6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 1

[MD Docket Nos. 24-85, 24-86; FCC 24-31; FR ID 209752]

Assessment and Collection of Space and Earth Station Regulatory Fees for Fiscal Year 2024; Review of the Commission's Assessment and Collection of Regulatory Fees for Fiscal Year 2024

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Federal Communications Commission (Commission or FCC) adopted a Notice of Proposed Rulemaking (NPRM) that seeks comments on revising the regulatory fees for space and earth station payors for fiscal year (FY) 2024.

DATES: Submit comments on or before April 12, 2024; and reply comments on or before April 29, 2024.

ADDRESSES: You may submit comments, identified by MD Docket No. 24-85 and MD Docket No. 24-86, by any of the following methods:

- *Electronic Filers*. Comments may be filed electronically using the Internet by accessing the ECFS, https://apps.fcc.gov/ecfs.
- *Paper Filers*. Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
    - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street NE, Washington, DC 20554.

- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, DA 20-304 (March 19, 2020). https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice) or 202-418-0432 (TTY).

FOR FURTHER INFORMATION CONTACT: Stephen Duall, Space Bureau, at (202) 418–1103 or Stephen.Duall@fcc.gov; Roland Helvajian, Office of the Managing Director, at (202) 418-0444 or Roland.Helvajian@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rulemaking (*NPRM*), in MD Docket Nos. 24-85 and 24-86; FCC 24-31, adopted and released on March 13, 2024. The full text of this document is available at https://docs.fcc.gov/public/attachments/FCC-24-31A1.pdf.

Comment Filing Requirements. Interested parties may file comments and reply comments on or before the dates indicated in the DATES section above. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).

Providing Accountability Through Transparency Act. The Providing Accountability Through Transparency Act, Public Law 118-9, requires each agency, in providing notice of a rulemaking, to post online a brief plain-language summary of the proposed rule. The required summary of the *NPRM* is available at https://www.fcc.gov/proposed-rulemakings.

Ex Parte Presentations. The Commission will treat this proceeding as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with 47 CFR 1.1206(b). In proceedings governed by 47 CFR 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

Initial Regulatory Flexibility Analysis. The Regulatory Flexibility Act of 1980, as amended (RFA), requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." The Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the potential impact of the proposed rule and policy changes contained in the *NPRM*. The IRFA is set forth in appendix A of the FCC

Document https://docs.fcc.gov/public/attachments/FCC-24-31A1.pdf and a summary is included below. Written public comments are requested on the IRFA. Comments must be filed by the deadlines for comments on the *NPRM* indicated on the DATES section of this document and must have a separate and distinct heading designating them as responses to the IRFA.

Synopsis

I. INTRODUCTION

1. Pursuant to section 9 of the Communications Act of 1934, as amended, (Communications Act or Act), the Commission undertakes the Notice of Proposed Rulemaking (*NPRM*) to commence the assessment of regulatory fees for space and earth station payors for fiscal year (FY) 2024.

2. In January 2023, the Commission reorganized its International Bureau into: (1) a Space Bureau to handle policy and licensing matters related to satellite communications and other in-space activities under the Commission's jurisdiction; and (2) an Office of International Affairs to handle issues involving foreign and international regulatory authorities as well as international telecommunications and submarine cable licensing. When the Commission adopted regulatory fees for Fiscal Year (FY) 2023 in the *FY 2023 Regulatory Fees Report and Order*, 88 FR 63694 (Sept. 15, 2023), it noted that it would be the last year for doing so for the International Bureau, and that the creation of the Space Bureau and Office of International Affairs could result in changes in the assessment of regulatory fees due to changes in Full Time Equivalents (FTEs), due to increased oversight on various relevant industries. One FTE, sometimes also referring to a Full Time Employee, is a unit of measure equal to the work performed annually by a full-time person (working a 40-hour workweek for a full year) assigned to the particular job, and subject to agency personnel staffing limitations established by the Office of Management and Budget (OMB). In particular, the *FY 2023 Regulatory Fees Report and Order* stated that an examination of the regulatory fees and categories for non-geostationary orbit (NGSO) space stations would be useful in light of changes resulting from the creation of

the Space Bureau. The Commission anticipated that the changes in the industry that resulted in the creation of the Space Bureau would likely also result in changes in the relative FTE burdens between and among space and earth station fee payors. Accordingly, the Commission found that it would be more efficient to seek comment on proposals to examine the categories of regulatory fees for NGSO space stations at the same time as other proposals that might arise as part of a "more holistic review" of the fee burden of the Space Bureau in FY 2024.

3. The *NPRM* commences that examination and review of regulatory fees for space and earth station payors that are regulated by the new Space Bureau. Specifically, the Commission seeks comment on a range of proposed changes related to the assessment of regulatory fees for space and earth stations under its existing methodology.

4. In addition, the Commission proposes an alternative methodology for assessing space station regulatory fees. Unlike the proposals made to adjust the existing methodology, the alternative methodology is a more comprehensive departure from the way that space station regulatory fees have been assessed since 1994 in that it eliminates the separate categories of regulatory fees for Geostationary Orbit (GSO) and NGSO space stations, as well as existing subcategories for NGSO space stations. It would retain the existing separate regulatory fee category for small satellites and spacecraft licensed under 47 CFR 25.122 through 25.123. For the reasons discussed in the *NPRM*, this alternative methodology may be more fair, administrable, and sustainable than the existing methodology, and the Commission seeks comment on all aspects of this alternative approach.

II. BACKGROUND

A. Communications Act Requirements

5. Section 9 of the Communications Act of 1934, as amended, 47 U.S.C. 159, obligates the Commission to assess and collect regulatory fees each year in an amount that can reasonably be expected to equal the amount of its annual salaries and expenses (S&E) appropriation. In accordance with the statute, each year, in an annual fee proceeding, the

Commission proposes adjustments to the prior fee schedule under 47 U.S.C. 159(c) to reflect unexpected increases or decreases in the number of units subject to the payment of such fees, and result in the collection of the amount required by the Commission's annual appropriation. Pursuant to 47 U.S.C. 159A(b)(1) of the Act, the Commission must notify Congress immediately upon adoption of any adjustment. The Commission will also propose amendments to the fee schedule under 47 U.S.C. 159(d) if the Commission determines that the schedule requires amendment so that such fees reflect the full-time equivalent number of employees within the bureaus and offices of the Commission, adjusted to take into account factors that are reasonably related to the benefits provided to the payor of the fee by the Commission's activities. Pursuant to 47 U.S.C. 159A(b)(2), the Commission must notify Congress at least 90 days prior to making effective any amendments to the regulatory fee schedule.

6. The Commission initiates the proceeding to seek comment on possible changes to the existing methodology for assessing space and earth station regulatory fees, ahead of its annual Commission-wide regulatory fee proceeding for the fiscal year, to adopt amendments to the existing space and earth station regulatory fee categories or to adopt new regulatory fee categories in time for those changes to be effective for FY 2024. Because changes to the regulatory fee categories require 90-day prior notification to Congress to be effective for FY 2024, any changes to the space and earth station regulatory fee categories would have to be adopted and notification of the changes would have to be timely provided to Congress to become effective before the end of FY 2024. While the Commission initiates the examination and review of the existing methodology for assessing regulatory fees for space and earth station payors in *NPRM*, it will propose and finalize the regulatory fee rates for space and earth station payors as part of its annual Commission-wide regulatory fee proceeding for FY 2024. Commenters will have an opportunity in that proceeding to provide comments on the proposed regulatory fee rates for space and earth station payors.

B. Space and Earth Station Regulatory Fees and Methodology

7. The existing schedule of regulatory fees for space and earth station payors is contained in 47 CFR 1.1156. There are four current categories of space station payors: Space Stations (Geostationary Orbit); Space Stations (Non-Geostationary Orbit)—Less Complex; Space Stations (Non-Geostationary Orbit)—Other; and Space Station (Small Satellites). "Less Complex" NGSO systems are defined as NGSO satellite systems planning to communicate with 20 or fewer U.S. authorized earth stations that are primarily used for Earth Exploration Satellite Service (EESS) and/or Automatic Identification System (AIS). "Small Satellites" are space stations licensed pursuant to the streamlined small satellite process contained in 47 CFR 25.122. The Space Stations (Small Satellites) category also includes "small spacecraft" licensed pursuant to the analogous streamlined procedures of 47 CFR 25.123. In addition, there is a single category of earth station payors – Earth Stations: Transmit/Receive & Transmit only. Since the Commission's fiscal year 2020 proceeding, non-U.S. licensed space stations granted market access to the United States through a Petition for Declaratory Ruling or through earth station licenses are subject to regulatory fees.

8. For FY 2023, the regulatory fee amount per category of space and earth station payor were as follows:

Fee Category	**FY 2023 Fee Amount**
Space Stations (Geostationary Orbit)	$117,580
Space Stations (Non-Geostationary Orbit)—Less Complex	$130,405
Space Stations (Non-Geostationary Orbit)—Other	$347,755
Space Stations (per license/call sign in non-geostationary orbit) (Small Satellites)	$12,215
Earth Stations: Transmit/Receive & Transmit only (per authorization or registration)	$575

9. Under the existing methodology of calculating regulatory fees for space and earth station payors, the Commission multiplies the space station and earth station FTE allocation percentages by the target goal of collections (overall total amount to collect), respectively, to determine the amount to be collected from each regulatory fee category. Since 2020, the space station allocation percentages reflect an 80/20 split between the GSO and NGSO regulatory fee categories, respectively. The amount to be collected by the space station and earth station regulatory fee categories, divided by the projected number of units, determines the fee rate. There are several space station regulatory fee categories – GSO, NGSO-Other, NGSO-Less Complex, and small satellites – and each of these regulatory fee categories has its own respective FTE allocation percentage to determine the fee rate. The small satellite fee rate is calculated by taking the average of the calculated fee rate for space stations in the NGSO-Other and NGSO-Less Complex categories. The average fee rate is then multiplied by 5% (1/20) and rounded to the nearest $5 to determine the small satellite fee rate. The small satellite fee rate is then multiplied by the number of small satellite units, and the amount derived is divided by an 80/20 split and reduced from the target goals of NGSO-Other and NGSO-Less Complex, respectively. After reducing the NGSO-Other and NGSO-Less Complex target goal amounts, the fee rates for both of these NGSO regulatory fee categories are re-calculated (dividing the revised target goal by its respective unit count) to reflect a slightly lower fee rate.

10. The units of assessment for GSO and NGSO space station regulatory fee categories differ in that the fee for Space Stations (Geostationary Orbit) is assessed per satellite in geostationary orbit, whereas the fee assessed for Space Stations (Non-Geostationary Orbit), either "less complex" or "other," is per "system" of satellites, with no limit on the number of satellites per system. Fees for Space Stations (Small Satellites) are assessed per license/call sign, which can include up to 10 satellites or spacecraft. This means that the unit of regulatory fees for GSO space stations is a single satellite, whereas the unit of regulatory fees for NGSO space

stations can include tens, if not thousands, of satellites. Thus, although the single highest regulatory fee for space stations for FY 2023 is $347,755 for Space Stations (Non-Geostationary Orbit) – Other, this fee reflects the regulatory burden associated with the licensing and oversight of numerous space stations in the system, usually subject to processing rounds, complex spectrum sharing arrangements, and providing global coverage. By contrast, the per unit fee for Space Stations (Geostationary Orbit) for FY 2023 is lower at $117,580, but an operator providing global coverage may be paying regulatory fees on multiple space stations in geostationary orbit, which could result in annual regulatory fee payments by a single fee payor in aggregate far greater than the regulatory fee for Space Stations (Non-Geostationary Orbit) – Other providing similar services and coverage. Earth station regulatory fees are assessed "per license or registration," and each license or registration may include a single earth station, or multiple earth stations.

11. In addition, regulatory fees are assessed solely on "operational" space stations. A space station is considered to be operational when the operator reports under the Commission's reporting requirements for space stations that the space station or stations have been successfully placed into orbit and that operations conform to the terms and conditions of the space station authorization. Similarly, if an earth station's license limits its operational authority to a particular satellite system, a regulatory fee payment is not due until the first satellite in that system becomes operational.

12. For FY 2023, the number of units for the earth station fee category was 2900. The number of units for Space Stations (Geostationary Orbit) was 136; the number of units for Space Stations (Non-Geostationary Orbit)—Other was nine; the number of units for Space Stations (Non-Geostationary Orbit)—Less Complex was six; and the number of units for Space Stations (Small Satellites) was seven. These unit counts and fees resulted in a total expected regulatory fee revenue of $21,656,110 from space and earth station payors for FY 2023, which is the sum of $1,667,500 expected to be paid by earth station payors (7.69% of all space and earth

station regulatory fees), $15,990,880 expected to be paid by Space Stations (Geostationary Orbit) (73.84%), $3,129,795 expected to be paid by Space Stations (Non-Geostationary Orbit) – Other (14.45%), $782,430 expected to be paid by Space Stations (Non-Geostationary Orbit) – Less Complex (3.61%), and $85,505 expected to be paid by Space Stations (Small Satellites) (0.39%).

III. DISCUSSION

A. Space Bureau FTEs

13. Pursuant to 47 U.S.C. 159(d), the Commission's methodology for assessing regulatory fees must reflect the full-time equivalent number of employees within the bureaus and offices of the Commission, adjusted to take into account factors that are reasonably related to the benefits provided to the payor of the fee by the Commission's activities. The Commission first sets forth the anticipated number of full-time equivalent number of employees, or FTEs, that will be in the new Space Bureau for purposes of assessing regulatory fees for FY 2024. The Commission previously anticipated that the changes in the satellite industry, which led to the reorganization of the International Bureau into the Space Bureau and the Office of International Affairs, might result in a larger number of FTEs devoted to space and earth station licensing, regulation, industry analysis, and oversight due to increased regulatory complexity that resulted from technological changes in the industry. Accordingly, the Commission stated that it would closely review the Space Bureau and Office of International Affairs FTEs to determine the appropriate number of FTEs in each entity as a result of the reorganization and how they will be apportioned among the different services.

