

GLOBALSTAR, INC., PETITIONER v. FEDERAL COMMUNICATIONS COMMISSION AND UNITED STATES OF AMERICA, RESPONDENTS, IRIDIUM SATELLITE LLC, INTERVENOR

No. 08-1046

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

**564 F.3d 476; 2009 U.S. App. LEXIS 9422; 47 Comm. Reg. (P & F)
1021**

**February 17, 2009, Argued
May 1, 2009, Decided**

PRIOR HISTORY: [1]**

On Petition for Review of an Order of the Federal Communications Commission.

COUNSEL: William T. Lake argued the cause for petitioner. With him on the briefs were William F. Adler, Meredith B. Halama, and Samir C. Jain.

Joel Marcus, Counsel, Federal Communications Commission, argued the cause for respondents. With him on the brief were Thomas O. Barnett, Assistant Attorney General, U.S. Department of Justice, Robert B. Nicholson and Robert J. Wiggers, Attorneys, Matthew B. Berry, General Counsel, Federal Communications Commission, Joseph R. Palmore, Deputy General Counsel, and Richard K. Welch, Acting Deputy Associate General Counsel. Daniel M. Armstrong, Associate General Counsel, entered an appearance.

Joshua S. Turner argued the cause for intervenor Iridium Satellite LLC. With him on the brief were R. Michael Senkowski, Andrew G. McBride, and Elbert Lin.

JUDGES: Before: SENTELLE, Chief Judge, GARLAND, Circuit Judge, and EDWARDS,

Senior Circuit Judge. Opinion for the Court filed by Senior Circuit Judge EDWARDS.

OPINION BY: EDWARDS

OPINION

[*479] EDWARDS, *Senior Circuit Judge:* In 2003, the Federal Communications Commission ("FCC" or "the Commission") issued a Notice of Proposed Rulemaking that sought proposals to reassign a portion [**2] of the 33 MHz of spectrum used by mobile satellite services ("MSS"). *See Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Notice of Proposed Rulemaking, 18 F.C.C.R. 1962, 2087-92 (2003) ("2003 NPRM").* In 2004, in the context of this same rulemaking proceeding, the Commission initially ordered petitioner Globalstar, Inc. ("Globalstar") and intervenor Iridium Satellite LLC ("Iridium"), companies that use different technologies to provide satellite-based voice and data communications, to share a block of spectrum that was previously reserved for Globalstar's use. *See Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Report and Order and Further Notice of Proposed Rulemaking, 19*

F.C.C.R. 13356, 13357 (2004) ("2004 Order"). Globalstar sought reconsideration of the *2004 Order*, claiming that sharing the spectrum would generate harmful interference between the two communications systems. The Commission then revisited the rulemaking and, following reconsideration, agreed with Globalstar that spectrum sharing was technologically [**3] infeasible. In 2007, the Commission issued an order that reassigned a block of electromagnetic spectrum to Iridium. *See Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Second Order on Reconsideration and Second Report and Order, 22 F.C.C.R. 19733, 19734 (2007) ("2007 Reconsideration Order")*. Globalstar now seeks review of the *2007 Reconsideration Order*, claiming that it was promulgated in violation of the notice-and-comment requirements of the Administrative Procedure Act ("APA"), *see 5 U.S.C. § 553*, and is also arbitrary and capricious, *see id. § 706(2)(A)*.

We deny the petition for review. First, we hold that Globalstar waived its inadequate notice claim by failing to raise it with the Commission. Globalstar's late-filed *ex parte* letter did not give the Commission an "opportunity to pass" on this issue as required by *47 U.S.C. § 405(a)*. Therefore, Globalstar's inadequate notice claim is not properly before us. Second, we reject Globalstar's argument that the Commission's reassignment of the disputed spectrum to Iridium was arbitrary and capricious. The Commission properly revisited the rulemaking [**4] pursuant to Globalstar's petition for reconsideration of the *2004 Order*. The *2007 Reconsideration Order* was an outgrowth of the ongoing rulemaking that began with a notice of proposed rulemaking in 2003. We find [**480] that the Commission's final order is based on the extensive record compiled during this lengthy rulemaking and that the record supports the Commission's decision. We also find that the *2007 Reconsideration Order* is a product of reasoned decisionmaking that survives the nar-

row scope of review under the arbitrary and capricious standard.

