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

In the Matter of)	
Expanding Flexible Use of the 3.7 to 4.2 GHz Band))	GN Docket No. 18-122

ORDER DENYING STAY PETITION

Adopted: July 8, 2020 Released: July 8, 2020

By the Chief, Wireless Telecommunications Bureau:

INTRODUCTION I.

On June 17, 2020, PSSI Global Services, LLC filed a Request for Stav¹ of the Commission's Report and Order and Order of Proposed Modification in the above-captioned proceeding.² We deny the Stay Request.

This is the second request for a stay of the 3.7 GHz Report and Order. We denied the first on June 10, 2020.3 The June 10 Stay Denial sets forth the relevant background. PSSI is an earth station operator that receives, but is not licensed to transmit, radio communications via satellite in the Cband (3.7-4.2 GHz).⁴ PSSI holds licenses to transmit in the 5.925-6.425 GHz band, which is "paired" with the C-band, and the Ku-band.⁵ PSSI operates a fleet of "C-band and Ku-band vehicles" and relies on purchase of C-band and 5.925-6.425 GHz band satellite capacity on an "occasional use" or part-time basis

¹ Request for Stay of PSSI Global Services, LLC (PSSI), GN Docket No. 18-122 (filed June 17, 2020) (Stay Request). Comments were filed on June 25 and PSSI filed a reply on June 31, 2020.

² Expanding Flexible Use of the 3.7-4.2 GHz Band, GN Docket No. 18-122, Report and Order and Order of Proposed Modification, 35 FCC Rcd 2343 (2020) (3.7 GHz Report and Order). PSSI's challenge to the 3.7 GHz Report and Order is pending before the United States Court of Appeals for the District of Columbia Circuit. Notice of Appeal, PSSI Global Services, L.L.C. v. FCC, No. 20-1142 (D.C. Cir. filed Apr. 28, 2020); Petition for Review, PSSI Global Services, L.L.C. v. FCC, et al., No. 20-1143 (D.C. Cir. filed Apr. 28, 2020).

³ Expanding Flexible Use of the 3.7 to 4.2 GHz Band, Order Denying Stay Petition, DA 20-609, 2020 WL 3166235 (WTB June 10, 2020) (June 10 Stay Denial); see Joint Petition for Stay of Report and Order and Order of Proposed Modification Pending Judicial Review of ABS Global Ltd., Empresa Argentina de Soluciones Satelitales S.A., Hispamar Satélites S.A., and Hispasat S.A. (collectively, the Small Satellite Operators), GN Docket No. 18-122 (filed May 15, 2020). The D.C. Circuit then denied a stay request by the same entities, whose challenges to the 3.7 GHz Report and Order are consolidated with PSSI's. Order, PSSI Global Services, L.L.C. v. FCC, No. 20-1142 (D.C. Cir. June 23, 2020).

⁴ See 3.7 GHz Report and Order, 35 FCC Rcd at 2406, paras. 147-48.

⁵ See id. at 2347, para. 8 ("[T]he 3.7-4.2 GHz band (space-to-Earth or downlink) is paired with the 5.925-6.425 GHz band (Earth-to-space or uplink), and collectively these bands are known as the 'conventional C-band.' Domestically, space station operators use the 3.7-4.2 GHz band to provide downlink signals of various bandwidths to licensed transmit-receive, registered receive-only, and unregistered receive-only earth stations throughout the United States.").

to provide coverage of live sporting and other events.6

3. In determining that repurposing part of the C-band to support fifth-generation (5G) wireless broadband networks would serve the public interest, the Commission found that incumbent space station operators "will be able to maintain the same services in the upper 200 megahertz as they are currently providing across the full 500 megahertz of C-band spectrum." Satellites "typically have 24 transponders, each with a bandwidth of 36 megahertz. Thus, the 24 transponders on a satellite use 864 megahertz of spectrum, or 364 megahertz more than the 500 megahertz available. "Spectrum reuse" effectively gives space station operators "more capacity than the spectrum in their licenses would provide without these techniques, and this will continue to be the case when they transition to the upper 200 megahertz of the band." To further improve spectral efficiency, space station operators "will be able to take advantage of new technologies" "such as improved data compression and modulation techniques." "10