14. The Commission's Human Resources Management office provided initial data identifying 54 FTEs in the Space Bureau to be counted for FY 2024. The Commission anticipates that these FTEs will be categorized as direct FTEs, with the exception of a small number of FTEs that work exclusively, or nearly exclusively, on administrative activities, with the staff of the Office of International Affairs on covering International Telecommunications Union (ITU) World Radiocommunications Conference (WRC) agenda items, or with the staff of

the Commission's Office of Engineering & Technology on experimental licenses involving space or earth stations. The Commission expects such FTEs to be categorized as indirect FTEs, since such work does not focus on the oversight and regulation of a specific category of regulatory fee payors, but instead benefits the Commission, the telecommunications industry, or the public as a whole, or in the case of work done on experimental licenses, is in furtherance of licenses that are not subject to a regulatory fee. The Commission also anticipates that a small number of FTEs from the Office of Economic and Analytics and the Public Safety and Homeland Security Bureau will be attributed as direct FTEs to the Space Bureau. For the sake of efficiency, the Commission will make its final proposals regarding the Space Bureau's total share of all Commission direct FTEs, as part of a notice of proposed rulemaking to be released at a later date for the Commission-wide assessment of regulatory fees for FY 2024.

15. Nonetheless, the Commission anticipates that the number of direct FTEs in the Space Bureau for FY 2024 will be greater than the 28 direct FTEs that were allocated to the International Bureau for FY 2023. Based on initial estimates, the Space Bureau FTEs could account for 10.76% of all Commission direct FTEs for FY 2024, compared with the International Bureau accounting for 7.77% in FY 2023. The Commission also expects that space and earth station payors will pay significantly more in regulatory fees in FY 2024 than in FY 2023. This is chiefly because the Commission anticipates there will be more direct FTEs in the Space Bureau attributable to space and earth station fee payors than there were in the International Bureau, due to the increased regulatory complexity and oversight required, which will result in a larger percentage of overall regulatory fees being allocated to the Space Bureau, assuming there is no offsetting increase in the number of FTEs in other core bureaus and offices. Accordingly, there is increased importance in examining how FTEs are apportioned among the categories of Space Bureau fee payors to ensure that the fee apportionment methodology is administrable, fair, and sustainable.

B. Space Station Fee Proposals

1. Allocation between GSO and NGSO Space Stations

16. If the existing methodology for assessing regulatory fees for space stations is maintained, the Commission proposes to change the allocation of the regulatory fees between GSO and NGSO fee payors to reflect more accurately the apportionment of current FTE work between these two classes of regulatory fee payors. Under the existing allocation adopted in 2020, 80% of space station regulatory fees are allocated to GSO space station fee payors and 20% of the space station regulatory fees to NGSO space station fee payors. For the reasons stated in the *NPRM*, the Commission proposes to change this allocation to 60% of space station regulatory fees being allocated to GSO space station payors and 40% to NGSO space station payors.

17. In proposing this change in allocation, the Commission employs the same methodology that was used by the Commission in 2020 in adopting the "80/20" split between GSO and NGSO space station fee payors. Specifically, the Commission focuses on three factors that collectively reflect its oversight of GSO and NGSO operators: the number of applications processed, the number of changes made to the Commission's rules, and FTEs devoted to oversight of each category of operators.

18. First, using the advanced search function of the International Communications Filing System (ICFS), the Commission identified all applications for space stations (service type: SAT) filed during the three most recent fiscal years (that is, FY 2021-2023) for both GSO (class of service: SSG) and NGSO (class of service: SSN). A total of 526 distinct applications for space stations were filed during this time period, with 322 applications being filed for GSO space stations (61%) and 204 applications for NGSO space stations (39%). Thus, the number of applications received during this three-year period supports a larger allocation of FTE time to GSO fee payors than to NGSO fee payors, but in a narrower range than the current 80/20 split.

19. Second, using compiled data through a search of the FCC's Electronic Comment Filing System (ECFS) and a cross check of items on the webpages of the FCC and the

International Bureau/Space Bureau for the last three fiscal years, the Commission identified docketed proceedings originating from the International Bureau's Satellite Division, or from the Space Bureau, and considered to the involvement of GSO and NGSO space stations in each proceeding. The Commission analyzed the data to estimate whether a particular docketed proceeding involved GSO or NGSO space station payors, or both. It did not count docketed proceedings for transfer of control or assignment applications or other docketed proceedings that did not make changes to the Commission's rules. It included, however, a docketed proceeding to modify the conditions relating to the International Telecommunications Satellite Organization placed on the licenses of a GSO space station operator, even though it was not a rulemaking proceeding, because it involved changes to the conditions on a large number of space station licenses that required significant FTE resources to process.

20. The Commission identified 16 proceedings during FY 2021-2023, of which 8 substantively involved GSO space stations (50%) and 12 substantively involved NGSO space stations (75%). Accordingly, the data presented suggests that there were more rulemakings substantively involving NGSO space stations than GSO space stations. The Commission notes that quantifying only the most recent rulemaking activities does not take into account past rulemakings that are of continued relevance to space stations and are administered by Commission FTEs either through licensing, interpretation and application of those rules in other proceedings, or in consultation with the space station regulatees. Thus, attributing a value to rulemaking activities directly is not an exercise in scientific precision, but rather an exercise in reasonable analysis and a mechanism to verify the other data the Commission reviews. On balance, however, the Commission tentatively concludes that these rulemaking data support a greater allocation of regulatory fees to NGSO space station payors than is currently the case.

21. Third, the Commission considered whether it could examine FTE activities directly, but although there has been a change in the number of FTEs attributable to satellite regulatory activities due to the creation of the Space Bureau, it remains challenging to segregate

the time spent by FTEs on work done on GSO versus NGSO matters. As was the case in the International Bureau, staff time spent in the Space Bureau on authorizations and rulemakings may benefit both categories of satellite operations. Based on its experience and judgement, the Commission estimates as closely as possible the relative percentage of FTEs that are attributable to benefitting either GSO or NGSO systems based on the factors above.

22. While there are issues of fact, law, engineering, and the physics of electromagnetic propagation that may be unique to GSO or NGSO space stations, many issues that Space Bureau staff work on are not segregable in a manner that is beneficial to clearly apportioning FTE time between GSO and NGSO regulatory fee categories. Taking all of the foregoing factors and data into consideration, the Commission tentatively concludes, however, that the GSO/NGSO ratio should be adjusted to reflect that GSO space stations derived roughly 60% of the benefit from the Commission's regulatory efforts and NGSO space stations derived roughly 40%. Accordingly, for FY 2024, the Commission proposes that GSO and NGSO space stations will be allocated 60% and 40% of space station regulatory fees, respectively. The Commission seeks comment on this tentative conclusion and proposal.

2. Allocation between NGSO – Other and NGSO – Less Complex

23. If the existing methodology for assessing regulatory fees for space stations is maintained, the Commission proposes to maintain the existing allocation of the regulatory fee burden between "Space Stations (Non-Geostationary Orbit) – Less Complex" and "Space Stations (Non-Geostationary Orbit) – Other." Currently, 20% of NGSO space station regulatory fees are allocated to Space Stations (Non-Geostationary Orbit) – Less Complex and 80% are allocated to Space Stations (Non-Geostationary Orbit) – Other fee payors. As discussed elsewhere in the *NPRM*, the Commission has defined "less complex" NGSO systems as NGSO satellite systems planning to communicate with 20 or fewer U.S. authorized earth stations that are primarily used for EESS and/or AIS. The Commission has concluded that EESS systems are less burdensome to regulate than other types of services when the systems plan to communicate

with 20 or fewer earth stations. NGSO satellite systems outside of this definition are included in the NGSO "other" fee category, unless they qualify as "small satellites" under Commission rules and are included in the regulatory fee category for small satellites.

24. The Commission tentatively concludes that there have not been any significant changes to the amount of FTE burdens allocated between these two fee categories since the "20/80" split of regulatory fees between NGSO "less complex" and NGSO "other" subcategories was adopted in 2021. As was the case in 2021, the Commission considers its experience and analysis of the time that FTEs in the International Bureau and the Space Bureau devote to oversight and regulation of "less complex" and "other" NGSO systems. Specifically, now – as then – the Commission considers the number of applications processed, the number of changes made to the Commission's rules, and the number of FTEs working on oversight for each category of operators. This methodology is the same as used for determining the allocation of regulatory fees among GSO and NGSO space station fee payors. In evaluating the FTE time devoted to the "less complex" and "other" subcategories, the Commission considers its adjudicatory role in connection with different types of NGSO systems, which is typically more intensive for those systems authorized as part of processing rounds. The Commission also considers the number of rulemakings over the last three fiscal years, as well as current rulemakings, and which types of NGSO systems are implicated in those rulemaking activities.

25. Based on its experience and judgement, the Commission estimates as close as possible the relative percentage of FTE time attributable to oversight of each subcategory of NGSO space stations. Its examination does not reveal any rulemaking proceedings in the last three fiscal years that are specific to EESS space stations eligible for the "less complex" NGSO subcategory, but did reveal several rulemakings in that same period specific to NGSO "other" systems. Similarly, an examination of applications filed over the previous three fiscal years (FY 2021-2023) shows that 44 NGSO applications out of 204 NGSO applications were by systems categorized as NGSO "less complex" (22%). The Commission's consideration of activities

engaged in by staff and the time spent on oversight of different NGSO systems does not indicate any change from its consideration in 2021, which resulted in a determination that NGSO "other" were the majority beneficiaries of FTE efforts.

26. The Commission recognizes the considerable challenge of segregating the time spent by Space Bureau staff among the subcategories of NGSO space stations, nonetheless the considerations above support the tentative conclusion that more FTE time is spent on the NGSO "other" subcategory than on the NGSO "less complex" subcategory. The number of applications in the NGSO "less complex" subcategory received over the last three fiscal years supports a tentative conclusion that the relative regulatory burden of such "less complex" space stations remains consistent with the current 20% allocation. The Commission seeks comment on this tentative conclusion.

27. The Commission does not propose at this time to revisit the definition of "less complex" NGSO space stations, which has been adopted and affirmed over the course of several regulatory fee rulemaking proceedings. As expressly recognized, however, the Commission does not foreclose the possibility of designating other categories of NGSO systems as "less complex" systems in the future if the Commission's experience supports a finding that its regulatory work for such systems is significantly less than those for other NGSO systems. The Commission's experience to date has not supported such a designation for other types of NGSO systems, and the Commission does not have a sufficient record to make proposals for such designations at this time.

3. Creation of Tiers of NGSO – Other

28. If the existing methodology for assessing regulatory fees for space stations is maintained, the Commission proposes to divide the existing regulatory fee subcategory of "Space Stations (Non-Geostationary Orbit) – Other" into two tiers: "Large Constellations" of more than 1,000 authorized space stations; and "Small Constellations" of 1,000 or fewer authorized space stations. Currently, there is a single subcategory for NGSO "other" space

station systems, which assesses the same annual regulatory fee – $347,755 for FY 2023 – for all NGSO space station systems that are not categorized as "less complex" or "small satellites." NGSO space station payors have argued that this "one fee fits all" assessment is unfair, as it assesses the same regulatory fee on an NGSO system consisting of 100 space stations as the fee assessed for an NGSO system consisting of potentially 10,000 or more space stations. The current single regulatory fee for all NGSO "other" space station payors resulted in requests by fee payors of smaller NGSO systems seeking to be assessed regulatory fees as NGSO "less complex" systems, even though the record at the time did not support a finding that the regulatory work for such systems was significantly less than other types of NGSO systems. The Commission uses this proceeding to explore whether its existing regulatory fee structure can be better tailored to the varying nature of NGSO systems and differing levels of licensing and regulatory oversight burdens required for these various systems, while maintaining a system that is fair, administrable, and sustainable.

29. The unit of assessment for Space Stations (Non-Geostationary Orbit), either "less complex" or "other," is "per system" of satellites. This unit of assessment reflects the ability of applicants to apply for, and be authorized to operate, a "system" of NGSO space stations, with no limit on the number of space stations per system. Each initial application for authority is granted under a single "call sign" as a regulatory identifier. In many cases the Commission has assessed a single regulatory fee for an NGSO system consisting of space stations requested and authorized under different call signs. The assessment of regulatory fees for NGSO space stations on a "per system" basis extends back to the first time that the Commission assessed regulatory fees for "Low Earth Orbit (LEO) Satellite Systems" in 1996. The choice of a "system" as the unit of assessment for LEO satellites was based in the original text of 47 U.S.C. 159, which included a "Schedule of Regulatory Fees" that the FCC was required to assess and collect, until amended by the Commission. The Schedule of Regulatory Fees included fee categories for "Space Station (per operational station in geosynchronous orbit)" and "Space Station (per system

in low-earth orbit)." The Schedule of Regulatory Fees, however, was deleted from 47 U.S.C. 159 by the RAY BAUM's Act of 2018.

