



## FEDERAL COMMUNICATIONS COMMISSION

### 47 CFR Part 1

[SB: MD Docket No. 24-85; FCC 25-11; FR ID 283344]

Assessment and Collection of Space and Earth Station 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 Further Notice of Proposed Rulemaking (*FNPRM*) that seeks additional comments on revising the regulatory fees for space and earth station payors.

**DATES:** Submit comments on or before March 27, 2025; and reply comments on or before April 11, 2025.

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

- Federal Communications Commission's Web Site: <https://www.fcc.gov/ecfs>. Follow the instructions for submitting comments.
- People with Disabilities: Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: [FCC504@fcc.gov](mailto:FCC504@fcc.gov) or phone: 202-418-0530.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:** Stephen Duall, Space Bureau, at (202) 418-1103, or [Stephen.Duall@fcc.gov](mailto:Stephen.Duall@fcc.gov).

**SUPPLEMENTARY INFORMATION:** Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be

filed using the Commission's Electronic Comment Filing System (ECFS).

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.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 hand or messenger delivery, by commercial courier, or by the U.S. Postal Service. **All filings must be addressed to the Secretary, Federal Communications Commission.**
- Hand-delivered or messenger-delivered paper filings for the Commission's Secretary are accepted between 8:00 a.m. and 4:00 p.m. by the FCC's mailing contractor at 9050 Junction Drive, Annapolis Junction, MD 20701. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial courier deliveries (any deliveries not by the U.S. Postal Service) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- Filings sent by U.S. Postal Service First-Class Mail, Priority Mail, and Priority Mail Express must be sent to 45 L Street NE, Washington, DC 20554.

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

*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 *FNPRM* is available at <https://www.fcc.gov/proposed-rulemakings>.

## **Synopsis**

### **I. INTRODUCTION**

1. This *FNPRM* continues an examination of how the Federal Communications Commission (Commission) assesses regulatory fees for space and earth station fee payors consistent with section 9 of Communications Act of 1934, as amended (Act or Communications Act), 47 U.S.C 159. This examination seeks to develop further the record on proposals that were initially made earlier in the *Space and Earth Station Regulatory Fees NPRM*, 89 FR 20582 (Mar. 25, 2024), but which were not adopted in fiscal year (FY) 2024.

## **II. BACKGROUND**

2. Pursuant to 47 U.S.C. 159, the Commission must assess and collect regulatory fees each fiscal 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 “(A) reflect unexpected increases or decreases in the number of units subject to the payment of such fees; and (B) result in the collection of the amount required” by the Commission’s annual appropriation. Pursuant to 47 U.S.C. 159A(b)(1), 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.

3. 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: (1) Space Stations (Geostationary Orbit); (2) Space Stations (Non-Geostationary Orbit)—Less Complex; (3) Space Stations (Non-Geostationary Orbit)—Other; and (4) Space Station (Small Satellites). For the

purposes of inclusion in the “Space Stations (Non-Geostationary Orbit)—Less Complex” category, “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). Similarly, “Small Satellites” are defined as space stations licensed pursuant to the streamlined small satellite process contained in 47 CFR 25.103 and 25.122. The Space Stations (Small Satellites) category also includes “small spacecraft” licensed pursuant to the analogous streamlined procedures of 47 CFR 25.103 and 25.123. In addition, there is a single category of earth station payors – Earth Stations: Transmit/Receive & Transmit only.

4. Two categories of regulatory fees were initially established by Congress for space stations fee payors in the initial statutory schedule of regulatory fees adopted in 1993: (1) Space Station (per operational station in geosynchronous orbit); and (2) Space Station (per system in low-earth orbit). Although the latter category was subsequently renamed in our rules to include all space stations in non-geostationary orbit, these two categories remained the sole space station regulatory fee categories for more than 25 years. Over the last five fiscal years, however, the Commission has found it necessary to amend repeatedly its categories of space station regulatory fees for space stations, as well as the methodologies for assessing those regulatory fees, in order to reflect more closely the requirements of section 9 of the Act.

5. In 2019, the Commission created a new space station regulatory fee category for small satellites and spacecraft that operate in non-geostationary orbits, separate from the fee assessed for NGSO space stations. The following year, in 2020, the Commission included non-U.S. licensed space stations with U.S. market access within the fee categories for GSO and NGSO space stations, finding that doing so was necessary to level the playing field since non-US licensed space stations benefit from the Commission’s regulatory activities in much the same manner as U.S. licensees. At the same time, the Commission reapportioned regulatory fees between GSO and NGSO space stations, allocating 80% of space station regulatory fees to GSO

space stations and 20% to NGSO space stations.

6. In 2021, the Commission again revisited its space station fees categories, this time to separate the NGSO space stations fee category into two separate categories – “less complex” NGSO space stations and “other” NGSO space stations. The Commission adopted a 20/80 allocation between the “less complex” and “other” NGSO space station fee categories within the NGSO fee category.

7. In 2022, the Commission adopted the methodology for calculating the regulatory fee for the small satellite category. The Commission adopted a methodology whereby small satellite regulatory fees were set at 1/20<sup>th</sup> of the average of the NGSO “less complex” and “other” space station regulatory fees. In addition, the Commission determined that it was appropriate to assess regulatory fees on small satellites on a per license basis, rather than on the per system basis used for “less complex” and “other” NGSO space station categories.

8. In June 2024, the Commission amended the methodology used to calculate regulatory fees for small satellites by no longer calculating it as a percentage of the NGSO “less complex” and “other” space station fee categories, and instead set the regulatory fee for “Space Stations (per license/call sign in non-geostationary orbit) (47 CFR part 25) (Small Satellite)” for FY 2024 at the level set for FY 2023 (\$12,215), with annual adjustments thereafter to reflect the percentage change in the FCC appropriation, unit count, and FTE allocation percentage from the previous fiscal year. It also determined to assess regulatory fees for space stations that are principally used for Rendezvous & Proximity Operations (RPO) or On-Orbit Servicing (OOS), including Orbit Transfer Vehicles (OTV), using the existing fee category for “small satellites” on an interim basis until the Commission can develop more experience in how these space stations will be regulated.