I. BACKGROUND

Among its many duties, the Commission licenses commercial entities to use the electromagnetic spectrum. *See 47 U.S.C. §§ 301, 303*. The Commission has designated 33 MHz of spectrum for use by mobile satellite services, a satellite-powered technology that provides email and cellular-like phone services to remote locations across the globe and is often used by military and public safety officials during wars and national disasters. *See Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, Report and Order, 9 F.C.C.R. 5936, 5939-41 (1994) [**5]* ("1994 Order"). This spectrum, the Big Low Earth Orbit band ("Big LEO" band), consists of two segments that are commonly referred to as the "L band" (1610 MHz through 1626.5 MHz) and the "S band" (2483.5 MHz through 2500 MHz). *See 2004 Order, 19 F.C.C.R. at 13357*. MSS providers employ one of two technologies: code division multiple access ("CDMA") or time division multiple access ("TDMA"). *See id. at 13359 & nn.7-9*. CDMA and TDMA systems differ in at least one critical respect. In CDMA systems, the L band is used for "uplink" operations from an earth terminal (*i.e.*, a user's phone handset) to a satellite, while space-to-earth "downlink" operations are carried on the S band. In TDMA systems, both uplink and downlink operations are carried on the L band. *See id.* This case concerns the Commission's assignment and reassignment of blocks of the Big LEO band to competing providers of CDMA and TDMA satellite services.

In the early 1990s, as MSS technology was first emerging, several companies seeking to deploy MSS systems applied to the FCC for licenses to use the Big LEO band. All but one proposed a CDMA system. *See 1994 Order, 9*

F.C.C.R. at 5942, 5955. In 1994, the FCC adopted an initial [**6] licensing scheme for MSS providers in the Big LEO band. *Id. at 5955-59.* Because the CDMA applicants outnumbered the lone TDMA applicant, the Commission divided the 33 MHz of Big LEO spectrum into two unequal but roughly proportionate parts. The Commission assigned the TDMA provider exclusive access to 5.15 MHz of spectrum in the L band and assigned the CDMA providers shared access to 27.85 MHz of spectrum (11.35 MHz in the L band and the entire S band). *Id.* The Commission also considered the possibility that only one of the CDMA systems would be launched, but it rejected a proposal that would have automatically reassigned 3.1 MHz of spectrum in the L band to the TDMA provider "upon a showing of need or, if this demonstration could not be made, to a new entrant." *Id. at 5960.* Instead, the Commission stated that it would "make the decision with respect to the 3.1 MHz, if necessary, in the context of a rulemaking, based upon the circumstances that have developed at that time." *Id.*

By 2002, only two MSS providers had begun commercial operations: the CDMA system now run by Globalstar and the TDMA system now run by Iridium. In light of this development, Iridium petitioned the FCC to undertake [**7] the reassignment rulemaking contemplated in the *1994 Order*. Petition for Rulemaking at i (July 26, 2002), *reprinted in* Joint Appendix [**481] ("J.A.") 329. Iridium advised the agency that it was experiencing "significant spectrum constraints" from operating in the 5.15 MHz block of L band spectrum and that it required additional spectrum to meet the current and future needs of its customers. *Id.* at 4, J.A. 333. Iridium urged the FCC to reassign it 5.85 MHz of spectrum currently allocated to CDMA systems. *Id.* at 5, J.A. 334.

The Commission responded with a notice of proposed rulemaking in 2003 that sought proposals to reassign a portion of the Big LEO

spectrum. *2003 NPRM, 18 F.C.C.R. at 2087-92.* The Commission recognized that because "only one CDMA Big LEO system has deployed, it is now appropriate to consider making at least 3.1 megahertz of additional spectrum available to Iridium." *Id. at 2089.* Though the Commission "tentatively conclude[d]" that the new developments in the MSS market necessitated a reallocation of the Big LEO spectrum, it noted that it would "base [its] final judgment on the record established in this proceeding." *Id.* To this end, the Commission directed both Globalstar [**8] and Iridium to submit detailed data on their current and projected spectrum needs. *Id. at 2089-90.*