II. DISCUSSION

- 4. To obtain a stay, PSSI must show that: (1) it is likely to prevail on the merits; (2) it will suffer irreparable harm absent grant of the stay; (3) other parties will not be harmed if the stay is granted; and (4) the public interest favors grant of the stay.¹¹ PSSI falls far short of the required showing.
- 5. *Irreparable Harm.* PSSI alleges two types of harm: (1) scarcity of satellite capacity for PSSI's occasional use due to the repurposing of the lower portion of the C-band; and (2) potential interference and equipment damage from wireless broadband service in the repurposed spectrum.¹² These alleged harms are not imminent, certain, or severe enough to warrant a stay.¹³
- 6. There is no risk of immediate harm. The D.C. Circuit has established an expedited schedule for considering PSSI's challenge to the *3.7 GHz Report and Order* under which briefing will be complete on September 16, 2020, and argument will be held at the first available opportunity thereafter. Thus, the court of appeals will be able to dispose of PSSI's challenge long before space station operators are scheduled to clear the lower portion of the C-band and wireless broadband providers can begin to operate there. Space station operators will continue to have access to the entire 500 megahertz of C-band

⁶ See Stay Request at 3, 5-6; see 47 CFR § 25.103 ("the terms 'Ku band' and 'conventional Ku band' refer to the 11.7-12.2 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space) bands"). The Commission throughout this proceeding referred to the 3.7-4.2 GHz band specifically as the "C-band," whereas PSSI's Stay Request refers to both the 3.7-4.2 GHz and the 5.925-6.425 GHz bands as the "C-band." We use the Commission's nomenclature here.

⁷ 3.7 GHz Report and Order, 35 FCC Rcd at 2353, para. 20.

⁸ Id. at 2348, para. 9. A transponder receives and transmits radio signals. June 10 Stay Denial at *10, n.89.

⁹ 3.7 GHz Report and Order, 35 FCC Rcd at 2404, para.144 ("adjacent transponders overlap, and self-interference is avoided by using opposite polarizations").

¹⁰ Id.

¹¹ Washington Metro. Transit Comm'n v. Holiday Tours, Inc., 559 F.2d 841, 843 (D.C. Cir. 1977); Virginia Petroleum Jobbers Ass'n v. FPC, 259 F.2d 921, 925 (D.C. Cir. 1958) (per curiam).

¹² Stay Request at 15-17.

¹³ See Mexichem Specialty Resins, Inc. v. EPA, 787 F.3d 544, 555 (D.C. Cir. 2015) (irreparable harm must be "'both certain and great,' 'actual and not theoretical,' 'beyond remediation,' and 'of such *imminence* that there is a clear and present need for equitable relief to prevent irreparable harm."") (quoting *Chaplaincy of Full Gospel Churches v. England*, 454 F.3d 290, 297 (D.C. Cir. 2006) (emphasis in original).

¹⁴ PSSI Global Services, L.L.C. v. FCC, Order, No. 20-1142 at 1-2 (D.C. Cir. July 2, 2020).

spectrum until December 5, 2021, and to 380 megahertz until December 5, 2023.¹⁵ There can be no threat of interference or equipment damage to PSSI from wireless broadband service in the lower portion of the C-band until *after* these deadlines (and only in geographic areas that already have been cleared). In sum, PSSI's court challenge is likely to be resolved long before the alleged harms occur.¹⁶

- 7. PSSI argues that satellite capacity for occasional use is scarce already, and that the post-auction C-band transition, for which preparations are underway, "will only accelerate" that scarcity. But PSSI identifies no instance in which it was unable to obtain needed satellite capacity for its services. Best also alleges several incidents of interference from terrestrial wireless operations in 2019. But PSSI does not claim that the incidents, which preceded the 3.7 GHz Report and Order, resulted from the Commission's decision to relocate satellite operators in the C-band. PSSI further argues that, absent a stay, future harm "will be a fait accompli" because the auction and transition "cannot be undone except with great difficulty." We rejected the same argument in the June 10 Stay Denial, 22 and we do so again here for the same reasons.
- 8. PSSI's injuries are also speculative. The Commission found that space station operators will be able to provide, and that earth station operators will be able to receive, the same level of service during and after the transition,²³ and the two largest space station operators expect to "continue to provide needed [occasional use] capacity even after the C-band transition has been completed."²⁴ Space station operators "are likely to have fewer total transponders after the transition," but the reduction is likely to be

