6 hours (6 responses x 1 hour/response = 6 hours).
46. **Consummation of Transfer and Control or Assignment** (47 CFR § 25.119(f))
47. Number of respondents: 365.
48. Number of responses: 365.
49. Frequency of response: One time.
50. Annual hour burden: The total annual hour burden is 365 hours (365 responses x 1 hour/response = 365 hours).
51. **Results of In-Orbit Testing** (47 CFR § 25.173)
52. Number of respondents: 5.
53. Number of responses: 5.
54. Frequency of response: One time.
55. Annual hour burden: The total annual hour burden is 5 hours (5 responses x 1 hour/response = 5 hours).
56. **Contact Information Update** (47 CFR §§ 25.171, 25.172, 25.259(b), 25.260(b), 25.271(f))
57. Number of respondents: 25.
58. Number of responses: 25.
59. Frequency of response: On occasion.
60. Annual hour burden: The total annual hour burden is 12.5 hours (25 responses x .5 hour/response = 12.5 hours).
61. **Notification of Non-Routine Space Station Operation** (47 CFR § 25.140(d))

(1) Number of respondents: 6.

(2) Number of responses: 6.

(3) Frequency of response: On occasion.

(4) Annual hour burden: The total annual hour burden is 12 hours (6 responses x 2 hours/response = 12 hours).

1. **Third Party Disclosures Requirements**
	* + 1. **SDARS** (47 CFR § 25.263(b))
2. Number of respondents: 1.
3. Number of responses: 25.
4. Frequency of response: Third party disclosure.
5. Annual hour burden: The total annual hour burden is 25 hours (1 respondent x 25 responses x 1 hour/response = 25 hours).
	* + 1. **ATC** (47 CFR § 25.149)
6. Number of respondents: 1.
7. Number of responses: 25.
8. Frequency of response: Third party disclosure.
9. Annual hour burden: The total annual hour burden is 25 hours (1 respondent x 25 responses x 1 hour/response = 25 hours).
	* + 1. **ESIM (**47 CFR § 25.228)
				1. **ESV** (47 CFR § 25.228(e))
10. Number of respondents: 5.
11. Number of responses: 5.
12. Frequency of response: Third party disclosure.
13. Annual hour burden: The total annual hour burden is 5 hours (5 responses x 1 hour/response = 5 hours).
	* + - 1. **VMES** (47 CFR § 25.228(f))
14. Number of respondents: 4.
15. Number of responses: 4.
16. Frequency of response: Third party disclosure.
17. Annual hour burden: The total annual hour burden is 4 hours (4 responses x 1 hour/response = 4 hours).
	* + - 1. **ESAA** (47 CFR § 25.228(g))
18. Number of respondents: 10.
19. Number of responses: 10.
20. Frequency of response: Third party disclosure.
21. Annual hour burden: The total annual hour burden is 10 hours (10 responses x 1 hour/response = 10 hours).
	* + 1. **17/24 GHz DBS** (47 CFR § 25.203(m))
22. Number of respondents: 3.
23. Number of responses: 3.
24. Frequency of responses: Once.
25. Annual hour burden: The total annual hour burden is 27 hours (3 responses x 12 hours = 12 hours).

**X. Milestones and Bonds**

* + - * 1. **GSO Launch and Operate Milestone** (47 CFR § 25.164(f))
1. Number of respondents: 4.
2. Number of responses: 4.
3. Frequency of response: One time.
4. Annual hour burden: The total annual hour burden is 4 hours (4 responses x 1 hour/response = 4 hours).
	* + - 1. **NGSO Launch and Operate Milestone** (47 CFR § 25.164(f))
5. Number of respondents: 4.
6. Number of responses: 8.
7. Frequency of response: Two times.
8. Annual hour burden: The total annual hour burden is 8 hours (8 response x 1 hour/response = 8 hours).
	* + - 1. **Application-Stage Bond** (47 CFR § 25.165(f))
9. Number of respondents: 1.
10. Number of responses: 1.
11. Frequency of response: One time.
12. Annual hour burden: The total annual hour burden is 2 hours (1 response x 2 hours/response = 2 hours).
	* + - 1. **Post-Licensing Bond** (47 CFR § 25.165(a))
13. Number of respondents: 4.
14. Number of responses: 4.
15. Frequency of response: On occasion.
16. Annual hour burden: The total annual hour burden is 8 hours (4 responses x 2 hours/response = 8 hours).