The FCC received extensive comments from both Globalstar and Iridium, among other industry players. Iridium explained that it was experiencing a "spectrum shortage" and recounted how recent strains on its network due to the use of its services by the U.S. military in the Middle East had caused the Commission to grant it temporary access to a portion of Globalstar's spectrum. Comments of Iridium Satellite, LLC at i, 12-15 (July 11, 2003), J.A. 344, 360-63. To relieve these strains and to meet the growing demand for its services, Iridium proposed a "spectrum parity" plan that would divide the 33 MHz of Big LEO spectrum into three roughly equal blocks, with just over 11 MHz for Iridium in the L band, just over 11 MHz for Globalstar in the L and S bands, and 10 MHz in the S band reclaimed for other uses. *Id.* at 30-34, J.A. 378-82. Globalstar strongly opposed any change to the existing spectrum plan because it was "using its entire spectrum assignment." Joint Comments of L/Q Licensee, Inc., Globalstar, L.P. and Globalstar USA, L.L.C. at i (July 11, 2003), J.A. 464. Globalstar also urged that [**9] if the FCC was inclined to reallocate spectrum in the Big LEO band, it should give the two companies an opportunity to devise a joint band plan. Joint Reply Comments of L/Q Licensee, Inc., Globalstar, L.P. and Globalstar USA, L.L.C. at 35-37 (July 25, 2003), J.A. 681-83.

In 2004, the FCC issued a report and order directing Globalstar and Iridium to share 3.1 MHz of spectrum in the L band between 1618.25 MHz and 1621.35 MHz. *2004 Order, 19 F.C.C.R. at 13357*. The Commission began by explaining that the deployment of only one CDMA system "justif[ied] a reassessment of the existing band plan." *Id. at 13370*. Though the Commission found that both Globalstar and Iridium had "set forth compelling arguments for utilizing the spectrum," it determined that sharing the spectrum would be "the most equitable solution at this time" because Iridium's need for spectrum "appears to be more sporadic and geographicspecific." *Id. at 13377*. The Commission further rejected Iridium's "spectrum parity" proposal because dividing the spectrum on a "pure megahertz-per-party basis . . . would ignore the significant encumbrances that exist in the lower portion of the L-band" from other non-MSS satellite systems **[**10]** in that band and in adjacent bandwidths. *Id. at 13378*. Finally, the Commission explained that it had limited the amount of shared L band spectrum to 3.1 MHz because of these same encumbrances and in order to remain **[*482]** consistent with the spectrum reallocation originally proposed in the *1994 Order*. *Id.* In the same order, however, the Commission issued a further notice of proposed rulemaking seeking comment on whether Globalstar and Iridium could share an additional 2.25 MHz of spectrum in the lower portion of the L band between 1616 and 1618.25 MHz. *Id. at 13397-99*.

Globalstar sought reconsideration of the *2004 Order*. Petition for Reconsideration of Globalstar LLC (Sept. 8, 2004), J.A. 821-56. Globalstar requested that the FCC "reverse its illadvised decision" because CDMA and TDMA systems could not both utilize spectrum at the same time without generating interference, and it submitted technical data on the harmful effects of spectrum sharing. *Id.* at 6, J.A. 832; *see also* Globalstar LLC Technical Appendix P 2, J.A. 852; ELEC. COMMC'NS COMM. WITHIN THE EUROPEAN CON-

REFERENCE OF POSTAL AND TELECOMMS. ADMIN'S., DRAFT ECC REPORT ON SHARING BETWEEN MSS SYSTEMS USING TDMA AND MSS SYSTEMS USING **[**11]** CDMA IN THE BAND 1610-1626.5 MHZ 36 (2006) (concluding that both Iridium and Globalstar would suffer interference when operating in shared spectrum), J.A. 1098. In the alternative, Globalstar asked the Commission to establish rules to permit the two companies to coordinate their usage of the spectrum to prevent such interference. *See* Petition for Reconsideration of Globalstar LLC at 6-8, J.A. 832-34. Iridium maintained that sharing was in fact possible and urged the Commission to permit further sharing in the L band because demand for its services had continued to grow. Comments of Iridium Satellite, LLC at ii, 7-8 (Sept. 8, 2004), J.A. 797, 805-06. In addition, Iridium noted that the Commission had again granted it temporary access to Globalstar's spectrum following Hurricane Katrina and that it had seen a spike in customer demand following the hurricane. *Ex Parte* Letter from Donna Betheam-Murphy, Vice President, Regulatory Engineering, Iridium Satellite, LLC, to Marlene H. Dortch, Secretary, Federal Communications Commission at 1-4 (Mar. 24, 2006), J.A. 971-74.