9. Most recently, in September 2024, the Commission revised the allocation of space station regulatory fees using the existing methodology for calculating their proportional share of regulatory fees from 80% of space station regulatory fees being allocated to GSO space station

fee payors and 20% of the space station regulatory fees being allocated to NGSO space station fee payors to 60% of space station regulatory fees being allocated to GSO space station payors and 40% to NGSO space station payors (that is, changing from an “80/20 GSO/NGSO split” to a “60/40 GSO/NGSO split”). It also adopted a re-apportionment of regulatory fees between earth and space station payors based on the percentage of direct FTEs involved in the licensing and regulation of each category.

10. In the June and September 2024 orders, the Commission did not act on the remaining proposals that were made in the *Space and Earth Station Regulatory Fees NPRM*. Those proposals include assessing regulatory fees on authorized, but not operational, space and earth stations; using an alternative methodology for assessing space station regulatory fees; establishing tiers within existing NGSO space station fee categories based on the number of space stations in the system; and creating new categories of earth station regulatory fees. The Commission instead concluded that action on these issues may benefit from further consideration, and stated that further comment on these remaining proposals would be sought in a further notice of proposed rulemaking.

### **III. DISCUSSION**

#### **A. Assessment of Fees on Authorized, but not Operational, Space and Earth Stations**

11. The Commission seeks comment on a proposal to assess regulatory fees on all authorized space and earth stations beginning in FY 2025, not only on stations that are operational, as is currently the case. The Commission tentatively concluded in the *Space and Earth Station Regulatory Fees NPRM* that the objectives of section 9 of the Act would be better met by assessing regulatory fees once a space or earth station is licensed or authorized, rather than, as now, waiting until a space or earth station becomes operational. The Commission seeks additional comment on whether to assess regulatory fees on authorized, not just operational, stations in time to make it effective for the assessment and collection of FY 2025 regulatory fees.

12. 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 regulatory fees 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 our rules. The *Space and Earth Station Regulatory Fees NPRM* sought comment on whether the objectives of section 9 of the Act would be better met by assessing regulatory fees when the stations are authorized, rather than when they are operational.

13. The *Space and Earth Station Regulatory Fees NPRM* examined if there is any statutory bar to assessing regulatory fees once a station is authorized, rather than when it is operational. The origin for assessing regulatory fees on space stations when they become operational, rather than when licensed, appears to be the text of the original fee schedule contained in section 9(g) of the Act from 1993. Congress deleted section 9(g) in the 2018 RAY BAUM's Act. Both the new and old versions of section 9 explicitly provides the Commission authority to adjust its regulatory fees by rule if it determines that the schedule of fees requires amendment. No comments were received in response to the *Space and Earth Station Regulatory Fees NPRM* that identified any statutory bar to assessing regulatory fees on authorized, but not operational, stations. Nor did any commenter object to the Commission's tentative conclusion.

14. The majority of comments in response to the *Space and Earth Station Regulatory Fees NPRM* strongly supports the proposal to assess regulatory fees on authorized stations, rather than on operational stations. As observed in the *Space and Earth Station Regulatory Fees NPRM*, significant FTE resources are involved with the licensing of space and earth stations, even before a station becomes operational. The Commission also observed that a licensee or grantee already benefits from the substantial FTE resources used to review and grant the application or petition to operate a station, 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. 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 such situations, fee payors with systems that become operational earlier than other licensed systems bear the entire fee burden of regulatory work done on behalf of all regulated systems. Other comments in response to the *Space and Earth Station Regulatory Fees NPRM* do not support the proposal to assess regulatory fees on all non-operational stations.

15. The Commission tentatively concludes that the concerns raised regarding costs, financial risks, and the stifling of innovation do not outweigh the need to assess regulatory fees on regulatees of the same class who benefit from the Commission's FTE efforts. While the Commission understands the desire to delay assessing regulatory fees on a satellite operator until the system becomes operational and generates revenue, it does not believe that this best comports with the statute nor is it fair to other fee payors in the same category. Moreover, assessing fees on all authorized space stations is consistent with the requirements of the Act. In section 9 of the Communications Act, Congress prescribed a method of collecting an amount equal to the full S&E appropriation by keying the regulatory fee assessment to the Commission's FTE burden. As a result, the fee assigned to each regulatory fee category relates to the FTE burden associated with oversight and regulation of each regulatory fee category by the relevant core bureaus. The Space Bureau FTEs exercise oversight over all authorized space stations regardless of whether they are operational at the start of the fiscal year. Broadening the base of regulatory fee payors to include authorized space and earth stations, reduces the per unit measure fee for everyone in the same class. The Commission tentatively finds that this broadening of the base of payors to all authorized space stations would be an important component of the alternative methodology for assessing space and earth station regulatory fees that was proposed in the *Space and Earth Station Regulatory Fees FNPRM*. This is because including authorized space stations could be more administrable to assess the number of authorized space stations in a NGSO system than the

number of actual operational space stations at any given time. That is, the administrability of the alternative methodology could be severely reduced if the current policy of assessing regulatory fees only on operational space stations is maintained, since it would be necessary to ascertain the operational status of space stations in each NGSO system in order to calculate regulatory fees. The Commission seeks comment on these observations, tentative findings, and tentative conclusions.

16. Kepler urges that FTE resources spent on pre-operational licensing activities would be better recovered through filing/application fees than through regulatory fees. Fees collected pursuant to our section 8 authority are deposited in the general fund of the U.S. Treasury and are accordingly not available as an offsetting collection for our annual S&E appropriation. The Commission continues to tentatively conclude that the objectives of section 9 of the Act would be better served by assessing regulatory fees on authorized, not just operational, space stations, and the Commission seeks further comment on this tentative conclusion.

17. The Commission seeks comment on specific ways that the proposal to assess regulatory fees on authorized space and earth stations could be implemented. Should the Commission continue to provide a list of all space stations that are eligible to be assessed regulatory fees in an appendix to the annual notice of proposed rulemaking for the assessment and collection of regulatory fee for the fiscal year? Or is it unnecessary to continue to publish this list in the notice of proposed rulemaking since the list of authorized space stations is already publicly available via the Space Bureau's Approved Space Station List? The Commission also seeks comment on any changes that may be necessary to the format of the information maintained on the Space Bureau's Approved Space Station List if we were to rely on it as a means of assessing regulatory fees in the future. Should the Approved Space Station List include a column specifying the number of authorized space stations for each approved NGSO system? In addition, the Commission seeks comment on whether it should assess regulatory fees on authorized space and earth stations regardless of when in the fiscal year the authorizations are

granted. The Commission currently assesses regulatory fees on stations that are operational as of the start of the fiscal year (*i.e.*, October 1). The Commission also seeks comment whether other points in time or periods of time should be referenced when establishing that fees are due for a given fiscal year. Should the Commission assess regulatory fees on stations authorized at the start of the fiscal year and/or authorized for more than a certain percentage of the fiscal year – half of the fiscal year, a quarter of the fiscal year, or some other unit of the fiscal year? What procedure best comports with the statutory requirements of section 9 and the Commission’s overarching goals of a fair, administrable, and sustainable regulatory fee system?

