

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, DC 20554**

In the Matter of	)	
	)	
Expediting Initial Processing of Satellite and Earth Station Applications	)	IB Docket No. 22-411
	)	
Space Innovation	)	IB Docket No. 22-271

**Reply Comments of TechFreedom  
to Further Notice of Proposed Rulemaking**

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February 6, 2024

## Summary

The Space Bureau's Transparency Initiative is an important step toward bringing the FCC's regulatory systems into the twenty-first century. TechFreedom applauds the revisions to Commission rules in the Report and Order and the efforts to coach up applicants so that applications are as complete and accurate as possible.

But those steps are too small and too slow to keep pace with the innovation that is driving commercial space in ways that were only science fiction a decade ago. The proposals contained in the Further Notice of Proposed Rulemaking (FNPRM) equally lack the vision necessary to allow the FCC to license satellite systems with the speed necessary to keep pace with our competitors and adversaries.

Instead, the Commission should focus on ways to decrease the overall number of applications it must process and increase the speed in which it can reach licensing decisions. In this vein, rules should allow for far more modifications of facilities than is now contemplated, so long as such modifications do not increase the interference environments for operators. Further, adopting broad shot clocks would force all stakeholders to hone their skills in preparing applications, and hone the technical and legal arguments in objecting to the applications of others.

Finally, the solution to the bottleneck of processing applications is not to further increase the use of the special temporary authority (STA) process. STAs are a symptom of a licensing system that is dysfunctional, not a solution that opens the bottleneck. STAs should be saved for true emergencies, not be the common resort of satellite operators to long processing lines.

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**COMMENTS OF TECHFREEDOM**

Pursuant to Sections 1.415 and 1.419 of the Commission’s rules,<sup>1</sup> TechFreedom submits these reply comments in response to the Commission’s Further Notice of Proposed Rulemaking (FNPRM) in the above-referenced proceedings.<sup>2</sup> In support of these reply comments, TechFreedom submits:

**I. About TechFreedom**

TechFreedom is a nonprofit think tank dedicated to promoting the progress of technology that improves the human condition. To this end, we seek to advance public policy that makes experimentation, entrepreneurship, and investment possible, and thus unleashes the ultimate resource: human ingenuity.

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<sup>1</sup> 47 C.F.R. §§ 1.415, 1.419 (2021).

<sup>2</sup> Expediting Initial Processing of Satellite and Earth Station Applications, Report and Order and Further Notice of Proposed Rulemaking, 88 Fed. Reg. 85553, FCC 23-73 (released Sept. 22, 2023), <https://docs.fcc.gov/public/attachments/FCC-23-73A1.pdf> (“Report & Order” & “FNPRM” respectively). The FNPRM appeared in the Federal Register on December 8, 2023, 88 Fed. Reg. 85553 (December 8, 2023), and set the comment date as January 8, 2024, and the reply date as February 6, 2024. These reply comments are timely filed.

TechFreedom and undersigned counsel have a long history advocating for innovative uses of outer space. The instant proceeding sits at the intersection of FCC regulation and space law, a place we've inhabited for decades.<sup>3</sup> We are uniquely suited to provide commentary in this important proceeding.

## **II. The New Space Race Needs a Twenty-First Century Licensing Regime**

As we stated in our previous comments to the NPRM in this proceeding,<sup>4</sup> the FCC knows the problem that it faces in dealing with the rush of satellite applications over the past few years.<sup>5</sup> FCC Chair Rosenworcel perfectly summarized the fundamental problem of the FCC's satellite licensing regime:

It is not easy to keep up with all this space activity. But it is easy to see how here on the ground, the regulatory frameworks we rely on to shape space and satellite policy were largely built for another era. They were designed for a time when going to space was astronomically expensive. No one imagined commercial space tourism taking hold; no one believed crowd-funded

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<sup>3</sup> Comments of TechFreedom in the Matter of Space Innovation; Facilitating Capability for In-Space Servicing, Assembly, and Manufacturing, IB Docket Nos. 22-271 & 22-272 (Oct. 31, 2022), <https://techfreedom.org/wp-content/uploads/2022/10/TechFreedom-Comments-FCC-ISAM-NOI.pdf>; *Artemis Accords: One Small Step for NASA, Not So Giant a Leap for Space Law*, TECHFREEDOM (May 15, 2020), <https://techfreedom.org/artemis-accords-one-small-step-for-nasa-not-so-giant-a-leap-for-space-law/>; *Revived National Space Council Could Mean Space Policy Rethink*, TECHFREEDOM (July 7, 2017), <https://techfreedom.org/revived-national-space-council-mean-space-policy-rethink/>; James E. Dunstan, "Space Trash:" *Lessons Learned (and Ignored) from Space Law and Government*, 39 J. OF SPACE L. 23 (2013).