In October 2007, while the FCC was weighing Globalstar's reconsideration petition and the comments received in response to **[**12]** the further notice of proposed rulemaking, the trade press reported that the Commission was poised to reassign a block of Big LEO spectrum to Iridium. *See Satellite*, COMM. DAILY, Oct. 25, 2007, J.A. 1287. On November 7, 2007, Globalstar submitted an *ex parte* letter to the Commission claiming that such a spectrum reassignment was beyond the scope of the rulemaking and would violate the APA's notice-and-comment requirements. A copy of the letter was emailed to the Commissioners and their legal advisors. *See Ex Parte* Letter from William T. Lake, Counsel to Globalstar, Inc., to Marlene H. Dortch, Secretary, Federal

Communications Commission (Nov. 7, 2007), J.A. 1147-49; *see also* Petitioner's Reply Br. at 14-15.

On the day Globalstar submitted its *ex parte* letter, the Commission adopted an order assigning equal amounts of L band spectrum to Iridium and Globalstar. *See 2007 Reconsideration Order*, 22 F.C.C.R. at 19733, 19734. Upon reconsideration of the 2004 Order, the Commission agreed with Globalstar that spectrum sharing would cause "harmful interference" between fully loaded CDMA and TDMA systems and would place "generally undesirable operational limitations" on both systems. *Id.* at 19741. [**13] Moreover, although neither Globalstar nor Iridium was fully loaded at present, the Commission found that both companies "state that their business has grown, and confidently predict that their business will continue to grow." *Id.* The Commission found that [**483] Iridium had "made a case demonstrating its need for more spectrum," noting that its communications traffic has "increased substantially" and that it desired "more spectrum to provide full-rate voice channels and higher speed data transmissions, as well as to accommodate peak demand." *Id.* Concluding that the reassignment of spectrum to Iridium was necessary "to provide long-term certainty and stability in the Big LEO market and to avoid harmful interference," the Commission thus divided the L band into two equal parts, assigning each company exclusive access to 7.775 MHz of spectrum in that band. *Id.* at 19734, 19741-42. In addition, the Commission retained a .95 MHz portion of shared spectrum in the center of the L band to safeguard one of Globalstar's channels, finding that this "small segment" of Big LEO spectrum could be effectively shared "while both systems are relatively lightly loaded." *Id.* at 19742. The net effect of the [**14] new spectrum plan was thus to reassign 3.1 MHz of L band spectrum to Iridium, subject to the minimal .95 MHz sharing requirement.

II. ANALYSIS

Globalstar challenges the 2007 *Reconsideration Order* on two grounds. First, it argues that the Commission's decision to reassign spectrum to Iridium was not a "logical outgrowth" of the 2004 decision ordering spectrum sharing and thus violated the APA's notice-and-comment requirements. *See 5 U.S.C. § 553*. Second, it argues that the Commission's decision is arbitrary and capricious because it lacks record support and because the Commission's rationale for ordering spectrum reassignment is inconsistent with certain policies adopted in the earlier 2004 Order. *See id.* § 706(2)(A).

A. Standard of Review

We will uphold an agency action unless we find it to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). "The scope of review under the 'arbitrary and capricious' standard is narrow and a court is not to substitute its judgment for that of the agency." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43, 103 S. Ct. 2856, 77 L. Ed. 2d 443 (1983). When the Commission is "'fostering innovative methods [**15] of exploiting the spectrum,' it 'functions as a policymaker' and is 'accorded the greatest deference by a reviewing court.'" *Mobile Relay Assocs. v. FCC*, 372 U.S. App. D.C. 355, 457 F.3d 1, 8 (D.C. Cir. 2006) (quoting *Teledesic LLC v. FCC*, 348 U.S. App. D.C. 296, 275 F.3d 75, 84 (D.C. Cir. 2001)). In all cases, however, the agency "must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *State Farm*, 463 U.S. at 43 (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168, 83 S. Ct. 239, 9 L. Ed. 2d 207 (1962)).