18. If the Commission adopts the proposal to assess regulatory fees on authorized space and earth stations, would it be fair, administrable, and sustainable to adopt separate fee categories for space and earth stations that are authorized, but not fully operational? Kepler suggests that the FTE burdens associated with licensing and oversight of authorized, but non-operational, stations are less than those associated with operational stations. As observed in the *Space and Earth Station Regulatory Fees NPRM*, substantial FTE resources in the Space Bureau are dedicated to the review and action on space and earth station applications, and the FNPRM tentatively concludes that entities with authorized, but not yet operational stations, still benefit from these resources, as well as from a wide-range of regulatory benefits, utilizing both direct and indirect FTEs. The Commission seeks comment on Kepler’s suggestion, with particular focus on how a separate fee category for authorized, but not operational, space and earth stations could be calculated and administered, if adopted.

19. The Commission also seeks comment specifically on whether it is feasible to assess a separate category of annual regulatory fees for space stations that remain authorized solely to conduct telemetry, tracking, and command (TT&C) operations, for example in order to complete end-of-life disposal plans pursuant to orbital debris mitigation plans approved by the Commission as part of the authorization process. In these instances, the space stations are still authorized by the Commission because their license has not terminated, and they continue to be

subject to regulatory oversight by the Commission for compliance with their end-of-life disposal plans. Astro Digital asserts that “licensees of the deorbiting space systems are not providing any satellite service and, accordingly, not benefitting from any FCC regulatory activities.” Astro Digital states that requiring an entity to pay regulatory fees for potentially years after end of commercial service could impose significant costs on space station operators. The Commission seeks comment on whether such space stations authorized only to conduct TT&C differs, if at all, in the context of assessing regulatory fees from authorized but not yet operational space stations. If there are differences would such differences, in the context of section 9 of the Communications Act, support a separate fee category for either situation? The Commission particularly seeks comment on how such categories could be calculated and administered, as well as how they could fit into existing space station fee categories or the alternative methodology for assessing space station regulatory fees.

20. The Commission seeks further comment on the proposal to assess regulatory fees in instances where there are separately identifiable space station authorizations, but which the Commission currently does not consider the space stations to be separably operational and therefore not subject to regulatory fees. For example, space stations classified as on-orbit spares currently are not considered to be operational space stations separate from the space stations that they are spares for and are not assessed regulatory fees. Another category is space stations that are both licensed by the Commission and also granted U.S. market access for certain operations of the space stations, which currently are assessed only a single regulatory fee rather than one for each authorization, each under a different call sign. In these instances, however, the Commission has observed that separable direct FTEs are utilized to license and regulate these space stations. The Commission seeks further comment on this observation.

21. In the *Space and Earth Station Regulatory Fees NPRM*, the Commission reevaluated a prior tentative conclusion that a space station attached to a GSO space station as part of Rendezvous and Proximity Operations (RPO) or On-Orbit Servicing (OOS) operations would

not be assessed 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 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. Instead, the Commission tentatively concluded just the opposite in the *Space and Earth Station Regulatory Fees NPRM*, that 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 our 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. The Commission reaffirms this tentative conclusion that assessing a regulatory fee on authorized space stations performing RPO or OOS operations is more administrable, since otherwise the fee status of the RPO or OOS space station 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. The Commission seeks further comment on this tentative conclusion.

22. The Commission also seeks comment on whether to assess regulatory fees on authorized, but not operational, space stations in FY 2025, or whether to delay such an assessment until FY 2026, or later, in order to give the Commission and regulatees time to adjust to the change in fee methodology. For example, if alterations to the information maintained in Space Bureau's Approved Space Station List are needed to implement the proposed change, would a delay until FY 2026 better allow such alterations to be made? Additionally, would delay of assessing regulatory fees on authorized, rather than operational, space stations until FY 2026 give

regulatees the chance to amend applications or modify existing licenses or grants of U.S. market access to bring the number of authorized space stations more in line with the number of their operational space stations?

## **B. Alternative Methodology for Assessing Space Station Regulatory Fees**

23. The Commission seeks further comment on the proposal to assess regulatory fees for space stations using an alternative methodology from the one currently being used. Specifically, the Commission seeks additional comment on whether to adopt the alternative methodology that was proposed in the *Space and Earth Station Regulatory Fees NPRM*. The Commission also seeks comment on whether to adopt the alternative methodology for assessing space station fees beginning for FY 2025. The Commission also tentatively concludes that the alternative methodology better achieves the objectives of section 9 of the Act, but seeks comment on this tentative conclusion.

### **1. Challenges Leading to Alternative Fee Methodology Proposal**

24. The development of the current space station fee categories has occupied considerable time and efforts, and space station regulatory fees have featured prominently in every proceeding to assess and collect annual regulatory fees since fiscal year 2019. These efforts have required Commission staff to spend considerable FTE resources every year reviewing and evaluating space station regulatory fees.

25. Under the current methodology for assessing space station regulatory fees, the Commission first determines a percentage of the Space Bureau's FTE resources allocated to the licensing and regulation of GSO space stations compared to NGSO space stations. This requires regular reevaluation of the share of work devoted to each category, which is in turn endogenous to changes taking place in the satellite industry. Without spending considerable FTE resources on this exercise, the Commission could be faced with a GSO/NGSO allocation that does not fairly reflect the share of FTE resources attributed to each payor category.