<sup>4</sup> Comments of TechFreedom in the Matter of Expediting Initial Processing of Satellite and Earth Station Applications & Space Innovation, IB Docket Nos. 22-411 & 22-271 (Mar. 3, 2023), <https://techfreedom.org/wp-content/uploads/2023/03/TechFreedom-Comments-Satellite-Streamlining-3-3-23.pdf> (hereinafter TechFreedom Space Innovation Comments). Those comments were cited 36 times in the Report and Order and FNPRM.

<sup>5</sup> TechFreedom Space Innovation Comments at 3-4.

satellites and mega constellations in low-Earth orbit were possible; and no one could have conceived of the sheer popularity of space entrepreneurship.<sup>6</sup>

We've spoken to the broken nature of the FCC's regulatory processes related to satellite licensing many times.<sup>7</sup> Undersigned counsel headed the regulatory review team for the Air Force's "Fast Space" study in 2017, which concluded that the nation's regulatory and licensing systems were in dire need of overhaul if government wanted to keep pace with commercial space activities that both rely on, and create the necessary demand for, an order of magnitude drop in launch costs.<sup>8</sup>

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<sup>6</sup> Jessica Rosenworcel, Chairwoman, Fed. Comm'n's Comm'n, Remarks to Satellite Industry Association: Space Innovation And The FCC (Nov. 3, 2022), <https://www.fcc.gov/document/chairwoman-rosenworcel-remarks-satellite-industry-association>.

<sup>7</sup> See, e.g., James E. Dunstan, *Regulating Outer Space: Of Gaps, Overlaps, and Stovepipes*, 27-39 (Center for Growth & Opportunity Policy Paper, July 2023), <https://www.thecgo.org/wp-content/uploads/2023/07/Regulating-Outer-Space.pdf>; James E. Dunstan, *Who Wants to Step Up to A \$10 Billion Risk?*, SPACENEWS (June 25, 2021), <https://spacenews.com/op-ed-who-wants-to-step-up-to-a-10-billion-risk/>. See also *Reopening the American Frontier: Hearing Before the Subcomm. on Space, Sci., & Competitiveness of the S. Comm. on Com., Sci. & Transp.*, 115th Cong. 8 (2017) (statement of James E. Dunstan & Berin Szóka) ("If a regulatory regime is adopted for mission authorizations that mirrors, or even remotely resembles, the ITAR regime, Congress will have failed to execute our Treaty obligations in a way that promotes the 'exploration and use' of space—the overarching goal of the Treaty (Article II)—and commercial entities will flee the United States to jurisdictions that treat their citizens in a fairer manner, just as satellite manufacturers fled the U.S."); Comments of TechFreedom in the Matter of Space Innovation & Facilitating Capability for In-Space Servicing, Assembly, and Manufacturing, IB Docket Nos. 22-271 & 22-272 (Oct. 31, 2022), <https://techfreedom.org/wp-content/uploads/2022/10/TechFreedom-Comments-FCC-ISAM-NOI.pdf>; Reply Comments of TechFreedom in the Matter of Allocation of Spectrum for Non-Federal Space Launch Operations, ET Docket 13-115 (Sept. 10, 2021), <https://techfreedom.org/wp-content/uploads/2021/09/TechFreedom-Reply-Comments-13-115-9-10-21.pdf>.

<sup>8</sup> AIR UNIVERSITY, MAXWELL AFB, FAST SPACE: LEVERAGING ULTRA LOW-COST SPACE ACCESS FOR 21ST CENTURY CHALLENGERS 33-34 (2017), [https://www.airuniversity.af.edu/Portals/10/Research/Space-Horizons/documents/Fast%20Space\\_Public\\_2017.pdf](https://www.airuniversity.af.edu/Portals/10/Research/Space-Horizons/documents/Fast%20Space_Public_2017.pdf) (declassified version).