B. Globalstar's Inadequate Notice Claim Is Barred by § 405(a) As an initial matter, the Commission contends that our consideration of Globalstar's inadequate notice claim is barred

by β 405(a) of the Communications Act. *Section 405(a)* provides that filing a petition for reconsideration before the Commission is "a condition precedent to judicial review . . . where the party seeking such review . . . relies on questions of fact or law upon which the Commission . . . has been afforded no opportunity to pass." 47 U.S.C. β 405(a). We have "'strictly construed' β 405(a), 'holding that we generally lack jurisdiction to review arguments [**16] that have not first been presented to the Commission.'" *Qwest Corp. v. FCC*, 375 U.S. App. D.C. 379, 482 F.3d 471, 474 (D.C. Cir. 2007) [*484] (quoting *In re Core Commc'ns, Inc.*, 372 U.S. App. D.C. 182, 455 F.3d 267, 276 (D.C. Cir. 2006)). Thus, "even when a petitioner has no reason to raise an argument until the FCC issues an order that makes the issue relevant, the petitioner must file 'a petition for reconsideration' with the Commission before it may seek judicial review." *In re Core Commc'ns, Inc.*, 455 F.3d at 276-77 (quoting 47 U.S.C. β 405(a)).

When, as here, a party "complains of only a technical or procedural mistake, such as an obvious violation of a specific APA requirement, we have insisted that a party raise the precise claim before the Commission." *Time Warner Entm't Co. v. FCC*, 330 U.S. App. D.C. 126, 144 F.3d 75, 81 (D.C. Cir. 1998). As we have explained, such rigid adherence to β 405(a) is necessary with respect to claims of procedural error in order to give the agency the opportunity to consider the claim in the first instance and to correct any error in the rulemaking process prior to judicial review. *Id.* at 80; *see also M2Z Networks, Inc. v. FCC*, 558 F.3d 554, 558 (D.C. Cir. 2009) ("Ordinarily petitioners must give agencies an opportunity to [**17] cure technical defect[s] before seeking review by this court.") (alteration in original) (internal quotation marks and citation omitted). Accordingly, we have repeatedly applied β 405(a) to bar inadequate notice claims identical to the one now raised by Globalstar. *See, e.g., Petroleum Commc'ns, Inc. v. FCC*, 306 U.S. App.

D.C. 82, 22 F.3d 1164, 1171, 1169-70 (D.C. Cir. 1994) (holding that inadequate notice claim under 5 U.S.C. β 553 was a "classic example" of the type of claim subject to β 405(a)'s exhaustion requirement and collecting similar cases).

Because Globalstar did not raise its inadequate notice claim in a petition for reconsideration, we must determine whether the Commission was "afforded a 'fair opportunity' to pass on the argument[] in question." *BDPCS, Inc. v. FCC*, 359 U.S. App. D.C. 33, 351 F.3d 1177, 1182 (D.C. Cir. 2003). Globalstar contends that it preserved the claim for appeal by discussing the lack of notice in an *ex parte* letter submitted on November 7, 2007 (and emailed to the Commissioners and their legal advisers) after press reports indicated that the Commission was considering a reassignment of spectrum to Iridium. Petitioner's Reply Br. at 14-18. We reject this argument. An *ex parte* submission may at [**18] times be sufficient to preserve an issue for appeal, but we have cautioned litigants that relying on such *ex parte* submissions "to satisfy β 405 is a risky strategy." *Sprint Nextel Corp. v. FCC*, 524 F.3d 253, 257 (D.C. Cir. 2008). The risks are readily apparent when the *ex parte* submission is ill-timed. For example, in *AT&T Wireless Services, Inc. v. FCC*, 348 U.S. App. D.C. 135, 270 F.3d 959 (D.C. Cir. 2001), we rejected the petitioners' attempt to comply with β 405(a) by relying in part on an "untimely" *ex parte* letter filed more than one month before the Commission's decision was adopted. *Id.* at 966. Here, Globalstar filed the letter in question the very day that the Commission adopted the 2007 *Reconsideration Order*, so it "cannot fairly be said to have alerted the Commission" to an issue that might have been addressed in the 2007 *Reconsideration Order* before the order was ready to be released. *Id.* And Globalstar never raised the issue in a petition for reconsideration, so the FCC never had a "fair opportunity" to explain the ongoing nature of the rulemaking and pass on Globalstar's claim.

