

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:
Amendment of Part 2 of the Commission’s
Rules for Federal Earth Stations
Communicating with Non-Federal Fixed
Satellite Service Space Stations

ET Docket No. 13-115

&

Wireless Telecommunications Bureau Seeks
Comment on Mechanism and Criteria for
Selecting Space Launch Frequency
Coordinator

WT Docket 24-687

**COMMENTS OF THE SOCIETY OF BROADCAST ENGINEERS, INC.
REGARDING COMMERCIAL SPACE LAUNCH COORDINATION PROCEDURES
AND THIRD-PARTY FREQUENCY COORDINATOR SELECTION**

The Society of Broadcast Engineers, Inc. (“SBE”)¹ submits these comments in response to the Commission’s requests for stakeholder input regarding several aspects of the new commercial Space Launch Service (the “Service”), including: (1) the frequency coordination procedures applicable to the Service; and (2) the selection of a third-party coordinator for the Service.²

SBE appreciates the Commission’s efforts thus far to develop a viable licensing and frequency coordination framework to benefit all authorized users in the 2025-2110 MHz band (the

¹ SBE is the association for broadcast engineers and multimedia technology professionals with over 4,500 members worldwide.

² *Wireless Telecommunications Bureau Seeks Comment on Licensing and Coordination Procedures for the Space Launch Service*, Public Notice, ET Docket No. 13-115, DA 24-1232 (Dec. 6, 2024) (“Coordination Public Notice”); *Wireless Telecommunications Bureau Seeks Comment on Mechanism and Criteria for Selecting Space Launch Frequency Coordinator*, Public Notice, WT Docket No. 24-687, DA 24-1230 (Dec. 6, 2024) (“Coordinator Public Notice”).

“band”).³ As the designated frequency coordinator for the 2025-2110 MHz band—and in light of SBE’s prior coordination experience in that portion of the band⁴—SBE is uniquely positioned to provide insight regarding additional coordination information and procedures that may better facilitate shared use of the band. SBE therefore offers the following comments and suggestions regarding the data submission and procedural requirements set forth in the Coordination Public Notice and the Coordinator Public Notice.

I. In Addition to the Data Submission and Procedural Requirements Set Forth in the Coordination Public Notice, the Commission Should Require that Coordination Requests Contain Additional Data, and the Commission Must Make Clear that Coordination is Required for Every Launch, that Each Coordination Is Only Valid for Specific Window of Time, and that Any Updates to Launch Particulars and Timing Should be Submitted to Coordinators as Soon as Reasonably Practicable.

SBE generally agrees with and supports the various data submission and procedural requirements proposed by the Coordination Public Notice. However, based on SBE’s prior coordination experience in the band, SBE believes requiring coordination requests to contain several additional pieces of data, as well as several additional clarifications regarding coordination procedures, are warranted. Specifically, SBE respectfully requests that space launch coordination requests be required to include both the height above ground to the antenna radiation center when the antenna is pointed along the horizon, as well as the projected space launch tracking arc path. SBE further respectfully requests that the Commission make clear that every space launch event

³ SBE takes no position on the other bands addressed in the Coordination Public Notice and Coordinator Public Notice.

⁴ See, e.g., 47 C.F.R. § 2.106, n. US92 (setting forth frequency coordination requirement for military services use of 2025-2110 MHz band to ensure that such use “shall not cause harmful interference to, nor constrain the deployment and use of the band by, the Television Broadcast Auxiliary Service, the Cable Television Relay Service, or the Local Television Transmission Service”); *Allocation of Spectrum for Non-Fed. Space Launch Operations Amend. of Part 2 of the Commission’s Rules for Fed. Earth Stations Communicating with Non-Fed. Fixed Satellite Serv. Space Stations; & Fed. Space Station Use of the 399.9 400.05 Mhz Band*, Second Report & Order, 38 FCC Rcd 9029, 9073 (2023) (“Second R&O”) (discussing SBE involvement in same.)

will require coordination (i.e., that blanket coordination is not permissible), that coordination for each event is only valid for a specific period of time, and that any changes to launch particulars and timing should be submitted to coordinators as soon as reasonably practicable.