¹⁵ 3.7 GHz Report and Order, 35 FCC Rcd at 2413-14, para. 170. December 5, 2021 is the Phase I Accelerated Relocation Deadline to clear 100 megahertz of C-band spectrum for flexible use (3.7-3.8 GHz) plus a 20 megahertz guard band (3.8-3.82 GHz), and December 5, 2023 is the Phase II Accelerated Relocation Deadline to clear the remaining 180 megahertz for flexible use (3.8-3.98 GHz) plus a 20 megahertz guard band (3.98-4.0 GHz). *Id.*

¹⁶ See Navajo Nation v. Azar, 292 F. Supp. 3d 508, 513 (D.D.C. 2018) (no irreparable harm where alleged injuries would not arise immediately and could be "mitigated by resolving this case on the merits according to an expedited litigation schedule, which the government suggests and which the Court intends to set").

¹⁷ Stay Request at 15-16.

¹⁸ PSSI's contention that two of its projects were "suspended after PSSI informed our customers regarding" the *3.7 GHz Report and Order*, *id.* at 11, is too vague to support a finding of irreparable harm. *See Cardinal Health Inc. v. Holder*, 846 F.Supp.2d 203, 213 (D.D.C. 2012) (no irreparable harm where declaration "state[d] in vague terms that rerouting drug shipments ... would 'require substantial effort and resources," but did "not quantify the anticipated costs of rerouting the shipments").

¹⁹ Stay Request at 12; *id.*, Exh. 1 (Declaration of Robert C. Lamb) at 16.

²⁰ See Wisc. Gas Co. v. FERC, 758 F.2d 669, 674 (D.C. Cir. 1985) (irreparable injury must "directly result from the action which the movant seeks to enjoin").

²¹ Stay Request at 17.

²² See June 10 Stay Denial at *5-6, paras. 9-11.

²³ See 3.7 GHz Report and Order, 35 FCC Rcd at 2406, para. 148.

²⁴ Letter from Brian D. Weimer, Counsel to SES Americom, Inc. (SES), to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122 at 1 (June 17, 2020) (SES June 17 *Ex Parte*); Intelsat License LLC (Intelsat) Comments on PSSI Request for Stay in GN Docket No. 18-122 at 3-4 (June 25, 2020) (Intelsat Comments) (Intelsat transition plan "recognizes and allocates dedicated capacity ... equal to the forecasted peak [occasional use] demand based on conversations with customers.").

offset by increased spectral efficiency and other factors.²⁵ "And if demand ... does begin to outpace supply, satellite operators may be able to launch additional satellites to add more transponders."²⁶ PSSI's capacity concerns are also based on market forces—such as the challenge of competing with higher-profit customers for available capacity—independent of the 3.7 GHz Report and Order.²⁷

PSSI's interference and equipment damage concerns likewise are speculative. "[F]ilters have been used in earth stations around the world to mitigate interference for many decades,"28 The 3.7 GHz Report and Order provides for filters to prevent interference to earth stations from wireless broadband service in the lower portion of the C-band.²⁹ PSSI complains that "no filtering solution yet exists" for the equipment that it uses and that it will have difficulty avoiding proximity to 5G wireless base stations when it covers live events because the Commission did not require registration of base stations to facilitate coordination.³⁰ PSSI's complaints are unpersuasive. PSSI has over a year to arrange for compatible filters for its equipment. Moreover, the costs to develop, test, and install filters for incumbent earth stations are eligible for reimbursement.³¹ Earth station operators already coordinate with other C-band users (and adjacent-band terrestrial wireless operators) to avoid interference.³² The only difference after the post-auction transition will be the need to coordinate with new 5G wireless broadband licensees in the lower 280 megahertz of the C-band.³³ PSSI can identify the new licensees using the Commission's Universal Licensing System database. PSSI also can avoid problems by, for example, not parking its vehicles too close to base stations (which generally are not hard to locate) and using radiofrequency scanners to identify nearby 5G operations before turning on its equipment. We agree with Intelsat's argument that we can expect PSSI and other occasional-use earth station operators "to take reasonable measures to assess the environment prior to set up and to select a location in which [they] can eliminate the risk of interference."34

²⁵ June 10 Stay Denial at *10, para. 21; see SES June 17 Ex Parte at 1-2. For example, with technology upgrades, SES has determined that it will be able to provide the same or better post-transition service with seven and one-half transponders to a customer that now requires 11. SES Accelerated C-band Transition Implementation Plan, GN Docket No. 18-122 at 9 (June 19, 2020).