Globalstar further urges us to lift β 405(a)'s bar in the present case because "the previous petition for reconsideration [**19] in this proceeding sat before the agency for over three years." Petitioner's Reply Br. at 17. We have held that β 405(a) "contains the traditionally recognized exceptions to the exhaustion doctrine, like futility." *M2Z Networks, Inc.*, 558 F.3d at [*485] 558 (quoting *Freeman Eng'g Assocs., Inc. v. FCC*, 322 U.S. App. D.C. 263, 103 F.3d 169, 183 (D.C. Cir. 1997)). But Globalstar makes no claim that presenting its inadequate notice claim to the Commission in a reconsideration petition would have been futile and points to no case in which the Commission's tardiness in rendering a decision prompted this court to excuse β 405(a)'s exhaustion requirement. Indeed, in *AT&T Corp. v. FCC*, 354 U.S. App. D.C. 325, 317 F.3d 227 (D.C. Cir. 2003), where the Commission failed for four and one-half years to issue an initial decision on petitioners' claim, the court rejected the petitioners' nearly identical plea that "unreasonable delay [by the Commission] preclude[s] strict application of the exhaustion doctrine." *Id.* at 236 (alterations in original). Although we certainly do not condone the Commission's delay in this case, it did not excuse Globalstar from presenting its inadequate notice claim to the agency before seeking review in this court.

In sum, [**20] because Globalstar failed to give the Commission an opportunity to pass on its inadequate notice claim and because it has not demonstrated that any exception to β 405(a) applies, the claim is waived.

C. The FCC's Decision to Reassign Spectrum to Iridium

Globalstar also contends that the Commission acted arbitrarily and capriciously in multiple respects in reassigning the disputed spectrum to Iridium. These arguments were raised with the FCC and are properly before the court.

Globalstar asserts that the Commission's reassignment of spectrum to Iridium is unreasonable for an array of interrelated reasons. However, the central premise of its claim is that the Commission issued a final decision in the *2004 Order* instituting a spectrum sharing plan in the L band and then impermissibly departed from this "precedent" in ordering reassignment in 2007. This claim does not withstand scrutiny. Globalstar petitioned for reconsideration of the *2004 Order* and this prompted the Commission to revisit the ongoing rulemaking record.

As this court has explained, "a petition for reconsideration may be filed within 30 days of a final agency order and insofar as such petitions are timely filed, the rulemaking [**21] is not final pending their resolution." *AT&T Corp. v. FCC*, 324 U.S. App. D.C. 272, 113 F.3d 225, 229 (D.C. Cir. 1997) (internal citation omitted). The Commission's *2007 Reconsideration Order* thus was not the product of a new and distinct rulemaking but was an outgrowth of the ongoing proceeding that commenced with the 2003 NPRM that sought and generated ample comment on the reassignment of L band spectrum to Iridium. See *2003 NPRM*, 18 F.C.C.R. at 2089 (noting that "it is now appropriate to consider making at least 3.1 megahertz of additional spectrum available to Iridium" and that "[w]e will base our final judgment on the record established in this proceeding"). Consequently, once Globalstar petitioned for reconsideration of the *2004 Order*, the Commission was free to reconsider the entire record dating back to the *2003 NPRM* and to modify the spectrum plan "provided [it] gave a reasoned explanation for its decision that is supported by the record." *AT&T Corp.*, 113 F.3d at 229.

Globalstar's argument to the contrary is unavailing. It claims that the reconsideration petition did not seek to overturn the spectrum sharing plan announced in the *2004 Order*, but "merely asked the FCC to modify the mechanics of the [**22] sharing regime." Petitioner's Reply Br. at 4. In other words, Globalstar ar-

gues that its request for reconsideration was so narrow in scope that it did not open the door to the Commission's adoption of a wholly different spectrum reassignment plan. The [*486] plain language of Globalstar's reconsideration petition belies this characterization. Globalstar claimed in its reconsideration petition that "the record in this docket cannot support *any* change to the existing Big LEO spectrum plan." Petition for Reconsideration of Globalstar LLC at 5, J.A. 831 (emphasis added). Globalstar further requested that "[i]f the Commission does not *reverse its ill-advised decision*, then at a minimum it must modify the plan to ensure that the goals of the order are accomplished." *Id.* at 6, J.A. 832 (emphasis added). As this language in the reconsideration petition makes clear, Globalstar urged the Commission to modify the sharing regime *as an alternative* to outright reversal of the 2004 Order. And once Globalstar sought to overturn the 2004 Order, the Commission surely was free to modify its decision based on the evidence amassed throughout the entire rulemaking.