26. In addition to reviewing the GSO/NGSO allocation, the Commission further determines

the percentage of FTE resources allocated between “less complex” NGSO systems and all other NGSO systems. As acknowledged repeatedly by the Commission, this step requires challenging determinations of the expected FTE burdens to be allocated to the various classes of space stations. The Commission must also often respond to repeated challenges about which factors determine whether an NGSO system is “less complex” or not, and if additional NGSO space stations could be included in this category. Moreover, regulatees argue that the “other” category for NGSO space stations is too broad, leading to smaller systems with fewer space stations paying the same regulatory fee as larger systems with many times the number of space stations. The Commission must also often consider new types of space stations, and whether they can be assessed regulatory fees under an existing category, or if creation of a new category of regulatory fees is needed. Accordingly, it is increasingly difficult to assess regulatory fees using orbital parameters as a primary means of allocation of FTE resources and the determination of “complexity” as a secondary means of allocation among NGSO space stations given the increasing diversity of the space stations being licensed and regulated.

27. As observed in the *Space and Earth Station Regulatory Fees NPRM*, 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 will increase the share of regulatory fees to be assessed on space station regulatees, compared to the number of FTEs regulating space stations in the International Bureau. Accordingly, there is increased importance now 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.

28. Assessing regulatory fees for space stations is particularly challenging due to the nature of the space stations that are authorized and regulated by the Commission. First, the operations of space stations are not homogenous. They differ in the orbits and spectrum used, in terms of

the quantity of spectrum used, which particular frequency bands are utilized, and whether these frequencies are utilized on a primary, secondary, or other basis. They also differ in the number of space stations that can operate under a single authorization, with one space station authorized per GSO call sign, up to ten space stations authorized per NGSO small satellite license, and anywhere from one to potentially tens of thousands under a single NGSO space station system. Thus, there are myriad factors that could distinguish one class of space stations from another, which in turn affects the factors that can be considered in the regulation of such space stations. Second, there is a relatively low number of units on which to assess and collect space station regulatory fees. Under the current methodology, for FY 2024 there were 16 units of small satellite fee payors, 140 units of GSO space stations, 6 units of “less complex” NGSO space stations, and 11 units of other NGSO space stations. Thus, any increase in the amount of regulatory fees assessed for space stations typically must be borne by a relatively small number of units, a situation that is intensified if an NGSO system is able to consolidate several individual space station authorizations into a single system, counted as a single unit for regulatory fee purposes, as is currently the case today.

29. In addition, many of the methods for assessing and collecting regulatory fees for Commission regulatees outside of the Space Bureau’s purview appear ill-suited for space station regulatory fees. The *Space and Earth Station Regulatory Fees NPRM* sought comment on a range of these alternate methods, including assessing regulatory fees per subscriber, per unit of spectrum authorized, and per class of service authorized. It identified potential difficulties with use of each of these alternate methods, and no commenter in response to the *Space and Earth Station Regulatory Fees NPRM* endorsed the use of any of them, by themselves, as methods for assessing space station regulatory fees. The combination of these alternate methods to assess regulatory fees, such as establishing a matrix of regulatory fees based on multiple factors – for example the amount of spectrum used and services provided – could be challenging to administer because space stations rarely operate in a single frequency band or provide a single type of

service. The types and purposes of space stations that seek authorization for spectrum usage by the Commission continue to expand and diversify in ways that make it increasingly unlikely to fit space stations used for novel space activities within regulatory fee categories tailored to existing narrow-defined factors such as services provided or nature of spectrum usage. The Commission tentatively concludes that using subscriber counts, units of spectrum authorized, or class of service, either individually or in combination, is not a useful unit measure for assessing regulatory fees on space and earth stations and may not reflect the FTE burdens of oversight and regulation of these stations. The Commission seeks comment on this tentative conclusion.

## **2. Implementation of Alternative Fee Categories and Methodology**

30. The Commission seeks further comment on whether to implement an alternative methodology largely as it was proposed in the *Space and Earth Station Regulatory Fees NPRM*. Under this alternative methodology, the Commission would first determine the Space Bureau's share of the total 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 FNPRM 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. The alternative methodology also would preserve a separate fee category for Space Stations (per license/call sign) (Small Satellite), with the inclusion of RPO, OOS, and OTV space stations, on an interim basis, in this existing fee category, as adopted in the *Space Station Regulatory Fee Order* in June 2024, 89 FR 60572 (Jul. 26, 2024). The amount assessed for regulatory fees for the Space Stations (Small Satellite) fee category would be subtracted from the amount of space station regulatory fees to be assessed on all remaining space station payors. Under the alternative methodology, fees would be assessed on authorized space stations, not just operational space stations.

31. The alternative methodology would establish a common initial unit of regulatory fees 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 of [to be determined] or Fewer Authorized Space Stations in Non-Geostationary Orbit).” The alternative methodology creates a single unit for assessing a share of Space Bureau FTE resources allocated to the licensing and regulation of all space stations. It recognizes, however, the difference in GSO and NGSO space stations in that a single GSO space station is not the same as a system of potentially hundreds or thousands of NGSO space stations. Accordingly, the unit provides for more than one space station to be included in the category for an NGSO system. In the *Space and Earth Station Regulatory Fees NPRM*, the number proposed for this single unit was 100 space stations. The Commission seeks further comment on this proposal.

32. The Commission also recognizes that NGSO systems can be authorized to include substantially more than 100 space stations, potentially in the thousands or tens of thousands, although such systems become less typical as the number of space stations authorized in the system increases. This is likely due to the fact that NGSO systems with a larger number of authorized space stations require the larger number of space stations to provide service in a large geographic area (usually global) and provide more transmission capacity in order to provide high-data rate, two-way connectivity. In addition, a larger number of earth stations are needed to support global, high-data rate two-way connectivity, and larger spectrum authorizations are required to provide the spectrum bandwidth needed for the desired services. More financial resources are generally required to construct, launch, and operate an NGSO system as the number of space stations authorized in a system increase. This is not always the case, however, and there are NGSO systems with a relatively large number of authorized space stations that are not used for high-data rate, two-way connectivity, and which may be relatively inexpensive to construct, launch, and operate. But as a general principle, a larger number of space stations

authorized in an NGSO system correlates to the rarity of such systems due to the increased higher financial resources needed to construct, launch, and operate the system, and correlates to the use of such a system to provide services with ubiquitous, high-data rate connectivity.