²⁶ June 10 Stay Denial at*10, para. 21.

²⁷ See Stay Request, Exh. 1 at 14 (profits from sales of full-time capacity are "traditionally at least double that from [occasional use]" and "will inevitably reduce even further the amount of available capacity for overall [occasional use] programming."); see supra note 25 and accompanying text.

²⁸ 3.7 GHz Report and Order, 35 FCC Rcd at 2477, para. 369; see id. at 2476-78, paras. 366-71 (establishing minimum filter performance specifications to protect earth stations from "receiver blocking" due to high-powered emissions in an adjacent spectrum band).

²⁹ *Id.* at 2414, 2426-27 paras. 171, 201.

³⁰ Stay Request at 12-13; *see* Intelsat Comments at 7 ([A] filter "cannot completely counteract the effects of a future 5G base station operating right next to one of PSSI's transportable earth stations, in which case the filter could become oversaturated."). PSSI warns that it "risks burning out its" equipment "as soon as the" equipment "is powered on" because of "the inevitable proximity to" 5G wireless operations. Stay Request at 12.

³¹ 3.7 GHz Report and Order, 35 FCC Rcd at 2426-27, para. 201. PSSI also "may qualify to . . . elect a lump sum payment that will enable it to obtain filters." June 10 Stay Denial at *10, para. 21.

³² See Intelsat Comments at 8 ("PSSI today uses prior coordination – often performed on an expedited basis – in its use of uplink frequencies shared with Fixed Service operations in the band.").

³³ See 3.7 GHz Report and Order, 35 FCC Rcd at 1407, n.421 (Earth station operators like PSSI can use "methods of responding to temporary, targeted spectral needs on a negotiated, non-interfering basis, such as through the use of Special Temporary Authority.").

³⁴ Intelsat Comments at 7.

- 10. In addition, PSSI has not shown that its alleged injuries rise to the level of irreparable harm. "Recoverable monetary loss may constitute irreparable harm only where the loss threatens the very existence of the movant's business." PSSI contends that occasional use of C-band satellite capacity is critical to its business, but PSSI also uses the Ku-band, and "can utilize AT&T's expansive fiber network to offer worldwide connectivity." PSSI provides no information that would permit evaluation of the economic effect of loss of C-band satellite capacity on its bottom line.
- 11. Likelihood of success on the merits. PSSI advances three merits arguments, none of which is likely to succeed. First, PSSI contends that the upcoming C-band auction violates a statutory prohibition against auctioning spectrum "used for the provision of international or global satellite communications services." The D.C. Circuit squarely rejected that argument, holding that the statute is ambiguous and deferring to the Commission's reasonable interpretation that it forbids auctioning spectrum for global or international satellite use, but not for use by domestic, non-satellite-based communications service providers. The Commission relied on that same interpretation here. 40
- 12. PSSI next contends that the Commission exceeded its license modification authority under section 316 of the Communications Act by limiting PSSI's interference protection rights to the upper portion of the C-band.⁴¹ The Small Satellite Operators advanced a similar argument in their unsuccessful stay request, and PSSI's argument fails largely for the same reason.⁴² Earth stations, including those operated by PSSI, "will continue to receive the same level of service . . . and will remain able to provide the same services to their own customers as before."⁴³ The Commission's limitation of PSSI's interference protection rights to the upper 200 megahertz of the C-band followed from the determination that limiting space station operators' licenses to transmit to that portion of the C-band would serve the public interest.⁴⁴
- 13. Finally, PSSI argues that the Commission did not provide notice that it would modify PSSI's right to transmit radio communications in the 5.925-6.425 GHz band in the 3.7 GHz Report and Order. The Commission did not modify PSSI's right to transmit in the 5.925-6.425 GHz band. It merely limited PSSI's interference protection rights in the 3.7-4.2 GHz band. And even if the Commission *indirectly* modified PSSI's right to transmit in the 5.925-6.425 GHz band (which it did not)

³⁵ Wisc. Gas, 758 F.2d at 674. PSSI has not shown that the alleged harms are irreparable. See supra notes 26-27 and accompanying text.