Globalstar's other challenges to the 2007 Reconsideration [**23] Order are straightforward and easily addressed. These challenges involve four principal claims that the order is arbitrary and capricious. All four claims lack merit.

First, Globalstar contends that the Commission's decision to reassign the disputed spectrum to Iridium "finds no support in the record, which is silent on reassignment because that issue had been excluded from the proceeding." Petitioner's Br. at 27. As explained above, this argument misses the mark by focusing narrowly on the record compiled since the 2004 Order to the exclusion of the rest of the record in the lengthy rulemaking proceeding. When properly viewed as an outgrowth of the ongoing rulemaking proceeding, the Commission's decision to reassign spectrum to Iridium is both well reasoned and supported by the record.

In the 2007 Reconsideration Order, the Commission relied on Globalstar's own reconsideration petition and technical data to conclude that sharing by fully loaded CDMA and TDMA systems would cause "harmful interference" and place "generally undesirable operational limitations" on both systems. 2007 Reconsideration Order, 22 F.C.C.R. at 19741; see also *id.* at 19739-40 n.52. Once it declared that sharing [**24] was technologically infeasible, the Commission then properly revisited the entire record dating back to the beginning of the proceeding. Having already found in 2004 that the deployment of only one CDMA system in the MSS market "justif[ied] a reassessment of the existing band plan," 2004 Order, 19 F.C.C.R. at 13370, the Commission pointed in 2007 to evidence that both Globalstar and Iridium had grown and that both companies predicted future growth for their businesses, 2007 Reconsideration Order, 22 F.C.C.R. at 19741. The Commission then singled out Iridium's submission describing its "need [for] more spectrum to provide full-rate voice channels and higher speed data transmissions, as well as to accommodate peak demand." *Id.* Given this record, there was nothing unreasonable about the Commission's decision to divide the L band equally between Globalstar and Iridium and to give Iridium access to an additional 3.1 MHz of spectrum in that band.

Moreover, this court is bound to defer to the Commission's predictive judgments that reassigning the spectrum to Iridium was necessary "in order to account for the growth of current CDMA and TDMA MSS systems" and "to provide long-term certainty [**25] and stability in the Big LEO market." *Id.* at 19740, 19741; see also *Earthlink, Inc. v. FCC*, 373 U.S. App. D.C. 202, 462 F.3d 1, 12 (D.C. Cir. 2006) ("[A]n agency's predictive judgments about areas that are within the agency's field of discretion and expertise are entitled to *particularly deferential* review, [*487] as long as they are reasonable.") (alteration in original) (quoting *In re Core Commc'ns, Inc.*, 455 F.3d at 282). The

FCC explained that "[b]y providing equal amounts of L-band spectrum for the exclusive use of CDMA and TDMA MSS systems, we provide a more equitable distribution of spectrum resources." *2007 Reconsideration Order*, 22 *F.C.C.R. at 19752*. At the same time, the Commission concluded that this new spectrum allotment would "provide the opportunity for Big LEO MSS systems to plan their future designs and operations with less uncertainty." *Id.* On this record, the Commission reasonably exercised its predictive judgment that the spectrum reassignment plan was well suited to the still developing MSS market and to the changing needs of the participants in that market.

Second, Globalstar points to the Commission's finding in the *2004 Order* that Iridium's "need for spectrum appears to be more sporadic [**26] and geographic-specific," 19 *F.C.C.R. at 13377*, and insists that the Commission failed to explain why Iridium's spectrum needs justified spectrum reassignment. *See* Petitioner's Br. at 28-31, 35-37. But contrary to Globalstar's assertions, the Commission *did* directly address Iridium's spectrum needs in the *2007 Reconsideration Order* and listed several reasons why Iridium required additional spectrum to conduct its operations in an effective manner. The Commission noted that it had granted Iridium temporary access to additional spectrum to support the use of its services by both the U.S. military in the Middle East and following the 2005 hurricane season. 22 *F.C.C.R. at 19736*. The Commission then explained that Iridium "has shown that the communications traffic it is handling has increased substantially" and that it "will need more spectrum to provide full-rate voice channels and higher speed data transmissions, as well as to accommodate peak demand." *Id. at 19741*. The Commission therefore concluded that "Iridium has made a case demonstrating its need for more spectrum." *Id.* This conclusion was entirely reasonable.