33. The alternative methodology would account for these NGSO systems with more than 100 authorized space stations. The *Space and Earth Station Regulatory Fees NPRM* proposed to create additional tiers 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. For example, 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 would be assessed to systems with 101-500 authorized space stations, and an additional unit would 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 would be 1-100 authorized space stations, the first additional unit would be assessed to systems with 101-1000 authorized space stations, and an additional unit would then be assessed for additional block of 1,000 authorized space stations. Thus, NGSO systems with larger numbers of authorized space stations would be assessed higher regulatory fees in the aggregate than those with a smaller number of authorized space stations, although the per unit of regulatory fees would be the same for all space stations, whether GSO or NGSO. The Commission seeks further comment on this proposal, as well the observations that the Commission made in the *Space and Earth Station Regulatory Fees NPRM* about the impact of this proposal compared to the existing methodology for assessing space station regulatory fees.

34. The Commission seeks further comment on whether 500 or 1,000 authorized space

stations per NGSO system per tier is the appropriate metric for assessing additional units for regulatory fee assessments. Although Iridium supports tiers that use increments of 500 additional satellites after the initial tier of 100, the Commission otherwise received a limited record on this issue in response to the *Space and Earth Station Regulatory Fees NPRM*, and thus the Commission seeks further comment on this question. Is 500 or 1,000 additional satellites the appropriate number, or is another number more appropriate? Should the number of authorized NGSO space stations per additional tier be decided with the objective of achieving the same proportionate share of Space Bureau FTE resources between GSO and NGSO space station fee payors that we determined was the case for FY 2024 (that is, 60 percent of space station FTE resources allocated to GSO space station fee payors and 40 percent allocated to NGSO space station fee payors), at least as an initial starting point for the alternative methodology? Or is there another basis for determining the number of authorized NGSO space stations per additional tier to reflect FTE resources and achieve the Commission's goals of fair, administrable, and sustainable regulatory fees?

35. The Commission recognizes that this alternative methodology differs from the existing methodology for assessing space stations fees, particularly for NGSO space stations. In particular, the alternative methodology would discontinue the use the "complexity" of an NGSO system as method for allocating regulatory fees. Assessing regulatory fees on NGSO space station systems based on "less complex" or "other" is a relatively recent development and has proven to be challenging to implement, since the "complexity" of a NGSO space station system can involve myriad factors, such as the spectrum sharing environment of frequency bands desired to be used, the quantity of spectrum used, the services to be provided, and the orbital parameters utilized. Adjudicating the complexity of all these factors, which present themselves differently among NGSO systems, takes significant staff resources and has involved repeated revisiting in annual regulatory fee proceedings. In addition, some comments suggest that that policy determinations involved in the FCC's regulation of space stations should be incorporated

into our regulatory fee proceeding in order to assess fees.

36. The alternative methodology would discontinue attempts to use any proxy for the allocation of FTE resources other than number of space stations that are authorized. All FTEs involved with space station licensing and regulation in the Space Bureau are assessed equally among all units of space station fee payors, without any *a priori* determinations about the allocation of FTE resources between GSO or NGSO space stations, or between different types of NGSO systems, other than the number of authorized space stations in the system. This allocation of Space Bureau resources matches the practice of the staff within the Space Bureau, which generally does not work in isolation on any particular type of space station licensing or regulation, but may work on different types and at different levels of intensity, from month-to-month or year-to-year. Thus, it may be reasonable to allocate all of Space Bureau resources that are allocated to space station licensing and regulation to all space stations and to use the alternative methodology to establish an objectively measurable metric by which to assess a proportional share of Space Bureau space station regulatory fees. This alternative methodology may have substantial benefits compared to the existing methodology, even if it were to be amended as proposed in the *Space and Earth Station Regulatory Fees NPRM*. The Commission seeks comment on these benefits.

37. The Commission acknowledges that using the number of space stations in an NGSO system to assess regulatory fees may not always correlate perfectly to the FTE resources involved in licensing and regulating a particular NGSO system. There may always be outlier situations where an NGSO system with a handful of authorized space stations could require more FTE resources to license and regulate than an NGSO system with 1000 or more authorized space stations. The Commission's methodology for calculating regulatory fees, however, need not reach scientific precision and instead must simply be reasonable.

38. The Commission seeks comment on whether fee payors under NGSO space station fee categories, other than fee payors in the Small Satellites fee category, would continue to be

assessed regulatory fees on a per system, rather than per call sign basis. Under this approach, if an NGSO system consists of space stations authorized under multiple call signs, it would not be assessed an initial unit for each call sign, but rather would be assessed an initial unit for its entire system, but all space stations in the system authorized under all call signs would be counted to assess additional units per tier of 500 or 1,000 space stations, as proposed above. The Commission seeks comment on this proposal.

39. The Commission seeks further comment on variations of the alternative methodology that were raised in the *Space and Earth Station Regulatory Fees NPRM*, as well as in comments in response to it. Kinéis proposes a multi-tiered approach to the alternative fee methodology that incorporates the aggregate authorized on-orbit mass of space stations as an additional factor to the number of authorized space stations when assessing space station regulatory fees. Kuiper proposes a modified version of the alternative methodology, which would initially maintain the relative share of Space Bureau regulatory fees that the existing methodology places on fee payors. The Commission seeks comment on these proposals and whether and how the variations suggested in these comments could be incorporated as part of the alternative fee methodology.

### **3. Benefits of Alternative Fee Methodology**

40. As observed in the *Space and Earth Station Regulatory Fees NPRM*, this alternative methodology may be more administrable, fair, and sustainable than the existing methodology. Some comments received in response to the *Space and Earth Station Regulatory Fees NPRM* support this expectation. Other comments express support for further examination of the alternative methodology, either as originally proposed or as modified, through a further notice and comment proceeding. SpaceX does not agree that the alternative methodology would be more administrable, fair, and sustainable than the existing methodology. The Commission seeks further comment on the potential benefits of the proposed alternative fee methodology, both as set forth in the *Space and Earth Station Regulatory Fees NPRM*, and as further elucidated below.