**A. The Commission Needs a Fundamentally Different Approach to Licensing that Speeds Decision Times and Lowers the Number of Applications Filed**

TechFreedom commends the FCC and the Space Bureau in undertaking its Transparency Initiative.<sup>9</sup> But as the Report and Order and FNPRM make clear, just coaching up applicants to better understand the systems and forms of the FCC is only a small part of what needs to happen for the FCC to keep up with the wave of applications for space spectrum uses. The Commission needs to consider a fundamentally different approach to licensing.<sup>10</sup> As the Report and Order issued with the FNPRM states,

As we enter the new space age, applications for space services before the Commission continue to increase in complexity and number. In response to this unprecedented era of growth in the space industry, the Commission launched the Space Bureau on April 11, 2023. Space activities are increasing in almost every industry sector. The Commission must, therefore, make expediting the processing of applications a priority of its Space Innovation Agenda. If the current rate of filings for applications continues in 2023, the Commission will receive approximately four times the number of space station applications and three times the number of earth station applications than it received in 2015. In addition, the complexity of applications continues to increase as new and novel space technologies are presented for consideration. The commercial space industry is evolving at a rapid pace, and it is critical that we keep up with the cadence of applications and complexity of regulatory issues presented.<sup>11</sup>

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<sup>9</sup> See FNPRM ¶ 2 (“as part of the Space Innovation agenda, the Space Bureau will undertake a Transparency Initiative.”). See also *Transparency Initiative*, FED. COMM’NS COMM’N (Oct. 13, 2023), <https://www.fcc.gov/space/transparency-initiative> (“The goal is to provide interested parties with user-friendly information and guidance regarding the Commission’s space station and earth station application and authorization procedures. The initiative covers a variety of topics, including application completeness, orbital debris requirements, and inter-bureau and inter-agency coordination. Additionally, the Space Bureau plans to release an updated version of its electronic filing database (the International Communications Filing System, or ICFS), which will include multiple forms of guidance for users, including training videos for the ICFS application process and a helpful links page.”).

<sup>10</sup> See TechFreedom Space Innovation Comments at 3-4.

<sup>11</sup> FNPRM ¶ 7.

Unfortunately, most of the changes adopted in the Report and Order will only impact at the margins; they lack a comprehensive approach to regulatory change necessary to allow the FCC staff to keep pace with the innovations being created from the commercial space sector. The Report and Order is replete with examples in which the Commission has concluded that suggestions that could assist in streamlining the licensing process offered by satellite operators and other stakeholders were beyond the scope of the proceeding.<sup>12</sup> If the essence of this proceeding is as its title suggests, “Expediting Initial Processing of Satellite and Earth Station Applications,” why are such suggestions immediately off the table?

Don’t misunderstand us; we support all the vast majority of changes made in the Report and Order,<sup>13</sup> but those revisions represent inside-the-box thinking. The FCC still

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<sup>12</sup> See, e.g., Report & Order ¶ 33, n. 99 (suggesting that the FCC revisit the bonding requirement “is outside the scope of this rulemaking”); ¶ 34, n. 107 (impact of missed milestones beyond scope of proceeding); ¶ 63 (“In response to our general questions, some commenters advocate for additional rule changes that they believe will reduce the need to file modification applications, but which are either outside of the scope of this proceeding or which we decline to take action on at this time.”); ¶ 74 (discussions of pre-application coordination “fall outside the scope of this rulemaking.”); ¶¶ 75-77 (multiple suggestions for revisions to rules fall outside the scope of the proceeding). See also *id.* ¶ 70 (“We are conscious of commenters’ points regarding large numbers of modification applications being filed for common changes, and we will consider this issue for future updates to our filing system, which currently cannot support this modification. In response to TechFreedom’s suggestion, we note that the Commission has made similar efforts to streamline common changes, such as through C-band earth station network licensing in section 25.115(c)(2) of our rules and our unified licensing system for space stations and blanket earth stations adopted in 2020. In the 2020 order creating the unified licensing system, the Commission declined to include individually licensed earth stations in the process, finding that adding them would “create more complexity than its streamlining benefit,” given the need for site-specific information and coordination. This reasoning remains valid. However, we may consider similar suggestions such as TechFreedom’s “hybrid licensing” approach as we gain more experience with some of the streamlining rules we have more recently put in place, such as the unified licensing system, that have not yet been widely utilized. We may consider further streamlining in a future proceeding.” Footnotes omitted.).