30. The sole exception made to assessment of NGSO space station regulatory fees on a "per system" basis is for small satellites, for which the Commission adopted a separate regulatory fee category in which small satellites are assessed on a "per license/call sign" basis. The Commission found that adopting the regulatory fee on a per-license basis would not only accurately reflect the increased oversight and regulation for these small satellite systems when an operator has multiple small satellite licenses, but also it would be more efficient and administrable because it avoids potential complications and additional FTE time spent in determining whether various sets of small satellites are part of the same system.

31. In creating the separate fee categories of "less complex" NGSO space stations and small satellites operating in non-geostationary orbit, the Commission has previously recognized that not all NGSO space stations are the same, and that different NGSO space stations can be assessed different regulatory fees based on the differing amount of FTE regulatory work is devoted to them, consistent with the statutory obligations of 47 U.S.C. 159. Accordingly, the default unit of fee assessment for NGSO space stations – the "system" – by itself does not indicate the amount of regulatory fees to be recovered from a particular NGSO space station payor. Instead, the Commission has used other factors as proxies for the amount of regulatory work required for a category of fee payors. For "less complex" space stations, the Commission relied on the primary service to be provided (EESS or AIS) and the number if U.S.-licensed earth station planned for communications (20 or fewer) as proxies for other factors for determining whether a category of NGSO space station system involved less staff resources to license and regulate than NGSO space station "other" systems: whether processing rounds are required, whether the system will have a global presence, the range and intensity of spectrum needs, and the variety of frequency bands, technical issues, and services presented.

32. The Commission in the *NPRM* seeks to explore whether the number of space

stations requested for an NGSO system could serve as a proxy for the Commission's regulatory burden, when combined with other factors that went into determining whether an NGSO system is, or is not, "less complex" for regulatory fee assessment purposes. Does a greater number of space stations authorized per system equate to greater staff burdens to license and regulate, if the greater number of space stations per system also correlates to the other factors relevant to NGSO systems that do not qualify for inclusion in the NGSO space stations "less complex" subcategory (that is, they fall within the "other" NGSO fee category because they are subject to processing rounds, have a global presence, have significant spectrum needs, and present a variety of frequency bands, technical issues, and services)? If so, is it reasonable to assume that a greater number of space stations authorized per system would equate to greater amount of FTE time to license and regulate? Although the Commission has previously stated that number of space stations in an NGSO system does not always correspond to increased regulatory complexity, those statements were based on consideration of the regulatory impact of the number of space stations in isolation, not when considered in connection with the other factors relevant to non-"less complex" NGSO space station systems. Is it a reasonable expectation that, if an NGSO space station system is not found to be "less complex" for regulatory fee assessment purposes, the amount of FTE resources needed to license and regulate that system increases as the number of space stations increases because, on average, the greater the number of space station considered, the greater the amount of spectrum resources required for the system, the greater complexity of spectrum sharing with other systems, the more complicated the orbital debris mitigation plan will be, and the greater number of earth stations required to support the space station system? The Commission seeks comment on this expectation.

33. Accordingly, if the Commission maintains the existing space station regulator fee methodology, it proposes to transform the existing "Space Stations (Non-Geostationary Orbit) – Other" category into a two-tiered category, with one tier for "Large Constellations" and one tier for "Small Constellations." The proposal to create tiers of NGSO space station regulatory fees is

not new, being first made in 1999. As recently as 2021 and 2020, the Commission was presented with proposals to assess NGSO space station regulatory fees based on the total number of satellites deployed, but it declined to do so because the evidence in the record at the time was insufficient to establish different fees for different sized NGSO space station systems. The Commission proposes to use the *NPRM* to establish such a record to evaluate the appropriateness of adopting regulatory fees for large and small NGSO systems. Although the Commission acknowledges that it is inherently challenging to establish the dividing line between such tiers, it proposes 1,000 space stations as the dividing number for large and small systems. The Commission seeks comment on this proposal. Is 1,000 the right number, or is there a different number, greater or less than 1,000, that better reflects the delineation in the amount of FTE burdens to license and regulate NGSO systems of variable sizes (for example, 500 space stations)?

34. If the Commission adopts the tiered approach for the NGSO space station "other" category under its existing methodology, it proposes to create two tiers, rather than three or more tiers, in order to facilitate administrability, because there are relatively few units within the existing NGSO space station "other" category, and dividing that category into many tiers with a narrow range of space stations per tier may result in only one payor being responsible for the entire cost of the tier, or there being no payor for a particular tier in a fiscal year, shifting the costs of that tier to payors in other tiers. Importantly, it may be harder to justify the difference in FTE burdens when tiers are more narrowly defined. The Commission tentatively concludes that a two-tiered approach will not only appropriately account for differences in regulatory burdens between NGSO space station systems of different sizes, but also provide a measure of consistency from one year to the next in the number of payors and the per unit fee. The Commission seeks comment on the proposal to use two tiers in its approach and its tentative conclusion that a two-tiered approach will result in greater administrability than a multi-tiered approach. The Commission also proposes that its tiered approach be based on the number of

authorized space stations in a system, rather than the number of space stations that are operational in a system at the moment that regulatory fees for a particular fiscal year are assessed. This proposal is consistent with its proposal elsewhere in the *NPRM* that all regulatory fees be assessed on authorized, rather than operational, space and earth stations. The Commission seeks comment on this proposal.

35. The Commission proposes to divide the total NGSO – "other" fees between the two subcategories on a 50/50 basis (that is, half of the NGSO "other" fees paid by "large constellations" and half paid by "small constellations"). It acknowledges the difficulty in allocating regulatory fee burdens between "large constellations" and "small constellations," because staff in the Space Bureau may work on both types of constellations and rulemaking proceedings often do not differentiate between large and small constellations. The Commission accordingly seeks comment on its proposal to divide the total NGSO – "other" fees between small and large constellations on a 50/50 basis. If the fees are not divided on a 50/50 basis, what would be a more appropriate division and why? The Commission notes that although the total costs would be allocated evenly between "large" and "small" constellations, it expects that there will be a greater number of units in the "small constellations" tier than the "large constellations" tier, and that that number of units in the "small constellations" tier will increase in the future, thereby resulting in a smaller per payor fee for the "small constellations" tier for future years. By contrast, the Commission expects that there will be only two to three payors in the large constellation tier for FY 2024, and that it is unlikely that that number will increase substantially in the foreseeable future. The Commission seeks comment on this proposed division and its expectations.

26. The Commission finds that the proposal to create fee categories for NGSO large and small constellations would be an amendment as defined in 47 U.S.C. 159. Such an amendment must be submitted to Congress at least 90 days before it becomes effective pursuant to 47 U.S.C. 159A(b)(2).

27. The Commission also seeks comment on other possible proxies that might reasonably equate with the share of FTE burdens associated with each system within the "Space Stations (Non-Geostationary Orbit) – Other" category, as alternatives to the 50/50 two-tiered approach proposed elsewhere in the *NPRM*. Other possible proxies include assessing regulatory fees for NGSO space station "other" using any of the following individual metrics: (1) per space station; (2) per subscriber; (3) per unit of spectrum authorized; (4) per class of service provided; and (5) per unit of on-orbit mass. The *NPRM* describes each possible proxy.

38. *Per Space Station*. Under this metric, the overall FTE burden of a NGSO "other" system would be proxied on the basis of the number of authorized space stations in the system, without utilizing a tiered system. The fee would be assessed on a per space station basis, with the total fee amount attributable to Space Stations (Non-Geostationary) – Other being divided by the number of space stations authorized in that category to establish a per space station fee unit. Each space station in the system would add incrementally to the amount of regulatory fees paid by the system. This alternative avoids the situation where a system may exceed the number of space stations eligible for the small constellation tier by only a few space stations, which will result in the system paying the substantially higher fee for large constellations. The alternative potentially presents the situation, however, where systems with a very large number of authorized space stations (for example, 20,000 or more) could effectively end up paying all, or nearly all, the regulatory fees for the NGSO "other" category, since the number of space stations in that system could be more than all other systems combined in that category. Such an outcome may not accurately reflect the FTE burdens imposed by the various payors of the NGSO space stations "other" category by substantially underrepresenting the amount of FTE resources spent on all other fee payors in the NGSO "other" category. Could this concern be addressed by setting a "cap" or "ceiling" on the number of authorized space stations for which regulatory fees would be assessed or having a decreasing fee for each additional space station? Although the Commission has previously disagreed with proposals to assess space station regulatory fees on a

per space station basis, it nonetheless seeks comment on the use of number of space stations as an alternative metric for assessing the regulatory fee burden for each NGSO "other" system.

39. *Per Subscriber*. Under this alternative, regulatory fees for NGSO space stations "other" would be assessed on a per subscriber basis, possibly using tiers of subscribers. The Commission observes, however, that not all NGSO systems have subscribers, and it does not currently collect information regarding subscriber numbers. Thus, to utilize subscriber information a review of an additional information collection may be required in order to assess regulatory fees on this basis. The time required to obtain the approval and collect the information would make the possibility of assessing fees on this basis for FY 2024 unlikely. The Commission also expects that it would require substantial FTE resources to calculate and assign fees for individual systems based on yearly subscriber numbers, which could in turn result in more FTEs being attributed to space station systems for regulatory fee recovery purposes. Furthermore, the Commission seeks comment on whether subscriber numbers are considered confidential by regulatees and, if so, how would that impact this approach?

40. *Per Unit of Spectrum Authorized*. An alternative proxy for the amount of FTE burden associated with a system in the NGSO space station "other" category could be the amount of spectrum resources authorized for the system. Systems that involve the use of a large amount of spectrum can require more FTE resources to license and regulate due to the likelihood of the increased need to coordinate with, and to address the interference concerns of, other spectrum users, compared to systems with smaller spectrum requirements. Thus, regulatory fees for NGSO space stations "other" could be assessed per unit of authorized spectrum, for example, per megahertz of spectrum authorized for the system. The Commission observes that the distinction between NGSO "other" and NGSO "less complex" already takes into account spectrum usage and ease of coordination in delineating between these two fee categories, so it is unclear what further delineation could be made within the NGSO space station "other" category based on authorized spectrum. In addition, not all spectrum is uniform in its complexity to

license and regulate. For example, it may be easier to license and regulate an NGSO system operating in 500 megahertz of spectrum allocated to NGSO space station use on a primary basis than licensing and regulating an NGSO system operating in 20 megahertz of spectrum operating on a secondary or non-interference basis. The Commission has previously found that total bandwidth is not consistently indicative of the complexity of NGSO regulation. The *NPRM* seeks comment, however, on this alternative proxy and whether there any basis to question the Commission's previous conclusion that total bandwidth does not consistently reflect the complexity of NGSO regulation.

41. *Per Class of Service Provided*. Commenters in previous regulatory fee assessment proceedings have suggested that the type of services provided by NGSO space station systems could be used as a proxy for the amount of FTE resources dedicated to licensing and regulating such systems. In addition to the orbit used (GSO or NGSO), space stations are regulated by the type of service that they provide, for example mobile-satellite service (MSS), fixed-satellite service (FSS), direct broadcast satellite service (DBS), and satellite digital audio radio service (SDARS). The Commission has previously found that the type of service primarily being provided (EESS and/or AIS) was a relevant factor in determining whether an NGSO system was "less complex" for purposes of regulatory fee assessments, when combined with another factor (the number of earth stations authorized by the United States with which the system plans to communicate). The Commission has not found, however, that other types of satellite services warrant a determination that a NGSO system is "less complex" for regulatory fee purposes, although it did not rule out the possibility of doing so if the record supported such a finding. Although the Commission does not propose that any particular additional service be considered as a factor that an NGSO system is "less complex" for regulatory fee purposes, it may be possible to use the type of service provided as a proxy for FTE resources to delineate additional fee subcategories within the "Space Stations (Non-Geostationary Orbit) – Other" category. The *NPRM* seeks comment on this possibility. Comments should focus on the specific

licensing and regulatory factors that differentiate the services and explain how the Commission would be able to allocate FTE time among these services. Comments should also address the administrability and sustainability of subcategories of regulatory fees in the NGSO space station "other" category based on the services provided by the space stations. For example, if a space station is authorized to provide multiple types of services, such as both FSS and MSS, how would it be determined which regulatory fee subcategory it belongs to? If it is determined based on the primary service that is authorized for a system, how should the Commission determine which service is primary? Would fee categories based on the service provided be relatively stable from year to year, or is it possible that there could be substantial changes in the number of fee payors in a service category year to year? Would every single service provided by a system need to be taking into account, or just the primary service? Would substantial FTE resources be needed to calculate and assign fees for individual systems based on primary services provided, which could in turn result in more FTEs being attributed to space station systems for regulatory fee recovery purposes?

