

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Streamlining Licensing Procedures for Small)	IB Docket No. 18-86
Satellites)	

COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

I. INTRODUCTION

The Satellite Industry Association (“SIA”)¹ submit these comments in response to the Notice of Proposed Rulemaking in the above-captioned docket.²

The current licensing regime (“Part 25 Process”)³ cannot adequately keep up with the quick development and deployment times associated with small satellite (“smallsat”) operations, which advance scientific research and gather critical Earth observation data.⁴ Smallsats are used for imaging and passive radiofrequency monitoring services, among others, to provide critical geospatial, atmospheric, and land surface sensing data for myriad industries. Unfortunately, the ability to effectively provide the mentioned services and quickly prove technology viability by smallsat companies has been hindered by the time-consuming and financially burdensome

¹ SIA Executive Members include AT&T Services, Inc.; The Boeing Company; EchoStar Corporation; Intelsat S.A.; Iridium Communications Inc.; Kratos Defense & Security Solutions; Ligado Networks; Lockheed Martin Corporation; Maxar Technologies; Northrop Grumman Corporation; OneWeb; SES Americom, Inc.; Space Exploration Technologies Corp.; Spire Global, Inc.; and ViaSat, Inc. SIA Associate Members include ABS US Corp.; Analytic Graphics Inc.; Artel, LLC; Blue Origin: DataPath Inc.; Eutelsat America Corp; Globecom; Glowlink Communications Technology, Inc.; Hawkeye360; Hughes Government Solutions; Inmarsat, Inc.; Kymeta Corporation; L3 Technologies.; Panasonic Avionics Corporation; Planet; Telesat; TrustComm, Inc.; Ultisat, Inc.; and XTAR, LLC. For more information, visit www.sia.org.

² See *Streamlining Licensing Procedures for Small Satellites*, IB Docket No. 18-86, Notice of Proposed Rulemaking, FCC 18-44 (rel. Apr. 17, 2018) (“*Smallsat NPRM*”).

³ See generally 47 CFR Part 25.

⁴ See *Smallsat NPRM* ¶ 1.

licensing processes. Moreover, requiring start-ups and educational entities to pay a \$450,000+ application fee, post a potentially multi-million dollar bond, take on costly attorney and consultant fees, and spend months coordinating spectrum use prevents them from quickly proving their technology and going to market.

II. SIA APPLAUDS THE COMMISSION’S INITIAL EFFORTS TO CREATE A STREAMLINED LICENSING PROCESS FOR SMALLSATS.

Taking into account the current licensing state for smallsats, the Commission now seeks to develop an alternative arrangement for authorizing smallsats that is more efficient for both applicants and the Commission and that better reflects the unique nature of smallsat deployment than the existing authorization regimes.⁵ SIA supports and applauds the Commission’s efforts to streamline the associated licensing process, increase spectrum usage efficiency, and reduce application fees.

III. SUBMISSION OF A FORM 312 AND NARRATIVE (WITH MINOR ADJUSTMENTS) SHOULD STILL BE REQUIRED.

a. Form 312

The Commission proposes that Form 312 continue to serve as basis for applications in the Streamlined Process.⁶ SIA believes that Form 312 is fairly straightforward and easy for smallsat companies to complete.

⁵ See *Smallsat NPRM* ¶ 21. Moreover, the proposed rules are designed to (i) make the process more accessible, (ii) decrease processing time for applications, (iii) limit regulatory burdens borne by applicants, (iv) offer protection for critical communication links, and (v) promote orbital debris mitigation and efficient use of spectrum. See *Smallsat NPRM* ¶ 21.

⁶ See *Smallsat NPRM* ¶ 47.

b. Narrative

The Commission further proposes that the narrative section be replaced by the various certifications required in the qualifying criteria and some information in narrative form as to how they meet the qualifying criteria.⁷ SIA notes that some analysis backing up the certifications should be required; in particular, the Commission should require submission of a streamlined Orbital Debris Assessment Report (“ODAR”).⁸ This requirement would allow the Commission and other operators to review the assumptions and analysis that goes into the certifications, particularly those around collision risk, casualty risk, and other orbital debris matters.

The reality that many smallsats are secondary payloads means that launch delays often drive potential operational changes. Including in the Streamlined Process the ability to identify ground station requirements or ground station options rather than specify a complete ground station plan in the narrative would allow more flexibility for smallsat missions. When an applicant knows its ground station plan, it can provide the plan in a supplemental filing and/or through direct communications with other operators during the process of any coordination.

IV. FEDERAL COORDINATION TIMELINES SHOULD BE REDUCED.

The Commission asks what procedures it can adopt to facilitate the Federal spectrum coordination,⁹ which is one of the biggest barriers to getting a license quickly. SIA proposes the following remedial measures.

First, SIA urges the Commission to mandate pre-coordination meetings that should take place between applicants and representatives of all affected Federal agencies. SIA recommends

⁷ See *Smallsat NPRM* ¶ 48.