³⁶ Letter from Stephen Díaz Gavin, Counsel to PSSI, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122, Attach. 2 at 2 (Feb. 22, 2019); Stay Request at 3, 5-6.

³⁷ See Cardinal Health, 846 F.Supp.2d at 213 (no irreparable harm where movant "offer[ed] no concrete estimates regarding lost revenues, customers, or market share" that would result absent a stay).

³⁸ Open-market Reorganization for the Betterment of International Telecommunications Act, Pub. L. No. 106-80, § 647, 114 Stat. 48 (2000) (ORBIT Act); Stay Request at 17-20.

³⁹ Northpoint Technology, Ltd. v. FCC, 414 F.3d 61, 72-73 (D.C. Cir. 2005).

⁴⁰ 3.7 GHz Report and Order, 35 FCC Rcd at 2373, paras. 62-63.

⁴¹ Stay Request 20-25.

⁴² See Joint Petition for Stay at 10-12.

⁴³ 3.7 GHz Report and Order, 35 FCC Rcd at 2406, para. 148.

⁴⁴ *See id.* at para. 147.

⁴⁵ Stay Request at 25-26.

by limiting PSSI's interference protection rights in the 3.7-4.2 GHz band,⁴⁶ PSSI had notice that the Commission might limit PSSI's interference protection rights, as evidenced by its extensive participation in the proceedings leading to the 3.7 GHz Report and Order.⁴⁷

14. Balance of equities. Finally, PSSI has not met its burden of showing that the public interest militates in favor of a stay and that others would not be harmed. We need not repeat the *June 10 Denial*'s discussion of the last two stay factors.⁴⁸ PSSI's sole argument regarding these factors is that there is no need to repurpose C-band spectrum because "[t]here is more than sufficient spectrum currently available and more immediately deployable in the mid-band range."⁴⁹ That argument flies in the face of the Commission's determination, based on an extensive record, that making C-band spectrum available to support 5G networks as quickly as possible is critical to its overall spectrum management strategy.⁵⁰

III. ORDERING CLAUSES

- 15. ACCORDINGLY, IT IS ORDERED, that, pursuant to sections 1, 4(i), 4(j), 201, 202, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 154(j), 201, 202, 303(r), and the authority delegated pursuant to sections 0.131 and 0.331 of the Commission's rules, 47 CFR §§ 0.131, 0.331, this Order Denying Stay Petition in GN Docket No. 18-122 is ADOPTED.
- 16. IT IS FURTHER ORDERED that the June 17, 2020 Request for Stay of PSSI Global Services, LLC is DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Donald Stockdale Chief Wireless Telecommunications Bureau

⁴⁶ See Stay Request at 26 (arguing that the Commission "effectively" modified PSSI's right to transmit in the 5.925-6.425 band by limiting its interference protection rights in the 3.7-4.2 GHz band). The Commission did not concede that its action modified PSSI's rights in the 5.925-6.425 GHz band. See June 10 Stay Denial at *10, n.93.

⁴⁷ See Stay Denial at *10-11, n.99.

⁴⁸ See Stay Request at 26-29.

⁴⁹ *Id.* at 26; *see id.* at 26-27.

⁵⁰ See 3.7 GHz Report and Order, 35 FCC Rcd at 2345-47, 2356, 2410-11, 2433, 2435-36, paras. 3-4, 6-7, 28, 162, n.580, 226. PSSI's argument also ignores Congress's specific direction in Section 605(b) of the Making Opportunities for Broadband Investment and Limiting Excessive and Needless Obstacles to Wireless Act (MOBILE NOW Act) to consider making the C-band available to support 5G wireless broadband networks. See id. at 2345, n.11 and accompanying text; MOBILE NOW Act, Pub. L. No. 115-141, Division P, Title VI, § 601 et seq. (2018).