**XI. Global Mobile Personal Communications by Satellite/E911 Call Centers** (47 CFR § 9.18)[[11]](#footnote-13)

1. Number of respondents: 4.
2. Number of responses: 4.
3. Frequency of response: Annual.
4. Annual hour burden: The total annual hour burden is 4 hours (4 responses x 1 hour/response = 4 hours).

**XII. Recordkeeping Requirement** (47 CFR §§ 25.115 (f), (g)(1), 25.263(c),)

1. Number of respondents: 1.
2. Number of responses: 1.
3. Frequency of response: Recordkeeping requirement.
4. Annual hour burden: The total annual hour burden is .5 hours (1 response x .5 hours = .5 hours).

**XIII. 3.7-4.2 GHz Information Collection Order** (FCC 18-91)

1. **Additional Information on Temporary Fixed Earth Stations in 3.7-4.2 GHz** (FCC 18-91)
2. Number of respondents: 70.
3. Number of responses: 70.
4. Frequency of response: One time.
5. Annual hour burden: The total annual hour burden is 420 hours (70 responses x 6 hours/response = 420 hours).
6. **Additional Information on Space Stations in 3.7-4.2 GH**z (FCC 18-91)
7. Number of respondents: 49.[[12]](#footnote-14)
8. Number of responses: 49.
9. Frequency of response: One time.
10. Annual hour burden: The total annual hour burden is 1,960 hours (49 responses x 40 hours/response = 1,960 hours).

**XIV. TOTALS: (COMPLETE)**

Total number of respondents: **3,515**

Total number of responses:  **3,567**

Range of hours per response: **.5-80**

Total number of burden hours: **27,175.5 rounded to 27,176**

**In-house Cost:** In-house staff who will be working on the information collection requirements contained in the chart above are estimated to have an hourly salary of $60/hour. The total overall in-house cost to respondents is **$1,630,560** (27,176 total burden hours x $60/hour = $1,630,560).

13. *Estimates of the cost burden of the collection to respondents.*

**Outside Cost:** Respondents are assumed to use outside legal or engineering assistance to complete their filing with the Commission. This is because, in addition to their in-house legal and engineering staffs, space station and earth station operators often rely on outside attorneys and engineers to assist with some of the information collection requirements in part 25. We estimate that the hourly rates for outside legal and engineering assistance are $300/hour and $250/hour, respectively. These figures are based on a small survey of local firms in the Washington, D.C. area and are conservative estimates. Because outside attorneys and engineers are used in approximately equal proportions, we use an average rate of $275/hour to arrive at the cost burden for outside assistance. The amount of hourly work performed by outside parties varies with the type and complexity of the application. Based on our experience, we estimate that operators will engage outside attorneys and engineers in preparing 879 of the total number of responses filed annually, with an average of 8.8 hours spent per response. Consequently, the total cost burden for outside assistance is **$2,127,125.** (879 responses x 8.8 hours per response = 7,735 burden hours. 7,735 burden hours x $275/hour = $2,127,125.)

**Application Filing Fees:[[13]](#footnote-15) $1,796,761.82.** This estimate is based on actual Commission filings over the past several years, as well as the estimates supplied in this statement, taking into account an estimate of the number of filings under the Commission’s new and modified rules adopted in the *DBS Licensing Report and Order*, the *17 GHz Report and Order,* the S*atellite Services Report and Order*, and the ICFS updates. The filing fees have been updated based on the 2013 International Bureau Application Fee Filing Guide.