⁸ For example, applicants can easily produce ODARs through the use of free National Aeronautics and Space Administration Debris Assessment Software.

⁹ See *Smallsat NPRM* ¶ 60.

the meetings takes place shortly after filing of an application with the Commission, ensuring that Federal agencies are only pre-coordinating serious applications for which the application fee has been paid. It will also provide potentially months of time for pre-coordination.

Second, SIA proposes that the Commission submit a Streamlined Process application for formal coordination to the National Telecommunications and Information Administration (“NTIA”) (coordinating on behalf of the U.S. Federal agency operators) concurrently with the placement of the Streamlined Process on public notice, giving the applicant and NTIA the duration of the public notice period to resolve any coordination issues.

No such requirements currently exist under the Part 25 Process, leaving applications for smallsat operations pending for almost a year without a full license grant. Failure to act in a timely manner truly does prejudice commercial smallsat companies by causing missed launches and lower service levels to customers and missing time-to-market advantages. Any potential federal coordination or application decision periods associated with the Streamlined Process should not detrimentally affect or delay the Commission’s consideration of Part 25 Process applications.

V. THE APPLICATION FEE SHOULD BE COMMENSURATE WITH THE COMMISSION’S ADMINISTRATIVE COSTS PROCESSING SUCH APPLICATIONS.

The Commission has proposed a \$30,000 fee for a 10-satellite license under the Streamlined Process.¹⁰ SIA supports an initial \$30,000 fee for commercial applications. As mentioned previously, there are additional and costly attorney and consultant fees that are unincorporated in this application fee but are necessary to complete the initial application and potential coordination. Many of the potential licensees under the Streamlined Process will be

¹⁰ See *Smallsat NPRM* ¶ 76.

university students/faculties and early-stage companies attempting to quickly prove technology viability to receive additional funding and move forward with their operations. Without securing funding, these applicants will struggle mightily to pay for the larger Part 25 Process application fee and prove their technology viability.

The Commission should reevaluate the reduced Streamlined Process application fee one year after the Streamlined Process takes effect. Such review and possible revision of the Streamlined Process application fees should be based on the Commission's administrative costs associated with processing such applications.¹¹ During that review, SIA proposes that the Commission consider a lower application fee for those providing a non-commercial service.

VI. THE STREAMLINED PROCESS SHOULD BE AVAILABLE TO NON-EARTH-ORBITING MISSIONS

The Commission has requested comments on whether the Streamlined Process should be available to other missions.¹² SIA supports opening the Streamlined Process to non-Earth-orbiting missions. There are a number of missions currently in construction, development, or conceptual phases that would enter into a non-Earth-orbit and would benefit from the Streamlined Process. Some of these non-Earth-orbiting missions will be run by universities or smaller companies that will find the current process onerous and expensive.

Similar to Earth-orbiting missions, operational life for spacecraft intended for a non-Earth-orbiting mission is constrained. Non-Earth-orbiting missions are limited by component life, the deep space environment, and the initial launch trajectory. As a result, there should not necessarily be different license terms for Earth-orbiting or non-Earth orbiting missions, and the

¹¹ See Consolidated Appropriations Act, 2018, 115th Cong., Division P, section 102 (amending section 8(a) of the Act).

¹² See *Smallsat NPRM* ¶ 31.

license term should be based on the design life or operational life expectation of the system, which allows flexibility for systems that pose very little collision or casualty risk (*i.e.*, non-Earth-orbiting spacecraft).

SIA proposes several specific modifications to the current application process to account for non-Earth-orbiting missions. Spacecraft destined for a non-Earth orbit are not able to provide orbital parameters relative to Earth; however, orbital parameters could be provided relative to another celestial body. Disposal of non-Earth-orbiting satellites cannot reasonably be accomplished through an atmospheric re-entry, and consideration should be given to allow disposal criteria to be met through analysis of collision potential with cessation of emissions requirements.

VII. THE STREAMLINED PROCESS SHOULD BE APPLICABLE TO SMALLSAT OPERATORS SEEKING U.S. MARKET ACCESS.

The Commission asks whether the proposed Streamlined Process should apply to foreign smallsat operators seeking U.S. market access.¹³ SIA supports foreign applicants being able to apply for U.S. market access under the Streamlined Process if they are subject to all the same requirements as U.S. applicants under the Streamlined Process and applicable reciprocity market access requirements under the Part 25 Process.¹⁴

VIII. CONCLUSION

For the reasons provided above, SIA urges the Commission to adopt a Streamlined Process, which is consistent with smallsat operators' ability to quickly develop and deploy their smallsats. Such action will provide smallsat operators much needed regulatory certainty and

¹³ See *Smallsat NPRM* ¶ 23.

¹⁴ See 47 CFR § 25.137.

financial relief when they are trying to quickly show technology viability and allow the United States to remain a leader in the smallsat industry.

Respectfully submitted,

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