<sup>13</sup> See, e.g., Report & Order ¶ 11 (instituting the overall Transparency Initiative); ¶ 18 (continuation of policy of working with applicants to correct errors rather than dismissing applications); ¶ 24



shoehorns the commercial space sector into a licensing system designed in the 1980s that assumed a dozen or so satellite launches a year.<sup>14</sup> By analogy, it seems great if I can make an appointment at the Department of Motor Vehicles (DMV), but it's of little use if I find the same long lines and forever processing times when I show up for my appointment.

**B. The Commission Should Allow Modifications of Applicants and Licenses by Notification Where Such Changes Do Not Pose a Threat to the Interference Environment**

The FNPRM “seek[s] comment on whether to expand upon the list of minor modifications that can be made by operators without prior authorization by the Commission.”<sup>15</sup> We endorsed this approach in our comments to the NRPM,<sup>16</sup> but the Commission concluded it was beyond the scope of the proceeding.<sup>17</sup> We reiterate these

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(revamping ICFS and Form 312 to flag errors in applications); ¶ 27 (accepting applications even if they propose using frequencies not in compliance with international table of allocations); ¶ 31 (eliminating rule provision prohibiting the filing of applications that could be deemed duplicative); ¶ 40 (expediting placement of application on Public Notice); ¶ 56 (expediting earth station applications to add points of communications).

<sup>14</sup> See Vice President Kamala Harris, Remarks at Chabot Space and Science Center: Supporting the Commercial Space Sector (Aug. 12, 2022), <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/08/12/remarks-by-vice-president-harris-on-supporting-the-commercial-space-sector/> (“To that end, we understand that we have got to update the rules, because they’re just simply outdated. They were written for a space industry of the last century. And when I was going through here just today, speaking with some of our innovators and looking at where the technology has grown in just the last decade, we know that we really are quite behind in terms of maximizing our collective understanding about how we will engage on the technology of today and what we can quickly and easily predict will be the technology over the next decades.”).

<sup>15</sup> FNPRM ¶ 89.

<sup>16</sup> TechFreedom Space Innovation Comments at 6-7.

<sup>17</sup> Report & Order ¶ 70 (“In response to TechFreedom’s suggestion, we note that the Commission has made similar efforts to streamline common changes, such as through C-band earth station network licensing in section 25.115(c)(2) of our rules and our unified licensing system for space stations and blanket earth stations adopted in 2020. In the 2020 order creating the unified licensing

comments here, in response to the FNRPRM. The Commission should implement a hybrid licensing approach under which the common elements (technical parameters, points of communications, etc.) of a network of earth stations could be licensed under a single license with only the individual elements (e.g., location) licensed separately. That way a modification of any of the common elements (e.g., a change in antenna parameters that did not increase possible interference) could be accomplished with a single form, or through a notification process, rather than require the filing of hundreds of nearly identical applications. This change alone would save the staff significant processing time.

More generally, the Commission should change its rules to allow for modifications via notification where the proposed changes do not negatively impact the interference environment.<sup>18</sup> Removing points of contact and modifying antenna identification information should be an easy lift.<sup>19</sup> But the Commission should look for other situations where the modification has no overall impact on the interference environment and create a notification process for such changes. By requiring licensees to certify that the change will not generate additional interference, the Commission can rescind the authorization and/or sanction the licensee if the certification is false. Unless the Commission can point to a significant number of actual interference complaints filed, it should have confidence that its

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system, the Commission declined to include individually licensed earth stations in the process, finding that adding them would “create more complexity than its streamlining benefit,” given the need for site-specific information and coordination. This reasoning remains valid. However, we may consider similar suggestions such as TechFreedom’s “hybrid licensing” approach as we gain more experience with some of the streamlining rules we have more recently put in place, such as the unified licensing system, that have not yet been widely utilized. We may consider further streamlining in a future proceeding.” (footnotes omitted)).

<sup>18</sup> See TechFreedom Space Innovation Comments at 7-8.

<sup>19</sup> FNPRM ¶ 90.

licensees are able to modify their systems as needed without creating new instances of interference.