42. *Per Unit of On-Orbit Mass*. Comments in previous years' regulatory fee assessment proceedings have suggested to use the mass of space stations as one proxy for an NGSO system's complexity. This suggestion is similar to the proposal in the *NPRM* to use of number of authorized space stations in an NGSO system as a proxy for regulatory burdens of systems in the NGSO space station "other" category, but considers the mass of the space stations in an NGSO system rather than the number of space stations. Thus, an NGSO system with 10 space stations with a mass of 1,000 kilograms each would pay more in regulatory fees than a system of 100 space stations with a mass of 10 kilograms each. Under this proposal, it is assumed that space station mass is a proxy for other factors relevant to the amount of FTE work required for the licensing and regulation of the system, such as how much spectrum the system will use, the number of earth stations that the space stations will communicate with, and the complexity of a system's orbital debris mitigation plan. Although the Commission has

previously found that space station mass is not a key driver of NGSO system complexity, the *NPRM* seeks comment on using space station mass as a proxy for the regulatory burden involved with an NGSO system. Is it correct that regulatory complexity increases in proportion to the mass of the space stations in an NGSO system? If so, should mass be assessed on a per space station or on an aggregate basis for all space stations in the system? Would mass be addressed on a "wet" basis (that is, including the mass of fuel and other consumables) or "dry" basis (that is, the mass of the space station without fuel and consumables)? Which basis – wet or dry – would more accurately reflect regulatory burdens for that system? Furthermore, the Space Bureau no longer collects information regarding the mass of a space station as part of the technical information required as part of an application for a space station authorization or a petition for U.S. market access. Thus, to utilize this information in assessing regulatory fees may require a review of an additional information collection under the Paperwork Reduction Act. The Commission also observes that the time required for such review, together with the time needed to collect the information, would rule out the possibility of assessing fees on this basis for FY 2024. The *NPRM* seeks comment on the consequences of this observation. Although the mass of a space station may be a factor disclosed in the orbital debris mitigation plan provided as a part of a space station application, the spacecraft mass is disclosed for the specific purpose of that analysis, and it is not clear whether it should be relied on for the purpose of assessing regulatory fees. Even if it may be possible to obtain information about the mass of space stations from third party sources, the Commission questions whether it is reasonable to rely on information obtained from such sources rather than from the fee payors themselves. The *NPRM* seeks comments on these issues. In addition, would substantial FTE resources be needed to calculate and assign fees for individual systems based on on-orbit mass, which could in turn result in more FTEs being attributed to space station systems for regulatory fee recovery purposes?

43. The Commission finds that the creation of fee categories for "other" NGSO space

stations based on any of these other possible proxies would be an amendment as defined in 47 U.S.C. 159(d). Such an amendment must be submitted to Congress at least 90 days before it becomes effective pursuant to 47 U.S.C. 159A(b)(2).

4. Small Satellites

44. The Commission seeks comment on a proposal to set the regulatory fee for "Space Stations (per license/call sign in non-geostationary orbit) (47 CFR part 25) (Small Satellite)" for FY 2024 and future fiscal years at the level set for FY 2023 ($12,215), with only an annual adjustments to reflect the percentage change in the FCC appropriation, unit count, and FTE allocation percentage from the previous fiscal year. As explained elsewhere in the *NPRM*, the small satellite fee rate is calculated by taking the average of the calculated fee rate for space stations in the NGSO other and NGSO "less complex" categories, multiplying this average by 5% (1/20) and rounding it to the nearest $5. The small satellite fee rate is then multiplied by the number of small satellite units and deducted from the NGSO share of space station regulatory fees. This remaining amount is then divided between NGSO "other" and NGSO "less complex" based on an 80/20 split and reduced from the target goals of NGSO" "other" and NGSO "less complex" respectively. Because the small satellite fee is based on the fees assessed for NGSO other and NGSO "less complex" categories, the increased fees expected for these two categories would lead to greatly increased fees for the small satellite regulatory fee category beginning in FY 2024.

45. The Commission's examination reveals that the number of applications, rulemaking procedures, and FTE staff working on small satellite matters has not increased greatly since the original methodology of assessing regulatory fees for small satellites was adopted. To the contrary, the Commission expects that the additional FTE resources allocated to the Space Bureau as a result of the reorganization of the International Bureau are not intensively involved in the licensing and regulatory oversight of small satellites, so that the overall percentage of FTE burden for small satellites may be less than the 1/20th burden of NGSO space

stations. The *NPRM* seeks comment on this expectation and whether it supports the reduction of fees paid by small satellites. In addition, the proposals made in the *NPRM* to create subcategories within the NGSO "other" category for "small" and "large" constellations will add to the complexity of determining the appropriate marker for determining the appropriate share of FTE resources allocated to small satellites. The Commission proposes the administrability and sustainability of its regulatory fees for small satellites would be better served by treating them as it has historically treated the regulatory fees for earth stations – that is, a fixed regulatory fee that is adjusted from year-to-year on, rather than as a percentage of the Space Bureau's overall share of regulatory fee allocation, or as a percentage of other categories of space station fee payors. The *NPRM* seeks comment on all these proposals, examinations, and expectations.

5. Treatment of RPO, OOS, and OTV

46. The Commission proposes, on an interim basis, to assess regulatory fees on spacecraft primarily performing Rendezvous and Proximity Operations (RPO) and On-Orbit Servicing (OOS) by including them in the existing regulatory fee category "Space Stations (per license/call sign in non-geostationary orbit) (Small Satellites)" regardless of the orbit in which they are designed to operate in. OOS and RPO missions can include satellite refueling, inspecting and repairing in-orbit spacecraft, capturing and removing debris, and transforming materials through manufacturing while in space. Due to the nascent nature of OOS and RPO industry, or more generally "in-space servicing" industries, there is not a distinct regulatory fee category for such operations, despite that fact that spacecraft have begun to operate under 47 CFR part 25 for radiocommunications while conducting these types of operations. Although the Commission has previously determined that the record is not sufficiently complete to adopt a separate regulatory fee category for spacecraft performing OOS and RPO, it tentatively concludes in the *NPRM* that it is appropriate to assess regulatory fees on RPO and OOS space stations as the Commission does for small satellites, rather than as Space Stations (Geostationary orbit) or Space Stations (Non-Geostationary Orbit) – Other. The Commission also tentatively

concludes that it is appropriate to assess regulatory fees on Orbital Transfer Vehicles (OTV) in the same manner.

47. The Commission first considered adopting additional fee categories for RPO and OOS in the notice initiating the FY 2022 regulatory fee assessment proceeding. At that time, commenters proposing such additional fee categories cited the similarities between the characteristics of small satellites and RPO and OOS. The commenters distinguished between OOS spacecraft and traditional NGSO satellites in that OOS spacecraft have limited duration and scope of use, as well as a limited number of earth stations; require a smaller investment in OOS technology; require less ongoing regulation owing to the shorter duration of OOS spacecraft; will likely be licensed on a shared use of spectrum basis, and without the need for processing round procedures or post-processing round disputes over matters such as interference protection and spectrum priority. Commenters also submitted that a fee category for RPO services would provide much need permanency and clarity to support this nascent infrastructure.

48. The Commission found, however, that it was premature at that time to adopt new fee categories for OOS and RPO operations. It observed that there have been a limited number of such operations and these were treated on a case-by-case basis, without a specific license processing regime. It also expressed the expectation that most OOS and RPO operations would involve NGSO space stations, but tentatively concluded that it was too early to identify exactly where operations such as those in low-Earth orbit might fit into the regulatory fee structure in the future. Accordingly, it found that the record was insufficient to propose to establish fee categories or a methodology for assessing fees to such categories. The Commission sought comment on those tentative conclusions, as well as whether and how to assess fees for RPO and OOS spacecraft that operate near the GSO arc.

49. Since that time, the Commission has continued to find that the record was insufficient to adopt a new regulatory fee category for in-space servicing operations, such as OOS and RPO. In the order adopting regulatory fees for FY 2022, the Commission determined

that the record was insufficient to support adopting new regulatory fee categories for OOS and RPO due to the nascent nature of these systems and the need for more experience with the operations of such systems and the FTE time required to support them. For the same reasons, the Commission declined to adopt separate fee categories for OOS and RPO in the FY 2023 regulatory fee proceeding, again finding that the record remained too incomplete and concluding that there was insufficient understanding of the nature and regulation of such spacecraft to consider concrete proposals for assessing regulatory fee categories for OOS and RPO space stations at that time. The Commission noted that it was still in the early stages of considering the regulatory environment for such services as a whole, and the definitions of which services would fit into OOS and RPO were yet to be adopted. Instead, the Commission stated it would continue to develop a record that would inform possible establishment of a fee category for OOS and RPO and an appropriate methodology for assessing fees for such a category.

50. In the *NPRM*, the Commission proposes that it should no longer delay adopting a regulatory fee category for OOS and RPO space stations, even if it has not yet adopted a separate regulatory environment for such services. In 2022, the Commission initiated a Notice of Inquiry, 87 FR 56365 (Sept. 14, 2022), regarding the regulatory needs related to in-space servicing, assembly, and manufacturing – or "ISAM" – that could include such services as RPO and OOS. The Commission has since adopted a Notice of Proposed Rulemaking, 89 FR 18875 (Mar. 15, 2024), seeking comment on a framework for licensing ISAM space stations. That proceeding is still in the early stages of considering the regulatory environment for such services. Nonetheless, the Space Bureau has considered applications for space stations performing RPO and OOS and issued licenses for such space stations under the existing regulatory framework of 47 CFR part 25, and such stations are already operational and subject to payment of regulatory fees. The Space Bureau anticipates that it will receive additional applications for such services in the near future, likely before the conclusion of any proceeding that may consider a separate licensing regime for such systems. Accordingly, there is a need to propose a method for assessing

regulatory fees on spacecraft primarily performing RPO and OOS now, even while the consideration of the regulatory environment for such services is ongoing.

51. Although the record remains insufficient to propose a new category of regulatory fees for these services, the Commission proposes, on an interim basis, to include RPO and OOS within an existing category of regulatory fees. In this respect, the Commission tentatively concludes that the regulatory fee categories of Space Stations (Geostationary Orbit) and Space Stations (Non-geostationary Orbit) – Other do not reflect the amount of regulatory work required by these nascent RPO and OOS services. Those fee categories are reflective of the greater FTE burden associated with regulation of more numerous and more complex space stations that primarily provide "always on" communication services, using spectrum and orbital resources on a protected basis, subject to processing rounds or "first-come, first-served" procedures, and requiring the use of a large number of associated earth stations. The Commission also tentatively concludes that the regulatory fee category of "Space Stations (Non-geostationary Orbit) – Less complex" is not the most appropriate fit, since space stations providing primarily RPO and OOS do not fall within the existing definition of "less complex" NGSO space stations, which is limited to space stations primarily providing EESS and/or AIS and the regulatory framework for RPO and OOS space stations is not sufficiently clear at this time. The Commission does not propose to use the existing NGSO "less complex" fee category for RPO or OOS space stations, since it tentatively concludes that the regulatory burden of RPO and OOS space stations is currently far less than that of "less complex" NGSO space stations. The Space Bureau has received relatively few applications for RPO or OOS space stations, and although it anticipates receiving more in the near future, the amount of FTE resources required at the present time to regulate these services is not comparable to the resources required for regulation of NGSO "less complex" space stations. It is possible that, in the future, the regulatory burden of RPO and OOS may significantly increase and justify revisiting this tentative conclusion, but at the present moment the regulatory burden of RPO and OOS space stations is more similar to that presented

by small satellite space station licensees, which are also few in number and involve a relatively small number of space stations that have limited duration and scope of use and operate using shared spectrum resources.

52. Although the Commission previously declined to adopt an interim fee for RPO and OOS space stations, including one equivalent to the fee assessed for small satellites, it did so due, in part, to time constraints that would not allow for the adoption of a new fee and the desire for more experience before adopting a separate fee for RPO and OOS space stations. In the *NPRM*, the Commission is not proposing to adopt a new fee for RPO and OOS space stations, but rather, on an interim basis, to assess fees using the existing Space Stations (Small Satellites) fee category. Given the immediate need to assess regulatory fees on RPO and OOS space stations now and in the near future, the Commission tentatively concludes that the purposes of 47 U.S.C. 159 would be best met by erring on the side of caution and assessing regulatory fees under the category of fees associated with the least-burdensome set of space station regulatees, rather than waiting for additional experience and in the interim potentially subjecting existing RPO and OOS space stations subject to regulatory fees for Space Stations (Geostationary Orbit) or Space Stations (Non-Geostationary Orbit) – Other, that may not reflect the amount of regulatory work required by these nascent services. As the Commission gains more experience with the regulation of RPO and OOS space stations, it will be in a better position to adopt a separate fee category for RPO and OOS space stations, if appropriate. The *NPRM* seeks comment on this proposal and tentative conclusions.

53. The Commission also proposes to assess RPO and OOS space stations using the small satellite fee category on an interim basis, regardless of the orbit utilized. Small satellites are limited to NGSO operations under 47 CFR part 25, and the Commission stresses that it is not proposing or suggesting that RPO or OOS space stations would meet the definition of a "small satellite" or "small spacecraft" under 47 CFR part 25. Instead, solely for the purpose of assessing regulatory fees, the Commission proposes to include RPO or OOS space stations

within the existing Space Stations (Small Satellite) regulatory fee category, rather than creating a new regulatory fee category for RPO and OOS space stations. The Commission tentatively concludes that the rational above for using the small satellite regulatory fee category to assess fees on RPO and OOS space stations applies regardless of whether the RPO or OOS space stations operate in GSO or NGSO. The Commission also proposes to assess the regulatory fee for RPO or OOS space stations on a "per license/call sign" basis as is the case for small satellites payors, rather than on the "per system" basis used for Space Stations (Non-geostationary Orbit). In addition, the Commission proposes to assess regulatory fees on OTV space stations in the same manner; that is, to assess regulatory fees for OTV space stations using the existing regulatory fee category of small satellite space stations on a per license/call sign basis. Like RPO and OOS space stations, OTVs are also few in number and involve a relatively small number of space stations that have limited duration and scope of use and operate using shared spectrum resources in a manner that reduces the amount of FTE resources needed for their licensing and regulation. The Commission has already licensed OTV space stations under its existing 47 CFR part 25 regulatory framework, and it anticipates that additional applications for OTV will be filed in the near future. Accordingly, the same rationale applies to erring on the side of caution and assessing regulatory fees under the category of fees associated with the least-burdensome set of space station regulatees, at least until the Commission gains more experience in this matter. The *NPRM* seeks comment on these proposals and tentative conclusions. It also seeks comment on whether this proposed approach for assessing regulatory fees for RPO, OOS, and OTV could also be applied to all space stations that fall within the definition of ISAM.

