file a renewal application, independent of their performance requirements, pursuant to Section 1.949 of the Commission's rules.[784] Commenters did not comment on or address any potential costs associated with the proposed license renewal criteria in the AWS-4 band. Accordingly, we conclude that the potential benefits of the proposed license renewal requirements would outweigh any potential costs.

270. A licensee's renewal showing is distinct from its performance showing. In the renewal context, the Commission will consider the level and types of a licensee's service provided over the entire license term, as opposed to measuring services offered at a specific point in time for performance requirements. Thus, a licensee that meets the applicable performance requirements might nevertheless fail to meet the renewal requirements.

271. We require the renewal showing to include a detailed description of the renewal applicant's provision of service during the entire license period and discuss: (1) the level and quality of service provided by the applicant (*e.g.*, the population served, the area served, the number of subscribers, the services offered); (2) the date service commenced, whether service was ever interrupted, and the duration of any interruption or outage; (3) the extent to which service is provided to rural areas; (4) the extent to which service is provided to qualifying tribal land as defined in § 1.2110(e)(3)(i) of this chapter; and (5) any other factors associated with the level of service to the public.[785] A licensee must also demonstrate at renewal that it has substantially complied with all applicable Commission rules and policies, and the Communications Act of 1934, as amended, including any applicable performance requirements. The licensee must also maintain the level of service provided at its final performance benchmark to the end of the license term.

272. As we did in the *700 MHz First Report and Order*, we will prohibit the filing of mutually exclusive renewal applications. If a license is not renewed, the associated spectrum will be returned to the Commission for reassignment.[786]

c. Permanent Discontinuance of Operations

273. *Background.* In the *AWS-4 NPRM*, the Commission requested comment on the application to AWS-4 operators of our rules governing the permanent discontinuance of operations.[787] Under Section 1.955(a)(3) of our rules, an authorization will automatically terminate, without specific Commission action, if service is "permanently discontinued."[788] The Commission proposed to define, "permanently discontinued," for the AWS-4 spectrum, as a period of 180 consecutive days during which a licensee does not operate and does not serve at least one subscriber that is not affiliated with, controlled by, or related to, the provider. The Commission proposed that licensees would not be subject to this requirement until the date of the first performance requirement benchmark. The Commission also proposed that, consistent with Section 1.955(a)(3) of the Commission's rules, if a licensee permanently discontinues service, the licensee must notify the Commission of the discontinuance within 10 days by filing FCC Form 601 or 605 and requesting license cancellation. The Commission also noted that an authorization will automatically terminate without specific Commission action if service is permanently

[784] 47 C.F.R. § 1.949.

[785] In the *700 MHz First Report and Order* the Commission noted that "As we have had the authority to do in the past on a case-by-case basis, we could nevertheless condition the renewal of any 700 MHz license on a specific level of compliance with one or more of these or any other relevant factors." *Id.* at 22 FCC Rcd at 8064¶ 75 n.174.

[786] *See 700 MHz First Report and Order*, 22 FCC Rcd at 8094 ¶ 76.

[787] *See WRS Renewals NPRM and Order,* 25 FCC Rcd at 7017 ¶ 49-50; *AWS-4 NPRM*, 27 FCC Rcd at 3602 ¶ 125.

[788] 47 C.F.R. § 1.955(a)(3).

discontinued even if a licensee fails to file the required form. The Commission sought comment on these proposals.[789] We received no comments on these issues.

274. *Discussion.* We adopt the Commission's proposal to apply Section 1.955(a)(3) of the Commission's rules to any licensee, such that an AWS-4 operator's terrestrial spectrum rights, will automatically terminate, without specific Commission action, if service is "permanently discontinued."[790] For AWS-4 spectrum, we define "permanently discontinued" as a period of 180 consecutive days during which a licensee does not operate and does not serve at least one subscriber that is not affiliated with, controlled by, or related to, the provider in an EA. We believe this approach strikes the appropriate balance between a licensee's need for operational flexibility and the need to ensure efficient utilization of licensed spectrum. In addition, our determination will ensure that AWS-4 spectrum does not remain idle for extended periods. Rather, it will facilitate business and network planning by providing certainty to licensees and their investors. The discontinuance rule will apply commencing on the date a licensee must meet its final performance requirement benchmark,[791] thereby providing a licensee with adequate time to construct its terrestrial network.