### **C. Reliance on STA Band-Aids Is Counterproductive**

The FNPRM seeks comment on what changes would make the special temporary authority (STA) process work better.<sup>20</sup> But the Commission should ask the tougher question: “why are so many STAs being applied for in the satellite services?” According to one study, for example, for GEO satellite findings between 200 and 2021, 43.7 percent of such applications were STAs.<sup>21</sup> At that filing rate, STAs are no longer “special”; they have become a common path to licensing—the exact opposite of their intended use.

STAs are a critical safety valve to catapult emergency applications to the front of the line. For example, after the deadly Hawaii wildfires, the FCC granted numerous STAs to restore cell service there.<sup>22</sup> Other licensing systems within the FCC, such as in the microwave service, require a showing of emergency or other extraordinary need to support an STA application.

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<sup>20</sup> FNPRM ¶¶ 92-95.

<sup>21</sup> Phillip Post et al., *Analysis of Geostationary Federal Communications Commission Satellite Applications from 2000 to 2022*, 61 J. OF SPACECRAFT & ROCKETS 1, 1 (2024), <https://arc.aiaa.org/doi/10.2514/1.A35660>.

<sup>22</sup> *Almost half of Maui’s cell sites are operational in six impacted areas as communications on the island improves*, WIRELESS ESTIMATOR (Aug. 15, 2023), <https://wirelessestimator.com/articles/2023/almost-half-of-maui-s-cell-sites-are-operational-in-six-impacted-areas-as-communications-on-the-island-improves/>. Undersigned counsel recalls receiving a telephone call the evening of October 17, 1989, after the Loma Prieta earthquake forced cancellation of a World Series game. The call came from an FCC staffer who was reaching out to all counsel he knew of who might have clients needing STAs to help restore telephone and other telecommunications services in the Bay Area. STAs were filed by noon the next day and granted that afternoon.

STA may be granted in the following circumstances:

1. In emergency situations, such as natural disasters;
2. To permit restoration or relocation of existing facilities to continue communication service;
3. For a temporary, non-recurring service where a regular authorization is not appropriate;
4. In other situations involving circumstances which are of such extraordinary nature that delay in the instruction of temporary operation would seriously prejudice the public interest.<sup>23</sup>

When STAs become the norm rather than a safety valve for emergencies, that system will ultimately break down. And the fact that the Commission is considering a system whereby Commission staff must “consider[] STA extensions concurrently with initial STA applications,”<sup>24</sup> indicates that the Commission recognizes just how broken the system is.

When STAs are filed simply because of the backlog of applications and the anticipated processing time, that’s a sure signal that there’s something inherently wrong with the whole process.<sup>25</sup> The Commission has faced this problem before. In 2000, for example, the International Bureau issued a Public Notice related to Section 214 authorizations and submarine cable landing licenses, in which it was compelled to clarify the purposes of STAs.

In addition to the administrative change discussed above, the International Bureau takes this opportunity to remind applicants that it is not our practice

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<sup>23</sup> *Microwave STA*, FED. COMM’NS COMM’N (Sept. 29, 2023), <https://www.fcc.gov/wireless/bureau-divisions/broadband-division/microwave-services/microwave-sta>.

<sup>24</sup> FNPRM ¶ 95 (section heading).

<sup>25</sup> For an example of how bad the situation can get with STAs, see Uniradio Corporation, DA 06-1669 (Fed. Commc’ns Comm’n Sept. 12, 2006) (forfeiture order), <https://docs.fcc.gov/public/attachments/DA-06-1669A1.pdf> (operator argued that the FCC should rescind a \$10,000 fine for operating a transborder microwave link for which applications (including an STA application) had been filed but not granted, and where the operator alleged that it “had been assured by staff from the Commission’s International Bureau, in 2001, that the International Bureau would no longer grant special temporary authority (“STA”) to cross-border microwave operators, such as Uniradio, but that no enforcement action would be taken against these operators either.”). This is an example of how STA applications ultimately can destroy a licensing system.