54. The Commission finds that the proposal to assess regulatory fees for RPO, OOS, and OTV space stations using the existing fee category for small satellites would be an amendment as defined in 47 U.S.C. 159(d). Such an amendment must be submitted to Congress at least 90 days before it becomes effective pursuant to 47 U.S.C. 159A(b)(2).

55. Finally, the Commission proposes that RPO or OOS space stations that are

attached to another space station as part of servicing or mission extension operations be assessed regulatory fees separate from, and in addition to, any regulatory fees assessed on the space station that is being serviced or that is having its mission extended. The Commission acknowledges that this tentative conclusion is the opposite of the Commission's prior tentative conclusion that RPO and OOS space stations joined to GSO space stations during servicing or mission extension operations should not be assessed separate regulatory fees, despite the RPO or OOS space stations being assigned their own call signs, which is the unit usually used to assess regulatory fees for space stations. This tentative conclusion was never adopted, and as such was only tentative in nature. Upon further consideration, the Commission tentatively concludes that the requirements and purpose of 47 U.S.C. 159 would be better met by assessing regulatory fees on such attached RPO or OOS space stations.

56. The premise underlying the prior tentative conclusion was that the RPO or OOS space station is operating as part of an existing GSO space station, rather than as a separate independent space station, and therefore there is no independent operating space station for a separate fee assessment and that the regulatory fee burden for the RPO or OOS space station would be included in the fees collected from the GSO space station fee payors. Upon further consideration, the Commission tentatively concludes that this premise is not correct. As long as a RPO or OOS space station retains a separate authorization, with its own call sign, it is a separate space station for the Commission's regulatory purposes, so that there is a space station for a separate fee assessment independent of the space station being serviced or having its mission extended. Regulatory work is associated with the licensing and regulation of the RPO or OOS space station that is separate and independent from the regulatory work associated with the space station that is being serviced or having its mission extended. FTE work expended on reviewing license applications, issuing licenses, and exercising regulatory supervision of the RPO or OOS space stations is completely separate from the FTE work associated with the licensing and regulation of the space station being serviced or having its mission extended. In

addition, the Commission observes that it would be difficult to administer regulatory fees for RPO or OOS space stations under the Commission's prior tentative conclusion, since the status of the RPO or OOS space station for regulatory fee purposes would depend on whether the RPO or OOS space station is attached to another space station on the date when regulatory fees are assessed, or whether it may be operating unattached, for example, between servicing missions, which could lead to uncertainty as to whether regulatory fees are due or not, as well as potential gaming of regulatory fees through the timing of missions. Pursuant to 47 U.S.C. 159, the Commission is required to assess regulatory fees to recover all of its FTE work based on how FTE time is used. The Commission tentatively concludes that it would not be able to meet that requirement if it was to consider the RPO or OOS to be part of the serviced space station, and not subject to separate regulatory fees. The Commission seeks comment on its proposal and the reasoning in support of it.

6. Assessment of Fees on Authorized, but not Operational, Space Stations

57. The Commission proposes to assess regulatory fees on all authorized space and earth stations, not only on stations that are "operational." Currently, regulatory fees for space stations are payable only when the space stations are certified by their operator to be operational. An earth station payor is required to pay a fee once it has certified that the earth station's construction is complete, but in the rare instances in which a license limits an earth station's operational authority to a particular satellite system, the fee is not due until the first satellite of the related system becomes "operational" within the meaning of the Commission's rules. A space station is authorized, in contrast, after an application or petition has been reviewed and granted by the Commission and the grant is effective. Because significant FTE resources are involved with the licensing of space and earth stations, the Commission tentatively concludes that the objectives of 47 U.S.C. 159 would be better met by assessing regulatory fees once a space or earth station is licensed, rather than when a space station becomes operational.

58. The origin for assessing regulatory fees on space stations when they become operational, rather than when licensed, was the statutory text of 47 U.S.C. 159 from 1993. The Omnibus Budget Reconciliation Act of 1993 that created 47 U.S.C. 159 and proposed regulatory fees in 47 U.S.C. 159(g), which identified two fee categories and amounts for space stations: (1) "Space Station (per operational station in geosynchronous orbit) (47 CFR part 25)" and (2) "Space Station (per system in low-earth orbit) (47 CFR part 25)". The Commission adopted the requirement that GSO space stations be operational before regulatory fees are assessed as part of 1994 regulatory fee proceeding, basing that decision on the statutory language. In that same proceeding, the Commission also applied to NGSO space stations the requirement that space stations be operational before regulatory fees are payable, even though the text of 47 U.S.C. 159(g) did not include the word "operational" for systems in low-earth orbit, as it did for GSO space stations. The Commission has kept the "operational" requirement for assessing regulatory fees on space stations through subsequent annual regulatory fee assessment proceedings without comment or reevaluation.

59. The Commission tentatively concludes that there is no statutory bar to assessing regulatory fees on authorized, but not yet operational, space and earth stations. Pursuant to 47 U.S.C. 159, the Commission is explicitly given authority to adjust its regulatory fees by rule if it determines that the schedule of fees requires amendment, and such adjustment by rule is what is being proposed in the *NPRM*. In addition, Congress deleted 47 U.S.C. 159(g), which was the textual basis for the operational requirement for assessing regulatory fees on space stations, in the 2018 RAY BAUM's Act. Accordingly, the original textual language of 47 U.S.C. 159(g) appears no longer relevant to the Commission's amendments of regulatory fee schedules. The *NPRM* seeks comment on this tentative conclusion and the reasons underlying it.

60. In the *NPRM*, the Commission tentatively concludes that now is an appropriate time to reevaluate the current policy that a space station must be operational before regulatory fees can be assessed. The recent creation of Space Bureau provides an opportune time to revisit

past conclusions about the regulatory burdens associated with space and earth station fee payors and how those fees should be assessed. The increased burdens of regulating space stations as a result of the changes in the satellite industry and the creation of the Space Bureau will increase the share of regulatory fees to be assessed on space and earth station regulatees, compared to the number of FTEs regulating space stations in the International Bureau, so the Commission should look to have as broad a base as possible for its regulatory fees in a manner that accounts for all regulatees that benefit from Space Bureau oversight as a matter of making its regulatory fees more fair.

61. The Commission observes that a licensee or grantee already benefits from the substantial FTE resources used to review and grant the application or petition, as well as from the FTE resources used to protect the benefits conferred by the grant of a license or of U.S. market access, such as use of spectrum and orbital resources and protection from interference, which convey upon issuance of the license or grant. Moreover, given the bespoke nature of many satellite systems, Space Bureau staff expertise is utilized by the industry before, during and after an application (including modifications thereof) or petitions for rulemaking are filed. In addition, as observed elsewhere in the *NPRM*, NGSO space stations are taking an increased share of FTE burdens relative to GSO space stations and are being assessed higher regulatory fees, so there is also increased importance to make sure that all NGSO beneficiaries of those FTE burdens are assessed fees. For example, if five NGSO FSS systems are licensed through a single processing round, FTE licensing work is necessitated by all five systems, but under the current policy only the operational systems would be required to pay regulatory fees, and the entire regulatory burden for that category of space stations would be paid only by operational systems. Systems that become operational later, or not at all, would not be assessed regulatory fees associated with that FTE work for potentially many years, or perhaps never. As a result, systems that become operational earlier than other licensed systems would bear the entire fee burden of regulatory work done on behalf of all regulated systems. The NPRM seeks comment on these

observations.

62. The Commission proposes that the intent of Congress in 47 U.S.C. 159 would be better fulfilled by recovering the costs of licensing and regulatory oversight based on authorized space stations, rather than operational space stations. Congress has directed the FCC to recover its annual S&E appropriation through regulatory fees, and the S&E appropriation includes funding for FTE time spent reviewing and granting applications, which is accrued regardless of when a space station becomes operational. In most cases, the amount of FTE spent on reviewing applications corresponds to the number of space stations requested to be authorized, rather than the number that become operational, since Commission staff must spend resources assessing the space station system as proposed in the application, regardless of whether all the space stations actually become operational. In addition, once a space station is authorized, it is subject to regulatory oversight by the Space Bureau and is entitled to all the benefits and privileges that come with an FCC license or market access grant. The *NPRM* seeks comment on this proposal.

63. The Commission also proposes that assessing regulatory fees based on authorized space stations, rather than operational space stations, should not present challenges to administer. No additional information collection would be needed to determine whether a space station is authorized (as opposed to operational), since the FCC's license or grant of market access displays the authorization particulars, including the date of grant and the number of space stations authorized, and the grants and the information contained within the grants are readily available to the Commission and the public. The Commission proposes to continue its practice of publishing a list of the space stations and systems that would be subject to regulatory fees as U.S. licensed space stations or non-U.S. licensed space station that have been granted U.S. market access. As is the case now, the Commission proposes that any party identifying errors will be able to advise Commission staff of the error and seek correction. The Commission also proposes that NGSO licensees may seek to modify their licenses under existing 47 CFR part 25 requirements to have the number of authorized space stations modified to reflect the number of

actual operational space stations if not as many space stations become operational as were applied for, or the number of authorized space stations diminishes due to the retirement of space stations at the end of their missions. The Commission acknowledges that permitting payors to reduce the number of authorized space stations after an application is granted could be inconsistent with the proposal that regulatory fees should be based on the number of space station licensed, rather than the number of operational space stations, but the Commission tentatively concludes that it is easier to administer its fees if they are based on the number of space stations authorized in the current license, rather than having to look back at previous iterations of license grants in order to fix the fee at the highest number of space stations licensed. Furthermore, the Commission does not anticipate that licensees or grantees will seek to reduce the number of authorized satellites significantly after authorization to avoid regulatory fees; rather, it anticipates that such reductions will be marginal and be due to business or operational considerations, rather than due to regulatory fee considerations. The Commission seeks comment on these proposals. It also seeks comment on whether, if the proposal to assess regulatory fees based on authorized, rather than operational, space stations is adopted, the Commission should assess fees on this basis in the current fiscal year, or whether it would be more appropriate to assess fees on this basis beginning in FY 2025.

64. The Commission recognizes that assessing regulatory fees before a GSO space station, or a system of NGSO space stations, is operational could lead to collateral effects that are outside the FTE-focused methodology required under 47 U.S.C. 159. For example, assessing regulatory fees on authorized, but non-operational, space stations could provide an incentive for applicants to request the Space Bureau to defer action on applications until after the period has passed for assessing which payors owe regulatory fees for the fiscal year, so as to defer the assessment of regulatory fees until the subsequent fiscal year. Alternatively, it could provide an incentive for space station operators to seek licensing outside the United States, and to apply for U.S. market access only once the system has become operational, thereby deferring the

assessment of regulatory fees in a manner not available to U.S.-licensed space station operators. It could also increase the costs to the operator at the initial funding phases of a space station or system of space stations. The Commission seeks comment on these, or any other, potential collateral effects, and whether they weigh against assessing regulatory fees on authorized, but not yet operational, space stations. In addition, if the Commission does not adopt the proposal to begin to assess regulatory fees when a space station, or system of space stations, is authorized, could the benefits for the proposal still be realized in part by assessing regulatory fees on the number of authorized space stations in the system, once the system has been notified as operational, as defined under 47 CFR 25.121(d)(2)?

65. The Commission finds that the proposal to assess regulatory fees on authorized, rather than operational, space and earth stations would be an amendment as defined in 47 U.S.C. 159. Such an amendment must be submitted to Congress at least 90 days before it becomes effective pursuant to 47 U.S.C. 159A(b)(2).

66. Summarizing the proposed changes to the existing regulatory fee methodology for space stations, the Commission proposes to modify the fee categories for space stations contained in 47 CFR 1.1156 to read as follows:

Fee Category	Fee Amount
Space Stations (per authorized station in geostationary orbit) (47 CFR part 25)	[TBD]
Space Stations (per authorized system in non-geostationary orbit) (47 CFR part 25) (Other – Large Constellations)	[TBD]
Space Stations (per authorized system in non-geostationary orbit) (47 CFR part 25) (Other – Small Constellations)	[TBD]
Space Stations (per authorized system in non-geostationary orbit) (47 CFR part 25) (Less Complex)	[TBD]
Space Stations (per license/call sign) (Small Satellite)	[TBD]

C. Earth Station Fee Proposals

67. The Commission proposes to increase the amount of regulatory fees assessed on earth stations in order to reflect more accurately the amount of FTE resources dedicated to their regulatory oversight. Currently, there is a single regulatory fee category for earth stations - Transmit/Receive & Transmit only (per authorization or registration). For FY 2023, the fee amount for this category per authorization or registration was $575. For the reasons set forth in the *NPRM*, the methodology used to assess regulatory fees for earth station payors may underestimate the FTE burdens associated with regulatory oversight of this category of fee payors, and the Commission seeks comment on proposals to adjust its regulatory fees to more accurately recover the amount of FTE resources devoted to licensing and regulation of earth stations.