Third, Globalstar claims that the Commission's *2007 Reconsideration [**27] Order* "mandates precisely" the same "spectrum parity" plan that the Commission rejected in 2004 without offering an adequate explanation for this reversal in policy. Petitioner's Br. at 30. Globalstar further contends that the Commission failed to take proper account of the encumbrances in the lower portion of the L band that had caused it to reject the "spectrum parity" plan in the *2004 Order*. *Id.* Globalstar is incorrect on both counts. In response to the *2003 NPRM*, Iridium proposed a "spectrum parity" plan that would have divided the 33 MHz of Big LEO spectrum into three roughly equal parts, with just over 11 MHz in the L band assigned to Iridium, just over 11 MHz in the L and S bands assigned to Globalstar, and 10 MHz reclaimed for other uses. Comments of Iridium Satellite, LLC at 30-33, J.A. 378-81. In the spectrum allotment announced in the *2007 Reconsideration Order*, Globalstar has access to more than 24 MHz of spectrum in both the L and S bands, while Iridium has access to just over 8 MHz. Thus, in stark contrast to the "spectrum parity" proposal, the Commission did not reassign any of Globalstar's spectrum in the S band and left Globalstar with a greater net share of Big LEO [**28] spectrum than Iridium. Because the *2007 Reconsideration Order* exhibited no change in policy with respect to "spectrum parity," there was thus no need for the Commission to juxtapose the spectrum reassignment with a significantly different proposal it had already rejected at an earlier stage of the rulemaking.

[*488] Nor was the Commission required to take explicit account of the encumbrances in the lower portion of the L band in the *2007 Reconsideration Order*. Globalstar points to the Commission's statement in the *2004 Order* that, "If the Commission implemented 'spectrum parity' on a pure megahertz-per-party basis, it would ignore the significant encumbrances that exist in the lower portion of the L-band." 19 *F.C.C.R. at 13378*. But, as explained above, the

Commission made this comment about encumbrances while assessing the "spectrum parity" plan, which would have left Globalstar with 5.35 MHz of spectrum confined to the lowest portion of the L band. Elsewhere in the *2004 Order*, however, the Commission explained that it was limiting the amount of sharing to 3.1 MHz because these same encumbrances restricted Globalstar's ability to operate in that spectrum. *Id.* When the Commission here likewise [**29] reassigned Iridium 3.1 MHz of spectrum in the L band (subject to the minimal .95 MHz sharing requirement), it was not required to state this same rationale a second time. *See AT&T Corp., 113 F.3d at 229* (rejecting petitioner's argument that "in an ongoing rulemaking the agency must restate its previously expressed rationale in each subsequent order").

Fourth, Globalstar contends that the Commission failed to consider its alternative proposal that the agency adopt a "reciprocal sharing" regime, whereby "each carrier [w]ould be allowed to use the other's spectrum, subject to a coordination agreement." Petitioner's Br. at 37. An agency is "required 'to consider responsible alternatives to its chosen policy and to give a reasoned explanation for its rejection of such alternatives.'" *Am. Radio Relay League, Inc. v. FCC, 524 F.3d 227, 242 (D.C. Cir. 2008)* (quoting *City of Brookings Mun. Tel. Co. v.*

FCC, 262 U.S. App. D.C. 91, 822 F.2d 1153, 1169 (D.C. Cir. 1987)). It is simply not true that the Commission "did not deign to mention the [reciprocal sharing] alternative." Petitioner's Br. at 39. The Commission twice noted Globalstar's request for "access to Big LEO TDMA spectrum, currently used by Iridium, in an amount [**30] equal to the amount of CDMA spectrum shared with TDMA MSS systems." *2007 Reconsideration Order, 22 F.C.C.R. at 19739; see also id. at 19742* (discussing Globalstar's proposal to "allow it to share TDMA-exclusive spectrum in an amount equal to the amount of CDMA spectrum shared with TDMA systems"). However, the Commission went on to conclude -- based on Globalstar's own reconsideration request and technical arguments -- that TDMA and CDMA systems could not share spectrum without generating "harmful interference." *Id. at 19740-41*. After rejecting spectrum sharing at Globalstar's own urging and altering the L band spectrum assignments accordingly, the Commission acted reasonably in declining to give more detailed consideration to Globalstar's proposal that would have implemented sharing on an even broader scale.

III. CONCLUSION

For the reasons discussed above, the petition for review is denied.