to grant routinely requests for temporary authorization (STA). Our authority to grant temporary authority is governed by the Communications Act which states that the Commission may grant an STA “if it finds that there are extraordinary circumstances requiring temporary operations in the public interest and that delay in the institution of such temporary operations would seriously prejudice the public interest. . . .” *Convenience to the applicant, such as marketing considerations or the meeting of scheduled customer service dates, generally is not considered to be sufficient to meet this public interest standard. In addition, processing an application for special temporary authority can result in delays in the processing time for other applications.* We ask that applicants keep these principles in mind when considering whether to ask the International Bureau for an STA, particularly in circumstances where the authority sought would ordinarily qualify for streamlined Section 214 processing.<sup>26</sup>

Rather than exploring the root cause of why so many STAs are being filed, the FNPRM instead seeks comments on ways to make the STA process better, including allowing automatic extensions to STAs while the underlying applications remain in the processing queue.<sup>27</sup> TechFreedom does not oppose such changes, but only so long as the Commission also continues to seek ways to both reduce the number of applications that it has to process and the timeframe in which it processes them.

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<sup>26</sup> International Bureau Announces Minor Change in IBFS Code For Identifying International Telecommunications Special Temporary Authority (STA) and Reminds Applicants of Appropriate Use for STA, Fed. Commc’ns Comm’n, DA 00-1252 (June 8, 2000), <https://docs.fcc.gov/public/attachments/DA-00-1252A1.doc> (emphasis added).

<sup>27</sup> See FNPRM ¶ 95 (“Are there public interest or policy concerns that are implicated by allowing automatic extensions of STAs while an underlying application is being considered? Additionally, we seek comment on whether allowing such a process might present conflict or confusion with regard to the provisions of the Communications Act regarding STAs and the assessment of filing fees.”).

#### **D. Shot Clocks Would Force All Stakeholders to Up Their Game**

The FNPRM asks whether the Space Bureau should institute shot clocks for some applications.<sup>28</sup> The record in response to the FNPRM is again mixed, with many operators urging for some form of shot clock,<sup>29</sup> while others argue that they ultimately will not speed processing times.<sup>30</sup> While shot clocks have been controversial over the years, the Commission has determined that, in many instances, they speed processing times, often forcing agencies to revamp their review and licensing regimes.

The record here suggests that our two existing Section 332 shot clocks have increased the efficiency of deploying wireless infrastructure. Many localities already process wireless siting applications in less time than required by those shot clocks, and a number of states have enacted laws requiring that collocation applications be processed in 60 days or less. Some siting agencies acknowledge that they have worked to gain efficiencies in processing siting applications and welcome the addition of new shot clocks tailored to the deployment of small scale facilities. Given siting agencies' increased experience with existing shot clocks, the greater need for rapid siting of Small

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<sup>28</sup> FNPRM ¶¶ [98-99]. The original NPRM similarly asked about the efficacy of imposing shot clocks, ¶ 19, but the Report and Order ultimately declined to adopt such an approach. Report and Order ¶ 51 (“Consistent with several of the commenters’ views, we recognize the need to process applications promptly after accepting them for filing. Nevertheless, we decline at this time to adopt a general, one-size-fits-all shot clock for taking action on license applications.”).

<sup>29</sup> See, e.g., Comments of SpaceX in the Matter of Space Innovation, IB Docket Nos. 22-411 & 22-271, at 3 (Jan. 8, 2024), <https://www.fcc.gov/ecfs/document/101092220717008/1>.

<sup>30</sup> See, e.g., Comments of SpaceX, *id.*; Comments of the Satellite Industry Association (Jan. 8, 2024), <https://www.fcc.gov/ecfs/document/101081888705564/1> (advocating for limiting the use of shot clocks for only routine earth station application); Comments of Viasat at 2 (Jan. 8, 2024), <https://www.fcc.gov/ecfs/document/1010822550833/1> (“preserve the integrity of its decision-making process by avoiding “shot clocks” and other artificial time constraints on reaching a decision on the merits of an application.”); Comments of SES at 2 (Jan. 8, 2024), <https://www.fcc.gov/ecfs/document/101081065702492/1>, p. 2 (“attempting to define shot clock deadlines for action as discussed in the Further Notice would be unwise.” (footnote omitted)); Comments of Myriota at 3 (Jan. 8, 2024), <https://www.fcc.gov/ecfs/document/101080659311941/1> (“The Commission should adopt ‘shot clocks’ only where they can realistically be implemented.”); Comments of Amazon Web Services, Inc. at 5 (Jan. 8, 2024), <https://www.fcc.gov/ecfs/document/1010814273873/1> (limit shot clocks only to consultation with NTIA).