41. The Commission tentatively finds that the main potential benefit of the proposed

alternative fee methodology is that it resolves the allocation of Space Bureau FTE resources among various types of space station fee payors in a manner that does not require the Commission to make repeated determinations as to the percentage of FTE resources attributable to various categories of fee payors. Instead, once space stations are authorized, they are allocated a unit of share of the Space Bureau's FTE resources attributable to space station licensing and regulation. If the authorized space station is GSO, it would increase the percentage share of overall space station fees attributable to GSO space stations. If it is an NGSO system, it would increase the overall percentage share of NGSO space stations. Accordingly, it would no longer be necessary for the Commission to calculate the percentage share of Space Bureau FTE resources attributable to GSO versus NGSO licensing and regulation; the percentage share would automatically adjust itself as space stations are added, or as authorizations terminate and licensed space stations are removed. Similarly, because NGSO space stations would not be assessed a single regulatory fee unit, but may be assessed multiple units of regulatory fees as the number of authorized space stations in the system increase, the proportion of fees allocated among NGSO systems also would automatically adjust, and NGSO systems with a substantially larger number of authorized space stations would pay a larger share of space station fees than NGSO systems with a small number of authorized space stations. The Commission tentatively finds that the balance of fees between GSO and NGSO, as well as among NGSO systems, would automatically be accomplished. The Commission seeks comment on this potential benefit.

42. In addition, every additional authorized space station or system of space stations would add to the number of units over which space station regulatory fees are apportioned, which would result in the lowering of the per unit regulatory fee for all space station payors, all other things being equal to the previous fiscal year. Under the existing methodology, regulatory fees for a particular category of fee payors go down per unit as more space stations or systems become operational in that category. Although such a decrease in fees might be 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 a rapidly increasing number of space stations or systems being authorized is assessed lower regulatory fees than a category where the number of payors remains steady or even declines. This discrepancy could continue until the Commission makes the challenging determination to alter the allocation of regulatory fees among the fee categories. The Commission seeks further comment on this analysis.

43. As observed in the *Space and Earth Station Regulatory Fees NPRM*, the alternative methodology may be more sustainable than the existing methodology. 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. For example, the elimination of a single fee payor in the existing NGSO “other” space station category could result in a large increase in the per unit fee for the other payors in this fee category, absent additional Commission action. Under the alternative methodology, the consequences of the elimination would be spread across all space station fee payors. The Commission seeks further comment on this potential benefit, as well as any other potential benefits of the proposed alternative fee methodology.

### **C. Amendment of Existing Methodology for Assessing Space Station Regulatory Fees**

44. Alternatively, the Commission seeks further comment on amending the Commission’s existing methodology to assess space station regulatory fees for future fiscal years.

#### **1. Creation of NGSO Small and Large Constellation Fee Categories**

45. The Commission seeks further 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. This proposal was made in the *Space and Earth Station Regulatory Fee NPRM*. Although it was not adopted for FY 2024, it was identified for further consideration in the *FY 2024 Regulatory Fees Second Report and Order*, 89 FR 78452 (Sept. 25, 2024).

46. As observed in the *Space and Earth Station Regulatory Fees NPRM*, the existing category for NGSO “other” space station systems assesses the same annual regulatory fee 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 expects that such arguments and requests will intensify after the substantial increase in regulatory fees from FY 2023 to FY 2024, particularly for the NGSO space station categories.

47. Comments in response to *Space and Earth Station Regulatory Fees NPRM* expressed broad, but not universal, support for the proposal to create tiers within the NGSO space stations “other” regulatory fee category. The majority of comments supported the proposal as justified and reflective of the differences in regulatory and licensing burdens between “small” and “large” NGSO constellations. SpaceX opposed the proposal, however, arguing that the Commission has previously rejected using the number of satellites in a system as a basis for apportioning fees, and that number of satellites in an NGSO system is not a reasonable proxy for the complexity of a NGSO system and the FTE resources allocated to licensing and regulating such systems. In addition, comments were not uniformly in support of the number of authorized space stations to use as the dividing line between categories. Although the majority of comments on this point

supported using 1,000 authorized space stations as the dividing line, Kinéis opposed using a single metric or number of space stations as the dividing line. No commenter supported using 500 space stations as a dividing line or proposed an alternative number.

48. The Commission seeks additional comment on the 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 Commission specifically seeks further comment on why the number of space stations in an NGSO system would or would not be an appropriate metric for assessing FTE burdens associated with NGSO space station systems, and whether 1,000 authorized space stations is the appropriate dividing line between the proposed categories of “small” and “large” constellations.

49. The Commission observes that other possible proxies identified in the *Space and Earth Station Regulatory Fees NPRM* that might reasonably equate with the share of FTE burdens associated with NGSO space station systems – the number of subscribers, the amount of spectrum authorized, the class of service provided, or the on-orbit mass – are not supported as viable metrics by commenters, and the Commission tentatively concludes not to use them going forward, at least as separate, individual metrics for assessing regulatory fees for space stations. The Commission also tentatively concludes that the creation of two tiers, rather than three or more tiers, will 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 would not have benefits that outweigh the costs and uncertainty created by the need to revisit the tiers every year as the number of space stations shift in relatively minor ways. The Commission seeks comment on this observation and these tentative conclusion.

50. The Commission also seeks comment on the proposal by SpaceX to adopt two tiers for the NGSO space stations “other” category based on a “risk-informed” methodology that

considers whether an NGSO space station system is operated above or below an altitude of 600 kilometers when determining the allocation of FTE burdens. SpaceX argues that apportioning NGSO space station regulatory fees in this manner would be the fairest, most administrable, and most sustainable proxy for FTE regulatory burdens. It argues that NGSO space stations operating at altitudes above 600 km generally present greater regulatory complexity than if the same system were operated at lower altitudes. Comments received as part of the *Space and Earth Station Regulatory Fees NPRM* oppose SpaceX's "risk-informed" methodology, particularly the proposal to use altitude as a basis for assessing regulatory fees among space stations payors. The Commission seeks comment on SpaceX's proposal.

51. The Commission seeks additional comment on the proposal 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"). Comments in response to the *Space and Earth Station Regulatory Fees NPRM* were divided on this question. Many commenters expressed support for the proposed division, while other comments opposed it and proposed an alternate division. The Commission seeks further comment on what division is appropriate and the reasoning supporting the division.