 **Total Annualized Cost**:

|  |  |
| --- | --- |
| **Total Costs to the Industry** | **Totals** |
| Estimated Application Filing Fees | **$1,796,761.82** |
| Estimated Cost of Outside Legal/Engineering Assistance |  **$2,127,125** |
| **Total Cost to Respondents** |  **$3,923,886.82** |

14. *Estimate of Annualized Cost to the Federal Government*.

The estimate of annualized cost to the Federal government is summarized in the chart below.

As shown in the chart, the annualized costs to the Federal government are **$2,650,652.22.**

The chart contains total staff salaries, burden hours, and annualized costs.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| **Federal Government Staff** | **Number of Staff** | **Salary Per Hour** | **Annual Burden Hours** | **Annualized Costs** |
| GS-15/Step 5 Attorney | 6 | $89.04 | 1,514 | $808,839.36 |
| GS-14/Step 5 Attorney | 3 | $75.70  | 1,517 | $344,510.70  |
| GS-13/Step 5 Attorney | 1 | $64.06  | 1,517 | $97,179.02  |
| GS-12/Step 5 Attorney | 1 | $53.87  | 1,517 | $ 81,720.79  |
| GS-15/Step 5 Engineer | 11 | $89.04  | 694 |  $679,731.36  |
| GS-14/Step 5 Engineer | 3 | $75.70  | 2,002 | $454,654.20 |
| GS-12/Step 5 Paralegal | 1 | $53.87  | 500 | $26,935.00  |
| GS-12/Step 5 Industry Analyst | 1 | $53.87  | 1,508 | $81,235.96  |
| GS-12/Step 5 Telecom Specialist | 2 |  $53.87  | 2,011 | $216,665.14  |
| **Total** | **29** |  | **12,780** | **$2,791,471.53**  |
|  |  |  |  |  |

15. *Program changes or adjustments.* The Commission has the following program changes to this collection as a result of the information collection requirements adopted in the *DBS Licensing Report and Order* (FCC 19-93), theS*atellite Services Report and Order* (FCC 20-159), the *17 GHz Report and Order* (FCC 22-63), and updates to the ICFS system.

FCC 19-93: The updates to this collection as a result of the revised rules adopted in FCC 19-93 include no change to the total number of annual respondents and responses, +4 to the annual burden hours, and + $1,100 in outside engineering assistance to the annual cost. The program changes reflect a very small increase in the estimated annual burden hours as a result of the changes adopted in FCC 19-93, and include additional application fees and costs of outside legal/engineering assistance associated with these additional estimated applications.

FCC 20-159: The updates to this collection include one addition to the total number of respondents and responses, -266 to the annual burden hours and -$73,150 in outside engineering assistance to the annual cost. We have included an additional section for unified Space Station/Earth Station applications, however, there is no net change to the total number of responses and burden hours at this time. The program changes reflect a decrease in the estimated number of burden hours and associated costs of outside legal/engineering assistance overall.

FCC 22-63: The updates to this collection as a result of the revised rules adopted in FCC 22-63 include +5 to the total annual number of respondents, +5 to the total number of annual responses, +180 to the total number of annual burden hours, and + $49,500 in outside engineering assistance to the annual cost.

ICFS updates: As a result of the updates to the Form 312 (including Schedules A,B, and S), this information collection update reflects +3 hours to the total number of burden hours to respondents, and +$180 in in-house costs to the applicant.

Although the annual burden hours reflect an increase resulting from the program changes described above, the overall burden hours for the collection have decreased significantly as a result of internal adjustments to correct the numbers specified in the existing information collection. The collection was adjusted as follows: -3,013 to the number of respondents, -3,008 to the total annual responses, and -17,813 (rounded) to the annual burden hours. The significant decrease in respondents, responses, and burden hours is based largely on a correction to our method of calculating the received number of earth station respondents and responses in the different categories.

16. *Collections of information whose results will be published.* The data will not be published for statistical use.