In terms of “additional data that should be required for coordination requests,”⁵ in SBE’s experience, knowing both (1) the height above ground to the radiation center when the antenna is pointed along the horizon, and (2) the projected tracking arc path enables more accurate and comprehensive coordination. When taken together, these data allow the frequency coordinator to better anticipate potential interference between the proposed space launch and in-band electronic newsgathering (“ENG”) receive sites located along the projected tracking arc path. Within the framework outlined in the Coordination Public Notice, the height above ground to the radiation center when the antenna is pointed along the horizon could easily be included in the “[f]ixed and base station details” of the initial registration of launch sites (and, therefore, the coordination data section encompassing “[p]reviously registered itinerant mobile stations to be used in the launch and corresponding details”),⁶ and the tracking arc path could be included as part of “[t]ransmitter characteristics for each transmit station (center frequency).”⁷

Turning to coordination procedures, SBE’s prior coordination experience in the band suggests that all authorized users would benefit from several clarifications regarding the process outlined in the Coordination Public Notice. First, due to the unique nature of each space launch and the existing heavy use of the band by mobile—i.e., variable—ENG and other uses,⁸ the

⁵ *Coordination Public Notice*, at 9.

⁶ *See id.* at 4, 8.

⁷ *Id.* at 8.

⁸ *See, e.g.*, Comments of the Society of Broadcast Engineers, Inc., *Allocation of Spectrum for Non-Fed. Space Launch Operations; Amend. of Part 2 of the Commission’s Rules for Fed. Earth Stations Communicating with Non-Fed. Fixed Satellite Serv. Space Stations; & Fed. Space*

Commission must make clear that each space launch event requires coordination. Put differently, the Second R&O should not be read to permit blanket coordination but to instead require meaningful, objective interference analysis for every event.⁹ Under all circumstances the Second R&O requires the involvement of the designated frequency coordinator to evaluate the interference implications of a proposed launch event—regardless whether that involvement is to coordinate an initial launch or to instead verify that prior coordination parameters will suffice for a subsequent launch.¹⁰ This is crucial for at least two reasons: (1) as SBE and others have previously explained, the scope and particulars of BAS use in the band is often “unpredictable” due to mobile ENG deployments to cover breaking news and other special, one-off events, thus typically requiring event-specific evaluation;¹¹ and (2) it would make little sense for commercial space launch users, particularly given their secondary status in the band, to have carte blanche to decide whether a prior coordination for a specific launch would continue to be sufficient for another of the space launch user’s subsequent events, and without any input or evaluation from another party.

Second, the Commission should make clear that each coordination is only valid for a specific window of time, either as specifically established by rule or as evaluated and set for each launch by the coordinator as part of the coordination process. In this regard, SBE’s experience performing coordination in the band thus far suggests that a one-week coordination validity window is typically appropriate. Such a week-long window facilitates the highest and best uses of

Station Use of the 399.9 400.05 Mhz Band, ET Docket No. 13-115, ¶ 5 (Aug. 2, 2021) (“SBE Space Launch Comments”).

⁹ See *Second R&O*, 38 FCC Rcd at 9073-74; *Coordination Public Notice*, at 10.

¹⁰ See *id.* (explaining that even when preparing a launch based in part on prior coordination the launch cannot be authorized unless the “frequency coordinator” can “perform the technical calculations” necessary to show that the proposed launch will meet the applicable interference protection criteria).

¹¹ *E.g.*, SBE Space Launch Comments, at 9.

the band by all authorized users because it affords a commercial space launch operator the flexibility to be able to, within reason, work around any unanticipated issues or changed circumstances that may arise regarding the proposed space launch, while simultaneously ensuring that the band's other authorized users are afforded certainty regarding the general time period in which the coordinated launch will occur.

Finally, and relatedly, commercial space launch users should be required to provide to the coordinator any updates to launch particulars and timing information as soon as reasonably practicable once they are known. By way of example, under current coordination procedures in the band, several days prior to each planned launch SBE typically receives "Launch Notifications" outlining the particulars of the launch, such as launch windows, orbital parameters, and event sequencing. When those launch particulars change, SBE promptly receives updated Launch Notifications so that all authorized band users can be apprised of—and better plan for—the anticipated launch.¹² SBE respectfully requests that the same protocol apply here, given that it both facilitates better, more particularized coordination timing within the general windows in which launches are planned to occur and harmonizes coordination procedures across all authorized users.