52. The Commission seeks comment on whether to eliminate the NGSO "less complex" and "other" categories and include all NGSO space stations within NGSO "small" and "large" constellations fee categories as proposed above. In light of proposals to move away from assessing regulatory fees for space stations based on the "complexity" of the space stations as a proxy for FTE burden, would it be reasonable to also discontinue the use of the term "less complex" in our existing regulatory fee categories for NGSO space stations? The Commission observes that all fee payors currently in the NGSO space stations "less complex" category would fall within the NGSO small constellations fee category using the proposal of 1,000 authorized space stations as the dividing line between "small" and "large" constellations. The Commission seeks comment on this observation and proposal, as well as how the elimination of the "less

complex” and “other” fee categories would affect the proposal to allocate FTE burdens between “small” and “large” constellation fee categories on a 50/50 basis. Would a 50/50 allocation be appropriate if the entirety of NGSO space station fees were allocated between “small” and “large” constellations, without first allocating 20% of NGSO space station fees to the NGSO space stations “less complex” category and 80% to the NGSO space stations “other” category?

## **2. Additional Space Station Fee Proposals**

53. The Commission also seeks further comment on any additional proposals made by commenters to amend the existing NGSO “less complex” and “other” fee categories. For example, Maxar and Telesat propose to create additional tiers of “small” and “large” NGSO constellations within the NGSO “less complex” fee category, with the dividing line being 100 authorized space stations and the total “less complex” share of NGSO space station fees allocated 50/50 between large and small constellations. The Commission seeks further comment in connection with this, or any other, outstanding proposal made in response to the *Space and Earth Station Regulatory Fees NPRM*.

### **D. Creation of Additional Earth Station Fee Categories**

54. The Commission seeks additional comment on 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. The *Space and Earth Station Regulatory Fees NPRM* sought comment on the question of whether to create subcategories of earth station regulatory fee payors, in addition to the existing single category of “Transmit/Receive & Transmit Only (per authorization or registration).” Although the Commission adopted the proposal to apportion regulatory fees between earth and space station payors based on the percentage of direct FTEs involved in the licensing and regulation of each category, it declined to adopt additional regulatory fee categories for earth stations. Comments in response to the *Space and Earth Station Regulatory Fees NPRM* expressed doubt that the creation of subcategories of earth stations with differing fee amounts is feasible, and urged that the record be

further developed before creating subcategories of earth station regulatory fees. As a result, the Commission stated that additional comment regarding the creation of additional earth station regulatory fee categories would be sought as part of a future further notice of proposed rulemaking.

55. The Commission now seeks further comment on the questions raised in the *Space and Earth Station Regulatory Fees NPRM* regarding the possible creation of subcategories of earth station regulatory fee payors. For example, should 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? Are there certain 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? 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?

56. The Commission observes it is challenging to separate the time spent by FTEs on different categories of earth station licenses because Earth Station Licensing Division staff work on all categories of earth stations and staff work is not recorded or segregated in a manner that is beneficial to clearly apportioning FTE time between various categories of earth station licenses. Some comments received in response to the *Space and Earth Station Regulatory Fees NPRM* indicate that such an undertaking would be “exceedingly difficult” or “particularly challenging” to administer fairly or efficiently, while other comments state that it is possible to identify types of earth stations that require less FTE burdens than other types. The Commission seeks comment on whether there are any identifiable methods to reasonably apportion FTE work to various subcategories of earth stations? 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.

#### **IV. INITIAL REGULATORY FLEXIBILITY ANALYSIS**

57. 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 a substantial number of small entities by the policies and rules proposed in the *FNPRM*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadline for comments specified on the DATES section of this document. The Commission will send a copy of the *FNPRM*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).

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

58. 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 non-geostationary orbit (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. Earlier this year, the Commission took certain steps to revise regulatory fees for space and earth station payors, but also determined that further consideration, as part of a future notice of proposed rulemaking, would be beneficial. The *FNPRM* continues the Commission's 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 remaining from the *Space and Earth Station Regulatory Fees NPRM*. The Commission examines and seeks comment on assessing regulatory fees on authorized, but not operational space and earth stations;

using an alternative methodology for assessing space station regulatory fees; establishing tiers with sub-categories for small and large constellations of non-geostationary orbit (NGSO) space stations within the existing Space Stations (Non-Geostationary Orbit) – Other fee category based on the number of authorized space stations in the NGSO system; and creating new sub-categories of earth station regulatory fees. 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.

## **B. Legal Basis**

59. The proposed action is authorized pursuant to 47 CFR §§ 154(i), 154(j), 159, 159A, and 303(r).

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

60. 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.

61. *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.

62. 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 2022, there were approximately 530,109 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.

63. 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 2022 Census of Governments indicate there were 90,837 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number, there were 36,845 general purpose governments (county, municipal, and town or township) with populations of less than 50,000 and 11,879 special purpose governments (independent school districts) with enrollment populations of less than 50,000. Accordingly, based on the 2022 U.S. Census of Governments data, the Commission estimates that at least 48,724 entities fall into the category of “small governmental jurisdictions.”

64. *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.

65. 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.

66. *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 \$44 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. Consequently, using the SBA's small business size standard most fixed satellite small transmit/receive earth stations can be considered small entities. The Commission notes however, that the SBA's revenue small business size standard is applicable to a broad scope of satellite telecommunications providers

included in the U.S. Census Bureau's Satellite Telecommunications industry definition.

Additionally, the Commission does not request nor collect annual revenue information from satellite telecommunications providers, and is therefore unable to more accurately estimate the number of fixed satellite small transmit/receive earth stations that would be classified as a small business under the SBA size standard.

67. *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 Very Small Aperture Terminal (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 \$44 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. Thus, for this industry under the SBA size standard, the Commission estimates that the majority of Fixed Satellite Very Small Aperture Terminal (VSAT) System licensees are small entities. The Commission notes however, that the SBA's revenue small business size standard is applicable to a broad scope of satellite telecommunications providers included in the U.S. Census Bureau's Satellite Telecommunications industry definition. Additionally, the Commission does not request nor collect annual revenue information from satellite telecommunications providers, and is therefore unable to more accurately estimate the number of Fixed Satellite Very Small Aperture Terminal (VSAT) System licenses that would be classified as a small business under the SBA size standard.

68. *Home Satellite Dish (HSD) Service.* 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.

69. *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 \$44 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. The Commission notes however, that the SBA's revenue small business size standard is applicable to a broad scope of satellite telecommunications providers included in the U.S. Census Bureau's Satellite Telecommunications industry definition. 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 from satellite telecommunications providers, and is therefore unable to estimate the number of Mobile Satellite Earth Station licensees that would be classified as a small business under the SBA size standard.