17. *Display of expiration date for OMB approval of information collection.* We continue to seek a waiver of the requirement to display the expiration date of OMB approval on the FCC Form 312 (including associated Schedules A, B, and S)and FCC Form 312-R and wish to instead display an edition date. If these forms remain unchanged when it is time to renew OMB approval for this collection, the Commission would be required to destroy all stock on hand displaying the old expiration dates and then reprint and redistribute the forms with the new expiration date. Additionally, it would require the Commission to modify the electronic versions as well. This would be an undue burden on Commission resources and may lead to confusion among licensees.

18. *Exceptions to the certification statement for Paperwork Reduction Act submissions.* There are no exceptions to the Certification Statement.

**B. Collections of Information Employing Statistical Methods**

No statistical methods are employed.

**APPENDIX A**

**Application Costs** (in Dollars)[[14]](#footnote-16)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Filing** | **No. of Applications** | **Filing Fee** | **Subtotals** | **Totals** |
| **I. Applications for Initial Licenses** |  |  |  |  |
| a. Space Stations |  |  |  |  |
| GSO | 7 | 3,965 | 27,755 |  |
| NGSO | 9 | 16,795 | 151,155 |  |
| Small Satellite | 5 | 2,425 | 12,125 |  |
|  |  |  |  | 191,035 |
| b. Earth Stations: |  |  |  |  |
| Fixed or Temporary Fixed Transmit or Transmit/Receive Earth Stations |  |  |  |  |
| Initial application, Single site |  | 400 |  |  |
| Initial Application, Multiple sites |  | 7,270 |  |  |
| (average earth station application fee)  | 226 | 3,835 |  | 866,710 |
| Receive Only Earth Stations |  |  |  |  |
| Single |  | 195 |  |  |
| Multiple |  | 520 |  |  |
| Blanket |  | 400 |  |  |
| (average earth station application fee) | 2 | 371.66 |  | 743.32 |
| Mobile Earth Station Blanket Authorization (ESIMs total) | 12 | 910 |  | 10,920 |
| **II. Modifications of Existing Licenses** |  |  |  |  |
| a. Space Station | 38 | 2,785 |  | 105,830 |
| b. Earth Station | 165 | 610 |  | 100,650 |
| **III. Amendments of Pending Applications** |  |  |  |  |
| a. Space Station | 10 | 1,810 |  | 18,100 |
| b. Earth Station |  |  |  |  |
| Single Site |  | 480 |  |  |
| Multiple Site |  | 705 |  |  |
| (average earth station application fee) | 34 | 592.50 |  | 20,145 |
| **IV. Transfers of Control and Assignments** |  |  |  |  |
| **A. Transfers of Control (T/C)** |  |  |  |  |
| a. Space Station |  |  |  |  |
| First call sign |  | 830 |  |  |
| Additional call signs (each) |  | 445 |  |  |
| (average space station T/C fee) | 4 | 636.50 |  | 2,546 |
| b. Earth Station |  |  |  |  |
| First call sign |  | 830 |  |  |
| Additional call signs (each) |  | 445 |  |  |
| (average earth station T/C fee) | 155 | 637.50 |  | 98,812.50 |
| **B. Assignments** |  |  |  |  |
| a. Space Station |  |  |  |  |
| First call sign |  | 830 |  |  |
| Additional call signs (each) |  | 445 |  |  |
| (average space station assignment fee) | 3 | 637.50 |  | 1,912.50 |
| b. Earth Station |  |  |  |  |
| First call sign |  | 830 |  |  |
| Additional call signs (each) |  | 445 |  |  |
| (average earth station assignment fee) | 81 | 637.50 |  | 51,637.50 |
| **V. Applications for Special Temporary Authority** |  |  |  |  |
| a. Space Station | 77 | 1,600 |  | 123,200 |
| b. Earth Station | 753 | 220 |  | 165,660 |
| **VI. Earth Station License Renewals** |  |  |  |  |
| Single Site |  | 130 |  |  |
| Multiple Sites |  | 160 |  |  |
| Average Earth Station Fee | 268 | 145 |  | 38,860 |
|  |  |  |  |  |
| **TOTALS** |  |  |  | 1,796,761.82 |