68. The unit for assessing regulatory fees for earth stations – per authorization or registration – is not uniform. In some cases, an authorization can be for a single earth station, such as a feeder link station in the mobile-satellite service. In other cases, a single authorization could be for several thousand earth stations under what is often called a “blanket license.” When

first established in 1994, the fee category for earth stations had four sub-categories with different fee amounts. These sub-categories were: (1) VSAT & Equivalent C-band antennas (per 100 antennas) - $6; (2) Mobile Satellite Earth Stations (per 100 antennas) - $6; (3) Less than 9 meters (per 100 antennas) - $6; and (4) 9 Meters or More – Transmit/Receive and Transmit Only (per meter) - $85; Receive Only (per meter) - $55. In 1995, the Commission deleted receive-only earth stations as a service subject to regulatory fee requirements and determined that assessing fees on a per authorization or registration basis was more equitable method than on a per meter or per 100 earth station basis. The Commission set the earth station regulatory fee per authorization or registration at $330 for all three remaining sub-categories (i.e., VSAT, Mobile-Satellite Earth Stations, Fixed Earth Stations – Transmit/Receive & Transmit Only). 47 CFR 25.1156, however, lists only a single category and fee for earth station payors: Earth Stations: Transmit/Receive & Transmit only (per authorization or registration).

69. The Commission has not assessed earth station regulatory fees as a percentage of overall bureau regulatory burdens. Rather, the assessment of regulatory fees for earth stations has been based on the initial per unit fee for earth stations – Transmit/Receive & Transmit only (per authorization or registration) that was established by the Commission in 1995. This initial fee has been adjusted on a year-to-year basis, but usually only in terms of a percentage change in the fee to reflect the changes in the amount of appropriated S&E each year and the number of anticipated units of payors. Since 1995, the Commission has periodically discussed earth station regulatory fees or considered adjusting earth station regulatory fees for factors beyond a change in the annual S&E appropriation or the number of units of earth station fee payors. In 2014, the Commission increased the earth station regulatory fee per unit by 7.5%, from $275 in FY 2013 to $295 for FY 2014, in order to reflect more appropriately the number of FTEs devoted to the regulation and oversight of the earth stations in response to concerns raised by commenters that space stations paid an unreasonably high portion of the regulatory fees for the regulation of the satellite industry. The following year, in 2015, the Commission sought comment on whether to

raise the earth station regulatory fees again but declined to do so finding that the issue required further analysis. In particular, due to comments suggesting that the Commission adopt different regulatory fees for different types of earth stations and an ongoing proceeding that held the possibility of affecting the distribution of FTE work, the Commission deferred the issue for the next year's proceeding. The Commission ceased consideration of different regulatory fees for different types of earth stations in 2016, however, when the commenter chiefly advocating for such consideration ceased to back its earlier proposal and no other entity commented on the record in favor of the proposal to assess different levels of regulatory fees on different types of earth station licensees. In 2020, commenters in the annual regulatory fee assessment proceeding proposed that the Commission review the apportionment of regulatory fees between earth and space station payors and implement different earth station subcategories for regulatory fee purposes. The Commission declined to do so, finding that there was insufficient evidence in the record at that time to increase apportionment of fees paid by earth station licensees or on which to base the creation of subcategories of earth station fees.

70. The Commission's focused examination of space and earth station fees as a result of the creation of the Space Bureau provides an opportunity to reconsider whether its regulatory fees adequately reflect the amount of FTE resources devoted to licensing and regulation of earth stations. The Commission tentatively conclude that they do not, and that a change in methodology in assessing regulatory fees for earth stations is required. Specifically, for the reason set forth in the *NPRM*, the Commission proposes to adopt an apportionment of the total regulatory fees allocated to the Space Bureau between space and earth station payors on a percentage basis, similar to the manner that space station fees are apportioned between GSO and NGSO space stations, and proposes that the apportionment be 20 percent for earth stations and 80 percent for space stations. The *NPRM* seeks comment on this proposal and apportionment.

71. For FY 2023, earth station licensees were assessed a total of $1,667,500 in regulatory fees, which amounted to 7.69% of the $21,656,110 in regulatory fees assessed for all

space and earth station payors. Several factors lead to the Commission's tentative conclusion that this percentage underestimates the amount of FTE resources dedicated to earth station licensing and regulation. First, unlike the case for apportionment of space station fees between GSO and NGSO space stations, or among various subcategories of NGSO space stations, it may be feasible to attribute Space Bureau FTE resources that are dedicated exclusively, or nearly exclusively, to earth station licensing and regulation. Within the Space Bureau is the Earth Station Licensing Division (ESLD), which lists eleven staff members that work almost exclusively on earth station licensing and regulation and that are not routinely involved in matters of space station licensing or regulation. If each staff member were to account for an FTE, these eleven staff members would account for approximately 20% of the 54 FTEs that could be categorized as direct FTEs for the Space Bureau for FY 2024, minus a small number of FTEs that may be categorized as indirect FTEs as discussed elsewhere in the *NPRM*. The Commission tentatively concludes that apportioning regulatory fee percentages between earth and space station payors based on the percentage of direct FTEs involved the licensing and regulation of each category, where feasible to do so, is a reasonable way to fulfill Congress' mandate in 47 U.S.C. 159 that the Commission's regulatory fees must reflect the full-time equivalent number of employees within the bureaus and offices of the Commission, adjusted to take into account factors that are reasonably related to the benefits provided to the payor of the fee by the Commission's activities. The Commission seeks comment on whether using FTEs in the ESLD to determine the proportion of earth station fees relative to space station fees is reasonable and reflective of Congressional intent. Are there other factors that are reasonably related to the FTE resources provided to earth station licensees that are not reflected in the Commission's proposal? Are there alternatives to using the percentage of direct FTEs involved in earth station licensing and regulation that should be considered?

72. The Commission recognizes that the proposal to apportion 20% of all Space Bureau regulatory fees to earth station licensees beginning in FY 2024 will result in a substantial

increase in the per unit regulatory fee paid by earth station licensees, both because the percentage share of Space Bureau regulatory fees is likely to increase as a whole due to the increased number of direct FTEs in the Space Bureau compared to the International Bureau, and because the percentage share of earth station fees of Space Bureau fees would increase from around from around 8% to 20% under the Commission's proposal. Nonetheless, the Commission tentatively concludes that the increase in earth station regulatory fees is consistent with the mandate given by Congress in 47 U.S.C. 159 for the Commission to recover its costs of regulation through fees that reflect the full-time equivalent number of employees within the Commission that provide the regulatory benefits to the payors. The *NPRM* seeks comment on this tentative conclusion and observation.

73. In light of the tentative conclusion that earth station licensees should be apportioned 20% of all fees allocated to Space Bureau fee payors, the Commission seeks to revisit the question of whether to create subcategories of earth station regulatory fee payors to better differentiate the amount of regulatory burdens associated with different types of earth station licenses. For example, should Very Small Aperture Terminal (VSAT), Mobile-Satellite Earth Stations, and Fixed Earth Stations – Transmit/Receive & Transmit Only be reinstated as distinct fee categories, each with a separate fee assessment? The Commission also seeks to develop a record as to whether there are types of earth station licenses that require more FTE resources to license and regulate, and that account for a higher share of FTE burdens than other categories of earth station licensees, for which a higher regulatory fee should be assessed. Likewise, are there categories of earth station licensees that require less FTE resources to license and regulate and therefore should be assessed a lower regulatory fee? For example, in the past commenters have suggested that blanket-licensed earth station licensees involving multiple antennas under a single authorization should pay higher fees than other earth station licensees because blanket-licensed earth stations require more regulatory oversight. The *NPRM* asks commenters to provide evidentiary support for their propositions and to provide specific

proposals for what these categories should be and how to allocate fees among any categories. Furthermore, comments should address the administrability of any proposed categories and whether the Space Bureau would be able to assign costs of specific regulatory activities to any proposed categories of earth station regulatory fees.

74. The Commission finds that the creation of any new fee categories for earth stations would be an amendment as defined in 47 U.S.C. 159. Such an amendment must be submitted to Congress at least 90 days before it becomes effective pursuant to 47 U.S.C. 159A(b)(2).

75. If the proposals made in the *NPRM* are not adopted, the Commission seeks comment on whether it should, at a minimum, increase the amount of the per unit fee for the existing fee category of "Earth Station - Transmit/Receive & Transmit only (per authorization or registration)" in order to reflect the increase of the Space Bureau's share of overall Commission regulatory fees as compared to the International Bureau's share in FY 2023. If so, how should this increase be calculated and what should be the percentage increase over the FY 2023 fee?

D. Alternative Methodology for Assessing Space Station Regulatory Fees

76. The proposals made elsewhere in the *NPRM* are amendments or adjustments to the existing methodology of assessing regulatory fees for space stations. This existing methodology was founded on the original regulatory fees proposed by Congress in 1994, which provided for earth station regulatory fees and separate categories of space station fees depending on the orbit used by the space station(s): geostationary or non-geostationary. Since then, the Commission has created subcategories for NGSO space stations and has continuously tried to adjust the allocation of FTE burdens among GSO space stations and the various subcategories of NGSO space stations. The Commission now seeks comment on an alternative methodology for assessing space station regulatory fees that eliminates the distinction between GSO, NGSO, and all the subcategories of NGSO, while preserving a separate fee category for small satellites. For the reasons discussed in the *NPRM*, the Commission seeks comment on whether this alternative

methodology would be more administrable, fair, and sustainable than the existing methodology, even if all the proposals made elsewhere in the *NPRM* are adopted.

77. The initial stages of the alternative methodology are the same as under the existing methodology. The Commission would first determine the Space Bureau's share of the total FCC annual S&E appropriation for the given fiscal year using the existing methodology used by the Commission. After the Space Bureau's share is determined, the Commission proposes that the share be allocated between earth station and space station fee payors proportional to the Space Bureau FTE resources that are involved in the licensing and regulation of each segment. As stated elsewhere in the *NPRM*, the Commission tentatively concludes that it is feasible to attribute Space Bureau FTE resources that are dedicated exclusively, or nearly exclusively, to earth station licensing and regulation. The Commission anticipates that the FTE resources attributed to earth stations will be 20 percent of the total Space Bureau share, resulting in 80 percent of regulatory fees to be attributed to space station regulatory fees. Earth station fees would be determined by dividing the total share attributable to earth station licensing and regulation by the number of units for the fiscal year, which were 2900 in FY 2023.

78. The Commission's alternative methodology also would preserve a separate fee category for Space Stations (per license/call sign) (Small Satellite), with the inclusion of RPO, OOS, OTV, and potentially other ISAM space stations in this category on an interim basis, as was proposed elsewhere in the *NPRM*. It would also retain the proposal to set this regulatory fee at the level set for FY 2023, with only an adjustment each year to reflect the percentage change in the FCC appropriation from the previous fiscal year. This fixed regulatory fee for Space Stations (Small Satellite) would be multiplied by the number of small satellite licenses/call signs required to pay regulatory fees for the fiscal year, and this total amount would be subtracted from the amount of space station regulatory fees to be assessed on all remaining space station payors. Fees would be assessed on authorized space stations, not just operational space stations, as proposed in the *NPRM*. This treatment of small satellite regulatory fees would be consistent with

the Commission's existing methodology for assessing space station regulatory fees, taking into account the proposals made in the *NPRM*.

79. The main change from the existing methodology is a proposal to establish a common initial unit of regulatory fee payment for all space stations, regardless of which orbit they are designed to operate in, and to eliminate separate fee categories for Space Stations (Geostationary Orbit), Space Stations (Non-Geostationary Orbit) – Less complex, and Space Stations (Non-Geostationary Orbit) – Other. The alternative methodology would have a single space station fee category for "Space Stations (Per Call Sign in Geostationary Orbit or Per System in Non-Geostationary Orbit)." The category would be tiered, with a single GSO space station or a NGSO system with up to 100 authorized space stations constituting this initial tier and being counted as one unit for assessment of space station regulatory fees. Additional tiers would be created to account for NGSO systems with more than 100 authorized space stations, for example 500 or 1,000 space stations per NGSO system per additional tier. Each tier would be counted as an additional unit for assessment of space station regulatory fees. The total number of units (initial and additional units) would be added together and the total space station allocation of the Space Bureau share would be evenly divided among the total number of units, resulting in a per unit regulatory fee for the fiscal year.

80. If the unit tiers are defined per 500 additional authorized space stations, the initial unit range will be 1-100 authorized space stations, the first additional unit will be assessed to systems with 101-500 authorized space stations, and an additional unit will then be assessed for each additional block of 500 authorized space stations. Similarly, if the additional unit tiers are defined per 1,000 additional authorized space stations, the initial unit range will be 1-100 authorized space stations, the first additional unit will be assessed to systems with 101-1000 authorized space stations, and an additional unit will then be assessed for additional block of 1,000 authorized space stations. For example, a single GSO space station or a NGSO system of 100 authorized space stations or fewer would be assessed one unit's share of space station

regulatory fees. If that NGSO system were to have 500 authorized space stations, it would be assessed an additional unit's share of regulatory fees, regardless of whether the additional tiers are based on 500 or 1,000 additional space stations per NGSO system. If that NGSO system were to have 1,000 authorized space stations, it would either be assessed one additional unit's share (if the additional tiers are based per 1,000 authorized space stations) or two additional units' share (if the additional tiers are based per 500 authorized space stations). Accordingly, GSO payors and NGSO systems of 100 authorized space stations or fewer would be assessed the lowest regulatory fees, while payors with multiple authorized GSO space stations or with NGSO systems with more than 100 authorized space stations would be assessed higher regulatory fees, with the highest regulatory fees assessed to payors with a large number of GSO space stations and to payors with NGSO systems consisting of thousands of authorized space stations.