Wireless Facilities nationwide, and the lower burden siting of these facilities places on siting agencies in many cases, we take this opportunity to update our approach to speed the deployment of Small Wireless Facilities.<sup>31</sup>

The Commission established shot clocks for localities reviewing small wireless facilities, notwithstanding the finding that these localities are sometimes faced with complex applications.<sup>32</sup> If municipalities are expected to review and decide on small wireless facilities within 60 days, even though many lack engineering expertise, why wouldn't the FCC impose the same rules on itself, given the depth of engineering expertise within the Commission? Further, given how routine STAs have become, and how many have been granted for the satellite services, isn't that a strong indicator that processing applications under a shot clock is possible for the FCC?

What shot clocks do, more than anything else, is make all stakeholders more responsive. Traditionally, the clock starts when the application is submitted, but can be paused in the event the FCC determines that the application is not materially complete.<sup>33</sup> Thus, any applicant wanting quick action will strive to present to the FCC staff an application that is as complete as possible. A shot clock combined with other efforts of the Space Bureau

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<sup>31</sup> Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, Declaratory Ruling and Third Report and Order, 33 FCC Rcd 7705, ¶ 104 (2018) (footnotes omitted).

<sup>32</sup> *Id.* ¶ 105, n. 299 (“For instance, while the City of Chicago opposes the shot clocks adopted here, we note that the City has also stated that, “[d]espite th[e] complex review process, involving many utilities and other entities, CDOT on average processed small cell applications last year in 55 days.”).

<sup>33</sup> *See, e.g.*, Small Wireless Facility Order at ¶ 141 (“In the 2014 Wireless Infrastructure Order, the Commission clarified, among other things, that a shot clock begins to run when an application is first submitted, not when the application is deemed complete. The clock can be paused, however, if the locality notifies the applicant within 30 days that the application is incomplete.”) (citing Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, Report & Order, 29 FCC Rcd 12865, 12966, 12973, ¶¶ 243, 270 (2014), *aff'd*, *Montgomery County v. Fed. Commc'ns Comm'n*, 811 F.3d 121 (4th Cir. 2015)).

in its Transparency Initiative to provide better guidance on applications would help address the filing of incomplete applications—just to get something on file—and therefore both decrease staff burdens and speed processing times.

Shot clocks also can go a long way toward stemming the tide of objections predominantly designed to slow down application processing. Proceedings subject to shot clocks are less prone to procedural mischief designed to delay the inevitable grant of a license. We raised this issue in our comments to the NPRM in this proceeding and reiterate it here.<sup>34</sup> Under a shot clock system, the FCC may be more inclined to dismiss late-filed informal complaints that lack a compelling justification.<sup>35</sup> One particular subset of such complaints that often abuse the informal complaint system are those based on claims that a Commission decision would have an adverse environmental impact under Section 1.1307.<sup>36</sup> As we pointed out in previous comments, the environmental complaint related to SpaceX's lowering part of its Starlink fleet wasn't filed until eight months after the application was filed.<sup>37</sup> Having a shot clock in place would have forced stakeholders to act more quickly raise

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<sup>34</sup> TechFreedom Space Innovation Comments at 8-9 (“Often application processing is slowed because entities file late comments or wait months to submit additional information without a showing justifying the delay. All too often, the Commission will note the lateness of the filing but nonetheless address the complaint on its merits.” (footnotes omitted)).

<sup>35</sup> See *WAIT Radio v. Fed. Commc’ns Comm’n*, 418 F.2d 1153, 1157 (D.C. Cir. 1969) (“Presumptions of regularity apply with special vigor when a Commission acts in reliance on an established and tested agency rule. An applicant for waiver faces a high hurdle even at the starting gate. ‘When an applicant seeks a waiver of a rule, it must plead with particularity the facts and circumstances which warrant such action.’” (quoting *Rio Grande Family Radio Fellowship, Inc. v. Fed. Commc’ns Comm’n*, 406 F.2d 664 (1968))).

<sup>36</sup> 47 C.F.R. § 1.1307.

<sup>37</sup> TechFreedom Space Innovation Comments at 9, n. 26.



their concern rather than wait months to file an informal objection that then took the FCC staff an additional four months to resolve.