1. This supporting statement does not include the information collections stemming from the Commission’s rulemaking decisions concerning orbital debris mitigation in IB Docket No. 18-313. Those information collections are under two separate collections: (1) OMB Control No. 3060-1013 for satellite applicants under part 5 (experimental) and part 97 (amateur) of the Commission’s rules, which is currently being renewed, *see* 89 FR 16769 (Mar. 8, 2024); and (2) OMB 3060-XXXX, titled “Part 25 Rules Addressing the Mitigation of Orbital Debris,” for satellite applicants under part 25 of the Commission’s rules, *see* 89 FR 19826 (Mar. 20, 2024). [↑](#footnote-ref-3)
2. The Commission is currently seeking a renewal of the information collection under OMB Control No. 3060-1215. *See* 89 FR 24833 (Apr. 9, 2024). [↑](#footnote-ref-4)
3. On March 19, 2024, the Commission’s Space Bureau and Managing Director released an Order, DA 24-271, that amends the final rules in Appendix A of *17 GHz Report and Order* in order to correct non-substantive typographical errors in the Final Rules and to conform them with the publishing conventions of the Federal Register. Those corrections will be effective thirty (30) days after the date of publication of that Order in the Federal Register, which will occur once the Commission receives approval from the Office of Management and Budget for the modified information collections under the Paperwork Reduction Act. [↑](#footnote-ref-5)
4. In 2023, the Commission rename the International Bureau Filing System to the International Communications Filing System (ICFS). *See* 88 FR 21424, 21425. [↑](#footnote-ref-6)
5. The Commission no longer uses the Form 312-EZ, and this will be reflected in the updated ICFS. Instead, applicants should continue to use the Form 312. [↑](#footnote-ref-7)
6. *See* 89 FR 19826. [↑](#footnote-ref-8)
7. The system of records (“IB-1, International Bureau Filing System”) refers to ICFS by its former name. [↑](#footnote-ref-9)
8. Throughout this document, we report the frequency of response for each information requirement. This reflects the number of times a particular respondent is required to submit that particular information. Thus, the term “one time” refers to a collection where a respondent need only submit that particular information once. Over the course of any year, however, one or more other respondents will be required to submit the same type of information. We use the term “on occasion” to refer to a collection where each respondent may be required to submit particular information more than once, but there is no requirement that they submit that information on a regular basis. We use the term “annually” to describe information that respondents must submit to us once each year. [↑](#footnote-ref-10)
9. Of the estimated 8 hours per response, the one-time filing accounts for approximately 7 hours per response and the third-party disclosure accounts for approximately 1 hour per response. [↑](#footnote-ref-11)
10. The total number of ESIM applications is estimated to be 12, but the information requirements in section 25.228 of the Commission’s rules are platform-based and multiple platforms can be requested by a single application. For information collection purposes, these figures demonstrate the amount of applicants requesting each specific platform and the burden hours of supplying information for each platform. However, the total number of applications, 12, is used for purposes of calculating final application totals. [↑](#footnote-ref-12)
11. The Commission updates the rule citation for this portion of the information collection. Previously, the Commission required the information in section 25.284, but in 2019, the Commission moved the requirement (without changes) to section 9.18 of its rules. 47 CFR § 9.18; *see Implementing Kari’s Law and Section 506 of RAY BAUM'S Act; Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems; Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission’s Rules*, PS Docket Nos. 18-261 and 17-239, GN Docket No. 11-117, Report and Order, 34 FCC Rcd 6607 (2019). [↑](#footnote-ref-13)
12. Respondents are calculated on a per-space station basis. [↑](#footnote-ref-14)
13. *See* Appendix A below for a table of calculations. [↑](#footnote-ref-15)
14. *See* 47 C.F.R. § 1.1107. [↑](#footnote-ref-16)