81. The Commission seeks comment on whether this alternative methodology would be more administrable, fair, and sustainable than the existing methodology. First, it could be more administrable because it does not require the Space Bureau to make the challenging determination of how FTE resources are allocated among space station payors. The Commission has previously recognized the considerable challenge of apportioning regulatory fees among space stations fee categories. Under the alternative methodology, tiered units are used as a proxy for the amount of FTE resources that are attributable to the system without having to repeatedly make challenging determinations of the amount of FTE resources attributable to particular categories or subcategories of space station regulatory fee payors. Furthermore, unless the number of authorized space stations substantially decreases over a year, the amount of regulatory fee assessed to a system on a per unit basis is unlikely to increase and is likely to remain stable (or possibly decrease) year to year. The alternative methodology does not utilize any characteristics of a space station system other than the number of authorized space stations in the system and is not dependent on potentially difficult evaluations of the complexity of a system under the Commission's licensing and regulatory framework. It would not require the

Commission to collect more information from operators. Thus, the Commission anticipates that the alternative methodology can remain stable longer than the existing methodology for assessing space station regulatory fees. The *NPRM* seeks comment on these issues.

82. The Commission seeks comment on whether the alternative methodology is more fair than the existing methodology, because it better corresponds FTE resources spent on licensing and regulating space stations with the types of space station systems that benefit from the FTE resources, thereby decreasing the per unit regulatory fees for space station payors that benefit less from FTE resources. Under the alternative methodology, higher aggregate fees will be assessed to systems with large numbers of authorized space stations, GSO or NGSO, but the Commission expects those higher fees will be borne by payors that benefit from more FTE resources in support of licensing and regulating their systems. The alternative methodology also increases the number of units over which space station regulatory fees are spread, thereby decreasing the per unit regulatory fees for all space station payors as additional units are added, regardless of their orbital configuration. The tiered system also avoids the situation where systems with a very large number of authorized space stations could effectively end up paying all, or nearly all, space station regulatory fees, and where the fee per unit for a single GSO space station or a NGSO system of up to 100 authorized space stations would be diluted to an amount that may not adequately reflect the amount of FTE resources allocated to such fee payors.

83. In addition, under the existing methodology, regulatory fees for a particular category of fee payors go down per payor as more space stations or systems become operational in that category. Although such a decrease is beneficial for payors in that category, it may not reflect the increased amount of FTE resources required for that category of fee payors because of the additional resources needed for authorizing and regulating an increasing number of space stations or systems. This can lead to a discrepancy in that a category with rapidly increasing number of space stations or systems becoming operational is assessed lower regulatory fees than a category where the number of payors remains steady or even declines. This discrepancy

continues until the Commission makes the challenging determination to alter the allocation of regulatory fees among the fee categories, which could take years to implement. For example, if additional NGSO systems become operational under the existing methodology, the regulatory fee per system for that particular subcategory of NGSO system would decrease because of the broader base over which the fees for that category would be spread, but it would not decrease the fees assessed on GSO space station payors or on NGSO space station payors in other NGSO subcategories – unless the Commission reallocates the percentage of space station regulatory fees among the GSO and NGSO categories. Under the alternative methodology this discrepancy is eliminated, because the addition of units of authorized space stations will automatically decrease the per unit regulatory fee for all space station regulatory fee payors, because the denominator used to divide the overall space station regulatory fee amount becomes larger. For example, the per unit regulatory fee for GSO space stations will decrease if the number of units assessed to NGSO space station systems increases, even if the number of units assessed to GSO space stations remains the same. Under this example, the per unit regulatory fee for all NGSO space stations would decrease as well. Furthermore, the alternative system avoids assessing the same regulatory fee on systems with a small number of authorized space stations as the fee assessed on systems with a large number of authorized space stations, as is the case under the existing NGSO space stations "other" subcategory. The *NPRM* seeks comment on these issues.

84. Finally, the Commission seeks comment on whether the alternative methodology is more sustainable than the existing methodology. The Commission has reason to expect that the number of authorized space stations will increase in the future, rather than decrease, which will result in an even broader base on which to assess space station regulatory fees and which will lower per unit fees for all space station payors, regardless of the orbit in which the space station operates or the services it provides. Because fees are spread across all space station payors, it avoids the situation where the loss of a single payor in an existing fee category could result in significant increases to the regulatory fees paid by the remaining payors in that category,

absent Commission action to reexamine fee allocations. The *NPRM* seeks comment on these issues.

85. The Commission observes that this alternative methodology relies exclusively on the number of authorized space stations to assess space station regulatory fees, rather than the more nuanced approach of the existing methodology of assessing the complexity of a system (and thus the amount of FTE resources required to regulate the system) based on a number of factors. The Commission also acknowledges that it has previously found that the number of space stations in a system is not the key driver of the amount of FTE time devoted to regulatory oversight of such systems. For example, an NGSO system consisting of a single space station that is designed to operate in a novel manner, subject to a processing round, and in a way that requires extensive coordination of spectrum and orbital resources may require significantly more regulatory oversight than a NGSO system of hundreds of space stations having non-exclusive use of spectrum and operating under well-established parameters. But is it reasonable to assume that NGSO systems with hundreds or thousands of authorized space stations require more FTE resources, on average and ignoring outliers, than NGSO systems with 100 authorized space stations or fewer, since as the number of space stations in a system increases, the complexity of spectrum sharing, frequency usage, and orbital debris mitigation plans also increases, generally speaking? While the number of space stations in a system may not be the key driver of the amount of FTE devoted to regulatory oversight of such systems, the Commission expects that it may be a driver, and one that is easier to administer than the more nuanced approach of the existing methodology or the use of other possible proxies for complexity, such as spectrum usage, services provided, or on-orbit mass. In order to gain the potential advantages of the alternative methodology, the number of space stations authorized may be the more administrable metric to serve as a proxy for the amount of FTE resources devoted to a system in order to accomplish the objectives 47 U.S.C. 159, rather than to continue the challenging task of determining which categories or aspects of NGSO systems are more or less complex to regulate

on a recurring basis, particularly as new technologies, services, and orbital operations rapidly develop. The *NPRM* seeks comment on these issues.

86. Although the regulatory fees that would be assessed under the alternative methodology for most space station fee payors may be roughly the same or potentially lower than those that would be assessed using the existing methodology, even with the changes proposed in the *NPRM*, the fees assessed for some space station payors could be substantially higher under the alternative methodology. For example, NGSO systems with more than 500 authorized space stations that are categorized as "less complex" under the existing methodology could pay more under the alternative methodology. For NGSO systems that are categorized as "less complex" under the Commission's existing methodology, it may be possible to reflect that categorization by allowing a greater number of space stations to be included in the first or second tier for those systems. For example, an NGSO system used primarily for EESS and/or AIS communicating with 20 or fewer U.S.-licensed earth stations with up to 500 authorized space stations could be assessed only the initial unit of fees, even though it exceeds the proposed limit of up to 100 authorized space stations for the initial unit. The *NPRM* seeks comment on these issues.

87. Furthermore, if NGSO systems have a significantly larger number of authorized space stations than is the case today, it is possible that tiers of units based on 500 or 1,000 space stations could result in such NGSO systems being assessed a very large percentage share of all space station regulatory fees. In this case, the concern is similar to using a "per space station" basis as a proxy for the complexity of a space station system that was discussed elsewhere in the *NPRM*. As discussed, the *NPRM* seeks comment on whether a "cap" or "ceiling" on the number of authorized space stations on which regulatory fees are assessed could alleviate this concern.

88. The use of tiers also presents the situation where a system with only a handful of authorized space stations over the cut off number of space stations in a tier would be assessed fees under the next higher tier. For example, under a tiered system where an additional unit of

fees is assessed per 500 additional authorized space stations, an NGSO system with 501 authorized space stations would be assessed fees for three units (the initial tier of up to 100 authorized space stations, the second tier of up to 500 authorized space stations, and the third tier of 501-1,000 authorized space stations), even though it crossed the second tier threshold by a single authorized space station. While the payor in such a case could seek authorization for one less space station, or modify an existing space station license to remove an authorized space station from its license, this may not make sense from a systems engineering perspective, particularly if the "spill over" is 50 or 100 additional authorized space stations. A potential remedy for this situation is to allow partial units for assessing regulatory fees. For example, if the additional authorized space stations per unit is set at 500, and an NGSO system has 508 authorized space stations, it could be assessed 1.016 additional units (508/500) instead of rounding up and being assessed two additional units. If the same NGSO system had 580 authorized space stations, it could be assessed 1.16 additional units (580/500) instead of two additional units. This fractional approach could result in more granular assessments of regulatory fees than a tiered system using cut offs. The *NPRM* seeks comment on these issues, particularly on the feasibility of implementing such an approach and whether it requires too much precision in assessing the number of authorized space stations in a system.

89. The Commission seeks comment on all aspects of this alternative methodology for assessing space station regulatory fees. Would it be more administrable, fair, and sustainable than the existing methodology? Is it reasonable to use the number of authorized space stations in a system to reflect the amount of FTE resources devoted to a system, as proposed in the alternative methodology? Is the regulatory burden of one GSO space station approximate to the regulatory burden of an NGSO system of up to 100 authorized space stations? If tiers of units are utilized, what should the number of additional authorized space stations per tier be set at? Would 500 or 1,000 additional authorized space stations be a reasonable number? Should there be a cap on the number of space stations on which tiers of units are assessed, in order to prevent

NGSO systems with tens of thousands of authorized space stations from potentially being assessed a fee that is disproportionate to the amount of FTE resources devoted to licensing and regulating such systems? Should partial units be utilized instead of cut offs for tiers, as discussed in the previous paragraph? Under the alternative methodology, should small satellite fees be fixed, as proposed for changes to the existing methodology elsewhere in the *NPRM*?

90. Summarizing the proposed changes under the proposed alternative regulatory fee methodology for space stations above, 47 CFR 1.1156 would be proposed to read as follows:

Fee Category	Fee Amount
Space Stations (Per Call Sign of Authorized Space Station in Geostationary Orbit or Per System of 100 or Fewer Authorized Space Stations in Non-Geostationary Orbit)	[TBD]
Space Stations (Per Tier of Up to 500 [or 1000] Additionally Authorized Space Stations in Non-Geostationary Orbit)	[TBD]
Space Station (per license/call sign) (Small Satellites)	[TBD]

91. The Commission finds that the proposal to use the alternative methodology to assess regulatory fees for space and earth stations would be an amendment as defined in 47 U.S.C. 159(d). Such an amendment must be submitted to Congress at least 90 days before it becomes effective pursuant to 47 U.S.C. 159A(b)(2).

E. Other Matters

92. *Changing the Title of 47 CFR 1.1156*. The Commission proposes to change the title of 47 CFR 1.1156 to make it clear that it contains space and earth station regulatory fees. Currently, satellite regulatory fees are contained in 47 CFR 1.1156, which is titled, "Schedule of regulatory fees for international services." The Commission proposes to rename this section as "Schedule of regulatory fees for space and international services" to reflect more accurately that the section contains the regulatory fees for space and earth stations, as well as the fees for

international bearer circuits and submarine cables regulated by the Office of International Affairs. The current title of 47 CFR 1.1156 was accurate when all categories of fees within it were regulated by the International Bureau. After the reorganization of the International Bureau into the Space Bureau and the Office of International Affairs, the current title can cause confusion by suggesting that only the fees for regulatees of the Office of International Affairs are contained within 47 CFR 1.1156. The Commission tentatively concludes that it would be easier to change the title of 47 CFR 1.1156 than to create a new section in 47 CFR part 1, subpart G, containing space and earth station regulatory fees. The Commission seeks comment on this tentative conclusion and proposal.

93. *Digital Equity and Inclusion*. The Commission, as part of its continuing effort to advance digital equity for all, including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations and benefits (if any) that may be associated with the proposals and issues discussed in the *NPRM*. Specifically, the Commission seeks comment on how its proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission's relevant legal authority. The *NPRM* notes that diversity and equity considerations, however, do not allow the Commission to shift fees from one party of fee payors to another, nor to use fees under 47 U.S.C. 159 for any purpose other than as an offsetting collection in the amount of the Commission's annual S&E appropriation.

94. *Space Innovation Agenda*. The Commission has an open proceeding on advancing opportunities for innovation in the new space age by taking measures to expedite the application processes for space stations and earth stations, consistent with the Commission's objective to promote a competitive and innovative global telecommunications marketplace via space services" In September 2023, the Commission adopted a Report and Order (Dec. 6, 2023, 88 FR 84737) that further streamlined its application review process, including establishing clear

timeframes for placing space and earth station applications on public notice. The Commission also sought comment on several proposed changes to further streamline the licensing process and reduce applicant and staff burdens in a Further Notice of Proposed Rulemaking (Dec. 8, 2023, 88 FR 85553). Finally, the Commission announced a Transparency Initiative with the goal of providing information and guidance, in a variety of forms, to interested parties so they can understand the Commission's procedures and what is needed to obtain authorization for their proposed space station and earth station operations. The Commission seeks comment, generally, how that proceeding and initiative might inform its consideration of the issues raised in the *NPRM*.

IV. INITIAL REGULATORY FLEXIBILITY ANALYSIS

95. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in the *NPRM*. Written comments are requested on the IRFA. Comments must be filed by the deadlines for comments on the *NPRM* indicated on the DATES section of this document and must have a separate and distinct heading designating them as responses to the IRFA. The Commission will send a copy of the *NPRM*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).

A. Need for, and Objective of, the Proposed Rules

96. The Commission is required by Congress pursuant to 47 U.S.C. 159 to assess and collect regulatory fees each year to recover the regulatory costs associated with the Commission's oversight and regulatory activities in an amount that can reasonably be expected to equal the amount of its annual appropriation. As part of last year's adoption of regulatory fees, the Commission noted that FY 2023 would be the last year where the Commission will do so for the International Bureau, given the creation of the Space Bureau, and Office of International Affairs. The Commission also noted that an examination of the regulatory fees, and

categories for NGSO space stations would be useful in light of changes resulting from the creation of the Space Bureau, and as part of a more holistic review of the FTE burden of the Space Bureau in FY 2024.