That complaint and others like it have at their root the claim that the National Environmental Policy Act (NEPA) requires the FCC to conduct a full environmental assessment of the impact of a satellite system on the space environment, rather than rely, as the FCC consistently has done, on a categorical exclusion to NEPA, undergirded by an evaluation of the application under the FCC's orbital debris rules.<sup>38</sup> That hasn't stopped others in this proceeding from arguing that the FCC can't adopt *any* rules that speed up processing and must subject applications to full "NEPA compliance."<sup>39</sup>

As we've pointed out in two amicus briefs, however, at least as to the space segment of satellite systems, NEPA simply does not apply.<sup>40</sup> Congress knows how to write laws that are meant to apply extraterritorially, but NEPA contains no such language. On the contrary, the statute says that it applies only to the "human environment" and the "biosphere." The absence of a clear reference to space is especially telling when we consider the year NEPA was passed by Congress: 1969. It was the height of the Space Race. The United States had just joined the Outer Space Treaty and landed on the Moon. Never in American history had

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<sup>38</sup> See Brief for Fed. Commc'ns Comm'n in Int'l Dark-Sky Ass'n v. Fed. Commc'ns Comm'n (D.C. Cir. Ct. App. 2023) (No. 22-1337), <https://docs.fcc.gov/public/attachments/DOC-394413A1.pdf>.

<sup>39</sup> See Comments of Healthy Heavens Trust Initiative in the Matter of Space Innovation, IB Docket Nos. 22-411 & 22-271 (Oct. 17, 2023), <https://www.fcc.gov/ecfs/document/1017862113904/1>.

<sup>40</sup> Brief of TechFreedom as Amicus Curiae Supporting Appellee in Int'l Dark-Sky Ass'n v. Fed. Commc'ns Comm'n (D.C. Cir. Ct. App. 2023) (No. 22-1337), <https://techfreedom.org/wp-content/uploads/2023/06/TF-22-1337-International-Dark-Sky-Association-Inc.-v.-FCC.pdf>. The D.C. Circuit failed to reach the question of whether NEPA applies to outer space in *ViaSat, Inc. v. Fed. Commc'ns Comm'n*, 47 F.4th 769 (D.C. Cir. 2022), dismissing the appeal on procedural (standing) grounds. The second case, *International Dark Skies Association v. FCC*, remains pending.

Congress been more aware of outer space—but NEPA makes no mention of it.<sup>41</sup> So long as the Commission’s rules lack a shot clock or other procedural limitations on the ability of parties to raise these types of claims and draw out the review process, FCC staff will never be able to operate at the “speed of relevance”<sup>42</sup>—i.e. being able to keep up with the pace of innovation in the commercial satellite sector.

### III. Conclusion

The Space Bureau is making progress in its Transparency Initiative. But minor tweaks to the process won’t solve the problems facing the Commission in keeping up with the demand for licenses in the space services. Instead, the Commission needs to grapple with fundamental changes that are necessary to convert a system that was designed to process a few dozen applications a year into one that can review and grant thousands of them. This will not be easy, but it is necessary, lest the United States lose its competitive edge in commercial space systems and satellite services.

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<sup>41</sup> Brief of TechFreedom, *id.*, at 6.

<sup>42</sup> The term “speed of relevance” is credited to then-Secretary of Defense James Mattis, who in the Defense Department’s 2018 National Defense Strategy “challenged the Department of Defense to throw off the shackles of inertia created by unwieldy approval chains, wasteful use of resources, and an aversion to risk to deliver faster adaptations to new ways of war.” See Joe Dransfield, *How Relevant is the Speed of Relevance?*, THE STRATEGY BRIDGE (Jan. 13, 2020), <https://thestrategybridge.org/the-bridge/2020/1/13/how-relevant-is-the-speed-of-relevance-unity-of-effort-towards-decision-superiority-is-critical-to-future-us-military-dominance>. See also DEP’T OF DEF., NATIONAL DEFENSE STRATEGY (2018), <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>.

TechFreedom looks forward to continuing to participate in this and other Commission proceedings to ensure that the United States remains the “go to” jurisdiction for space spectrum licensing, which in turn will allow the United States to craft rules for the cis-lunar economy that reflect our ideals and freedoms.

Respectfully submitted,

\_\_\_\_\_/s/\_\_\_\_\_  
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February 6, 2024