¹² For the avoidance of doubt, such changes and updates are distinct from substantive "changes to launch parameters" that would trigger a requirement to perform an "updated coordination." *See* Coordination Public Notice, at 13. Under SBE's proposal in these comments, successful coordination would afford a licensee a specific window of time in which to perform the launch at its coordinated parameters. As the launch window approaches, Commercial space launch operators would then provide the coordinator with a Launch Notification, to be updated and redistributed as necessary, setting forth greater specifics regarding the proposed launch. However, if something such as a fundamental technical aspect of the launch were to change, the third-party frequency coordinator may determine that updated coordination is required—i.e., an updated Launch Notification would be insufficient.

II. Applicants for Third-Party Space Launch Frequency Coordinator Should Describe Relevant Dispute Resolution Experience and How They View the Scope of the Position.

As the designated frequency coordinator for BAS operations in the 2025-2110 MHz band,¹³ SBE places great importance on ensuring that whomever is selected as the third-party space launch coordinator has the ability and temperament to successfully administer coordination amongst the various stakeholders in the band. In this regard, SBE appreciates the selection mechanism and minimum qualifying criteria set forth in the Coordinator Public Notice, and generally agrees with the Commission's proposed selection approach.

In addition to the minimum qualifying criteria already specified in the Coordinator Public Notice, SBE respectfully suggests that any applicant for the position be required to describe relevant experience resolving disputes between industry stakeholders, as well as the applicant's view of the scope of its role as third-party coordinator. SBE believes this information may assist the Commission in evaluating competing applications for this critical and relatively unique role. In particular—and as the Commission itself stated in the Coordination Public Notice—the primary task for the third-party coordinator in this particular section of the band will be to “facilitate” coordination between primary contact points for the various authorized band users.¹⁴ This “coordinator” role will therefore likely be different than, for instance, SBE's role as the coordinator for BAS operations in the band, insofar as the third-party coordinator will often be a go-between for various users, rather than the entity performing the actual, technical frequency coordination itself. Consequently, insight into an applicant's conception of its role in the overall frequency

¹³ See, e.g., *Second R&O*, 38 FCC Rcd at 9073.

¹⁴ *Coordination Public Notice*, at 6 (“[I]n the Second Report and Order, the Commission adopted a post-license grant coordination regime *to be facilitated by* a third-party space launch frequency coordinator.” (emphasis added)).

coordination process in the band, as well as information regarding relevant dispute-resolution experience, may prove useful.

To be clear, SBE approaches—and will continue to approach—each coordination request with the goal of finding a way to successfully coordinate between authorized users.¹⁵ SBE raises these points only because the third-party space launch coordinator will be serving as a go-between for SBE and those seeking to conduct commercial space launches in the 2025-2110 MHz portion of the band, and thus all parties to the frequency coordination process will need to be sensitive to the roles played by each involved entity, as well as, by way of example, the overall frequency coordination communication structure, timelines, and shared goals.

Finally, and perhaps most fundamentally, SBE looks forward to a long-term productive working relationship with all stakeholders in the space launch coordination process.

Conclusion

For all the foregoing reasons, SBE respectfully requests that the Commission adopt the above-described additional coordination data submission and procedural requirements, as well as solicit the above-described additional information from applicants for the third-party coordinator position. SBE looks forward to working with all stakeholders in the band to facilitate coordination and sharing amongst all authorized users.

¹⁵ *See, e.g.*, SBE Space Launch Comments, at 6 (“The role of the SBE local market frequency coordinator, according to longstanding SBE policy, is to act as an information disseminator and database administrator, and an entity that facilitates licensee-to-licsee contact, compatible sharing, and accommodation of all authorized users.” (emphasis in original)).

Respectfully submitted,

THE SOCIETY OF BROADCAST ENGINEERS, INC.

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