97. The *NPRM* commences the examination and review of regulatory fees for space and earth station payors regulated by the new Space Bureau, specifically seeking comment on a range of proposed changes to the assessment of regulatory fees for space and earth stations under the existing methodology. It proposes to: (1) change the allocation of fee burdens between GSO and NGSO space stations and maintain the existing allocation of fee burdens between the categories of "less complex" and "other" NGSO space stations; (2) create new fee categories within the existing fee category of "Space Station (Non-Geostationary Orbit) – Other" to make assessment of the Commission's regulatory fees fairer, more administrable, and more sustainable; (3) set the regulatory fee for "Space Stations (per license/call sign in non-geostationary orbit) (47 CFR part 25) (Small Satellite)" for FY 2024 and future fiscal years at the level set for FY 2023, annually adjusted to reflect the percentage change in the appropriation from the previous fiscal year; (4) include, on an interim basis, space stations that are principally used for RPO or OOS, including OTV, in the existing fee category for "small satellites" until the Commission can develop more experience in how these space stations will be regulated; (5) assess regulatory fees on all authorized space stations, not just on operational space stations, in order to adhere more closely to the framework of 47 U.S.C. 159, and to make the Commission's fees fairer, more administrable, and more sustainable; and (6) increase the allocation of fees payable by earth station licensees in order to reflect more accurately the fee burden attributable to their licensing and regulation and seek comment on whether additional earth station fee categories should be created.

98. Additionally, the *NPRM* proposes to amend the title of 47 CFR 1.1156, currently titled "Schedule of regulatory fees for international services," to clarify that the rule includes space and earth station regulatory fees, following the reorganization of the Commission's

International Bureau. The *NPRM* also proposes an alternative methodology for assessing space station regulatory fees by eliminating the separate categories of regulatory fees for GSO and NGSO space stations, as well as existing subcategories for NGSO space stations, while retaining the existing separate regulatory fee category for small satellites and spacecraft licensed under 47 CFR 25.122 through 25.123. The goal of these proposals is to update the regulatory fees and categories for earth and space stations in light of changes resulting from the creation of the Space Bureau and as part of a more holistic review of the regulatory fees for earth and space stations in FY 2024.

B. Legal Basis

99. The proposed action is authorized pursuant to 47 U.S.C. 154(i) and (j), 159, 159A, and 303(r).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

100. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

101. *Small Businesses, Small Organizations, Small Governmental Jurisdictions*. The Commission's actions, over time, may affect small entities that are not easily categorized at present. The Commission therefore describes, at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the

Small Business Administration's (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.

102. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." The Internal Revenue Service (IRS) uses a revenue benchmark of $50,000 or less to delineate its annual electronic filing requirements for small exempt organizations. Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of $50,000 or less according to the registration and tax data for exempt organizations available from the IRS.

103. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." U.S. Census Bureau data from the 2017 Census of Governments indicate that there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 36,931 general purpose governments (county, municipal and town or township) with populations of less than 50,000 and 12,040 special purpose governments - independent school districts with enrollment populations of less than 5ll governmental jurisdictions."

104. *Direct Broadcast Satellite (DBS) Service*. DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic "dish" antenna at the subscriber's location. DBS is included in the Wired Telecommunications Carriers industry which comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks.

Transmission facilities may be based on a single technology or combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution; and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.

105. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that 3,054 firms operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Based on this data, the majority of firms in this industry can be considered small under the SBA small business size standard. According to Commission data however, only two entities provide DBS service – DIRECTV (owned by AT&T) and DISH Network – which require a great deal of capital for operation. DIRECTV and DISH Network both exceed the SBA size standard for classification as a small business. Therefore, the Commission must conclude, based on internally developed Commission data, in general DBS service is provided only by large firms.

106. *Fixed Satellite Small Transmit/Receive Earth Stations*. Neither the SBA nor the Commission have developed a small business size standard specifically applicable to Fixed Satellite Small Transmit/Receive Earth Stations. Satellite Telecommunications is the closest industry with an SBA small business size standard. The SBA size standard for this industry classifies a business as small if it has $38.5 million or less in annual receipts. For this industry, U.S. Census Bureau data for 2017 show that there was a total of 275 firms that operated for the entire year. Of this total, 242 firms had revenue of less than $25 million. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 65 providers that reported they were engaged in the provision of satellite telecommunications services. Of these providers, the Commission estimates that approximately

42 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, a little more than half of these providers can be considered small entities.

107. *Fixed Satellite Very Small Aperture Terminal (VSAT) Systems*. Neither the SBA nor the Commission have developed a small business size standard specifically applicable to Fixed Satellite VSAT Systems. A VSAT is a relatively small satellite antenna used for satellite-based point-to-multipoint data communications applications. VSAT networks provide support for credit verification, transaction authorization, and billing and inventory management. Satellite Telecommunications is the closest industry with an SBA small business size standard. The SBA size standard for this industry classifies a business as small if it has $38.5 million or less in annual receipts. For this industry, U.S. Census Bureau data for 2017 show that there were a total of 275 firms that operated for the entire year. Of this total, 242 firms had revenue of less than $25 million. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 65 providers that reported they were engaged in the provision of satellite telecommunications services. Of these providers, the Commission estimates that approximately 42 providers have 1,500 or fewer employees. Consequently using the SBA's small business size standard, a little more than half of these providers can be considered small entities.

108. *Home Satellite Dish (HSD) Service*. Home Satellite Dish (HSD) or the large dish segment of the satellite industry is the original satellite-to-home service offered to consumers and involves the home reception of signals transmitted by satellites operating generally in the C-band frequency. Unlike DBS, which uses small dishes, HSD antennas are between four and eight feet in diameter and can receive a wide range of unscrambled (free) programming and scrambled programming purchased from program packagers that are licensed to facilitate subscribers' receipt of video programming. Because HSD provides subscription services, HSD falls within the industry category of Wired Telecommunications Carriers. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or

fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated for the entire year. Of this total, 2,964 firms operated with fewer than 250 employees. Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

109. *Mobile Satellite Earth Stations*. Neither the SBA nor the Commission have developed a small business size standard specifically applicable to Mobile Satellite Earth Stations. Satellite Telecommunications is the closest industry with a SBA small business size standard. The SBA small business size standard classifies a business with $38.5 million or less in annual receipts as small. For this industry, U.S. Census Bureau data for 2017 show that there were 275 firms that operated for the entire year. Of this number, 242 firms had revenue of less than $25 million. Thus, for this industry under the SBA size standard, the Commission estimates that the majority of Mobile Satellite Earth Station licensees are small entities. Additionally, based on Commission data as of February 1, 2024, there were 16 Mobile Satellite Earth Stations licensees. The Commission does not request nor collect annual revenue information and is therefore unable to estimate the number of mobile satellite earth stations that would be classified as a small business under the SBA size standard.

110. *Satellite Master Antenna Television (SMATV) Systems, also known as Private Cable Operators (PCOs)*. SMATV systems or PCOs are video distribution facilities that use closed transmission paths without using any public right-of-way. They acquire video programming and distribute it via terrestrial wiring in urban and suburban multiple dwelling units such as apartments and condominiums, and commercial multiple tenant units such as hotels and office buildings. SMATV systems or PCOs are included in the Wired Telecommunications Carriers' industry which includes wireline telecommunications businesses. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this total, 2,964 firms operated with fewer

than 250 employees. Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

111. *Satellite Telecommunications*. This industry comprises firms "primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." Satellite telecommunications service providers include satellite and earth station operators. The SBA small business size standard for this industry classifies a business with $38.5 million or less in annual receipts as small. U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year. Of this number, 242 firms had revenue of less than $25 million. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 65 providers that reported they were engaged in the provision of satellite telecommunications services. Of these providers, the Commission estimates that approximately 42 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, a little more than half of these providers can be considered small entities.

112. *All Other Telecommunications*. This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Providers of Internet services (e.g. dial-up ISPs) or Voice over Internet Protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry. The SBA small business size standard for this industry classifies firms with annual receipts of $35 million or less as small. U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year. Of those firms, 1,039 had revenue of less than $25 million. Based on this

data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements for Small Entities

113. The *NPRM* does not propose any changes to the Commission's current information collection, reporting, recordkeeping, or compliance requirements for small entities. Small and other regulated entities are required to pay regulatory fees on an annual basis. The cost of compliance with the annual regulatory assessment for small entities is the amount assessed for their regulatory fee category and should not require small entities to hire professionals to comply.

114. Small entities that qualify can take advantage of the exemption from payment of regulatory fees allowed under the de minimis threshold. In addition, small entities may request a waiver, reduction, deferral, and/or installment payment of their regulatory fees. The waiver process is an easier filing process for smaller entities that may not be familiar with the Commission's procedural filing rules.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

115. The RFA requires an agency to describe any significant, specifically business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives, among others: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.

116. The *NPRM* seeks comment on a number of amendments to the existing

methodology of assessing regulatory fees paid by space and earth station payors. While the *NPRM* initiates the examination and review of regulatory fees for space and earth station payors under the existing regulatory fee methodology, the Commission will propose and finalize the regulatory fee rates for space and earth station payors as part of its annual Commission-wide regulatory fee proceeding for FY 2024. Commenters will have an opportunity in that proceeding to provide comments on the proposed regulatory fee rates for space and earth station payors. The *NPRM* gives parties an opportunity to file comments on possible changes to the existing methodology for assessing space and earth station regulatory fees. If any of these proposals are adopted, it may reduce the regulatory fee burden on some satellite entities.

117. Specifically, the *NPRM* seeks comment on a proposal to divide the existing regulatory fee subcategory of "Space Stations (Non-Geostationary Orbit) – Other" into two tiers: "Large Constellations" of more than 1,000 authorized space stations; and "Small Constellations" of 1,000 or fewer authorized space stations. The current single regulatory fee for all NGSO "other" space station payors has resulted in requests by fee payors of smaller NGSO systems seeking to be assessed regulatory fees as NGSO "less complex" systems. If adopted, the proposal for the tiered approach for the NGSO space station "other" category would likely reduce the regulatory fee burden on smaller satellite constellations, and likely on smaller entities.

118. As another example, the *NPRM* notes that, based on preliminary calculations, the fee amount for the small satellite category for FY 2024 could be substantially greater than the fee assessed for FY 2023. The *NPRM* proposes that the administrability and sustainability of regulatory fees for small satellites would be better served by treating them as the Commission has historically treated the regulatory fees for earth stations – that is, a fixed regulatory fee that is adjusted from year-to-year on, rather than as a percentage of the Space Bureau's overall share of regulatory fee allocation, or as a percentage of other categories of space station fee payors. This proposal if adopted would significantly minimize the economic impact of regulatory fees potentially faced by small satellites.

119. The *NPRM* also proposes, on an interim basis, to assess regulatory fees on spacecraft primarily performing RPO and OOS by including them in the existing regulatory fee category "Space Stations (per license/call sign in non-geostationary orbit) (Small Satellites)" regardless of the orbit in which they are designed to operate in. The Space Bureau has received relatively few applications for RPO or OOS space stations, and although it anticipates receiving more in the near future, the amount of FTE resources required at the present time to regulate these services is more similar to that presented by small satellite space station licensees, which are also few in number, and involve a relatively small number of space stations that have limited duration and scope of use and operate using shared spectrum resources. Therefore, the *NPRM* tentatively concludes that the purposes of 47 U.S.C. 159 would be best met by erring on the side of caution and assessing regulatory fees under the category of fees associated with the least-burdensome set of space station regulates which would result in lower regulatory fees, and have less economic impact.

120. The *NPRM* also seeks comment on possibly creating subcategories of earth station regulatory fee payors to better differentiate the amount of regulatory burdens associated with different types of earth station licenses. This may reduce the regulatory fee burden on some smaller earth station payees who could face a substantial increase in the per unit regulatory fee if the Commission adopts the proposal in the *NPRM* to apportion 20% of all Space Bureau regulatory fees to earth station licensees beginning in FY 2024.

121. Finally, the *NPRM* seeks comment on an alternative methodology for assessing space station regulatory fees that eliminates the distinction between GSO, NGSO, and all the subcategories of NGSO, while preserving a separate fee category for small satellites. The alternative methodology would have a single category for "Space Stations (Per Call Sign in Geostationary Orbit or Per System in Non-Geostationary Orbit)," which would be tiered, with a single GSO space station or a NGSO system with up to 100 authorized space stations constituting the first tier and being counted as one unit for assessment of space station regulatory

fees, and additional tiers added to account for NGSO systems with more than 100 authorized space stations, with the possibility of 500 or 1,000 additional space stations per NGSO system per tier. Each tier would be counted as an additional unit for assessment of space station regulatory fees. Accordingly, GSO payors and NGSO systems of 100 authorized space stations or fewer would be assessed the lowest regulatory fees, while payors with multiple authorized GSO space stations, or with NGSO systems with more than 100 authorized space stations would be assessed higher regulatory fees, with the highest regulatory fees assessed to payors with a large number of GSO space stations, and to payors with NGSO systems consisting of thousands of authorized space stations. The Commission believes this alternative methodology could be more administrable, fair, and sustainable than the existing methodology, and the *NPRM* seeks comment on all aspects of this alternative methodology for assessing space station regulatory fees.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

122. None.

Federal Communications Commission.

Marlene Dortch,
Secretary.

[FR Doc. 2024-05996 Filed: 3/22/2024 8:45 am; Publication Date: 3/25/2024]