70. *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.

71. *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 \$44 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. Consequently, using the SBA's small business size standard most satellite telecommunications service providers can be considered small entities. The Commission notes however, that the SBA's revenue small business size standard is applicable to a broad scope of satellite telecommunications providers included in the U.S. Census Bureau's Satellite Telecommunications industry definition. Additionally, the Commission neither requests nor collects annual revenue information from satellite telecommunications providers, and is therefore unable to more accurately estimate the number of satellite telecommunications providers that would be classified as a small business

under the SBA size standard.

72. *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 \$40 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**

73. The *FNPRM* 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.

74. The *FNPRM* continues the Commission’s review of regulatory fees for small and other space and earth station payors, and gives parties an opportunity to file comments on possible changes to the existing methodology for assessing space and earth station regulatory fees from the *Space and Earth Station Regulatory Fees NPRM* that were not addressed by the Commission.

If any of the proposals discussed in the *FNPRM* are adopted the regulatory fee burden on some satellite entities could be reduced. The Commission will propose and finalize the regulatory fee rates for space and earth station payors as part of its annual Commission-wide FY 2025 regulatory fee proceeding. Commenters will have an opportunity in that proceeding to provide comments on the proposed regulatory fee rates for small and other space and earth station regulatees.

75. Notwithstanding the methodology for assessing space and earth station regulatory fees the Commission adopts, small entities that qualify will be able to take advantage of the exemption from payment of regulatory fees allowed under the de minimis threshold. In addition, as described in the *FY 2023 Report and Order*, 88 FR 63694 (Sept. 15, 2023), 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**

76. The RFA requires an agency to describe any significant alternatives that could minimize impacts to small entities 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.

77. The proposal in the *FNPRM* to assess regulatory fees on all authorized space and earth stations, not only on stations that are deemed to be separably operational, which is the current Commission policy, could lower the costs and financial risks for small and other space and earth

station regulatory fee payors overall as a result of broadening the base of regulatory fee payors to include authorized space and earth stations, which could produce lower per unit regulatory fees. Although the current policy defers payment of regulatory fees until the time that revenue can be generated through operations, and it is possible that regulatees with operational systems may be able to bear those costs more easily than those without, under the current policy some FTE burdens are never recovered if an authorized system does not become operational, and some FTE burdens are deferred for many years to the detriment of small and other fee payors whose systems become operational earlier, and consequently must pay higher regulatory fees.

78. The tier approach, as part of 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, would likely reduce the regulatory fee burden on smaller entities that may not qualify as small satellites. The alternative methodology seeks comment on 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. Using this approach, 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. This alternative methodology could be more administrable, fair, and sustainable than the existing methodology, and the *FNPRM* seeks

comment on all aspects of this alternative methodology for assessing space station regulatory fees.

79. The *FNPRM* also seeks comment on amending its existing methodology to assess space station regulatory fees for future fiscal years. Specifically, the *FNPRM* seeks further 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 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. 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 on smaller entities. Related to the proposals to establish tiers, the Commission considers, and the *FNPRM* specifically seeks further comment on whether or not the number of space stations in an NGSO system could be an appropriate metric for assessing FTE burdens associated with NGSO space station systems, and whether 1,000 authorized space stations is the appropriate dividing line between the proposed tiers for “small” and “large” constellations.

80. The Commission also seeks comment on an alternative proposed in comments to adopt two tiers for the NGSO space stations “other” category based on a “risk-informed” methodology that determines the allocation of FTE burdens based on whether an NGSO space station system is operated above or below an altitude of 600 kilometers. Space X claims that this option is the fairest, most administrable, and the most sustainable proxy for FTE regulatory burdens. Another proposed alternative which the *FNPRM* seeks additional comment on is dividing the total NGSO – “other” fees between the two subcategories on a 50/50 basis requiring “large constellations” to pay half of the NGSO-Other fees and “small constellations” to pay the other half.

81. Moreover, the *FNPRM* seeks comment on any additional, alternative proposals made by commenters to amend the existing NGSO “less complex” and “other” fee categories, or any other outstanding proposals made in response to the *Space and Earth Station Regulatory Fees NPRM*. For instance, the Commission requests comment on a proposal by Maxar and Telesat to create additional tiers of “small” and “large” NGSO constellations within the NGSO “less complex” fee category that designates 100 authorized space stations as the appropriate benchmark to differentiate between small and large constellations, and to allocate the total “less complex” share of NGSO space station fees 50/50 between large and small constellations.

82. In the *Space and Earth Station Regulatory Fees Report and Order*, the Commission considered but declined to create additional subcategories of earth station regulatory fees. Consistent with its determination that the record on this matter required further development, the *FNPRM* considers and seeks further comment on this issue. The Commission inquires whether VSAT, Mobile-Satellite Earth Stations, and Fixed Earth Stations – Transmit/Receive & Transmit Only should be reinstated as distinct fee categories, each with a separate fee assessment, or alternatively, 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, justifying the assessment of a higher regulatory fee, or similarly types of earth station licenses that require less resources to license and regulate supporting lower regulatory fee assessments. In light of mixed comments received in response to the *Space and Earth Station Regulatory Fees NPRM*, ranging from “exceedingly difficult” or “particularly challenging” to administer fairly or efficiently, to possible to identify types of earth stations that require less FTE burdens than other types regarding the feasibility of apportioning the time spent by FTEs on separate categories of earth station licenses, the Commission’s further consideration of this approach in the *FNPRM* seeks comment on whether there are any identifiable methods to reasonably apportion FTE work to assign specific regulatory activity costs to various subcategories of earth stations.

83. Lastly, another matter the Commission considers in the *FNPRM* that could benefit small entities is when to assess regulatory fees if the Commission adopts its proposal to assess all authorized space and earth stations including those that are not operational. Specifically the Commission inquires, and seeks comment on, whether to apply the assessment based on the alternative fee calculation methodology, if adopted, in FY2025, or to delay application of this assessment until FY2026, or later, to provide the Commission and regulatees time to adjust to the change in the fee calculation methodology.

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

84. None.

FEDERAL COMMUNICATIONS COMMISSION

**Marlene Dortch,**  
*Secretary.*

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