275. Furthermore, in accordance with Section 1.955(a)(3) of the Commission's rules, if a licensee permanently discontinues service, the licensee must notify the Commission of the discontinuance within 10 days by filing FCC Form 601 or 605 and requesting license cancellation.[792] We emphasize, however, that an authorization will automatically terminate without specific Commission action if service is permanently discontinued even if a licensee fails to file the required form requesting license cancellation.

276. Finally, in applying section 1.955(a)(3) to licensees of AWS-4 authority, we clarify that operation of so-called channel keepers, *e.g.*, devices that transmit test signals, tones and/or color bars, do not constitute operation for purposes of the permanent discontinuance rules.[793]

5. Other Operating Requirements

277. *Background.* In the *AWS-4 NPRM*, the Commission stated that even though licenses for this band may be issued pursuant to one rule part, licensees in these bands may be required to comply with rules contained in other parts of the Commission's rules by virtue of the particular services that they offer.[794] The Commission sought comment on any provisions in existing, service-specific rules that may require specific recognition or adjustment to comport with the supervening application of another rule part, as well as any provisions that may be necessary in the other rule part to fully describe the scope of covered services and technologies.[795] In addition, the Commission sought comment generally on

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[789] *AWS-4 NPRM,* 27 FCC Rcd at 3602-03 ¶ 125.

[790] 47 C.F.R. § 1.955(a)(3).

[791] *See supra* Section III.E. (Performance Requirements).

[792] 47 C.F.R. § 1.955(a)(3).

[793] *See* Application of San Diego MDS Company, *Memorandum Opinion and Order*, 19 FCC Rcd 23120, 23124 ¶ 10 (2004) ("in order to provide a service a provider would, at a minimum, need a customer or other person to serve") (*San Diego MDS*); *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5731 ¶ 297 (favorably citing *San Diego MDS* when affirming that "transmission of test signals and/or color bars by a BRS/EBS licensee or lessee does not constitute substantial service"); *see WRS Renewals NPRM and Order,* 25 FCC Rcd at 7019 ¶ 59.

[794] *AWS-4 NPRM,* 27 FCC Rcd at 3603 ¶ 126.

[795] *Id.* at 3603 ¶ 127.

whether any conditions should govern the operation of a provider's network if it is granted a license to operate in these bands.[796]

278. *Discussion.* Although we are generally adopting Part 27 rules for the AWS-4 band, in order to maintain general consistency among various wireless communication services, we also require any licensee of AWS-4 operating authority to comply with other rule parts that pertain generally to wireless communication services. For example, Section 27.3 of the Commission's rules lists some of the other rule parts applicable to wireless communications service licensees generally;[797] we thus find it appropriate to apply this and similar rules to the AWS-4 band. Some of these other rule parts will be applicable by virtue of the fact that they apply to all licensees, and others will apply depending on the type of service a licensee provides. For example:

- Applicants and licensees will be subject to the application filing procedures for the Universal Licensing System, set forth in Part 1 of our rules.[798]
- Licensees will be required to comply with the practices and procedures listed in Part 1 of our rules for license applications, adjudicatory proceedings, etc.
- Licensees will be required to comply with the Commission's environmental provisions, including section 1.1307.[799]
- Licensees will be required to comply with the antenna structure provisions of Part 17 of our rules.
- To the extent a licensee provides a Commercial Mobile Radio Service, such service is subject to the provisions of Part 20 of the Commission's rules, including 911/E911 and hearing-aid compatibility requirements, along with the provisions in the rule part under which the license was issued.[800] Part 20 applies to all CMRS providers, even though the stations may be licensed under other parts of our rules.[801]
- The application of general provisions of Parts 22, 24, or 27 will include rules related to equal employment opportunity, etc.

No commenter opposes this approach.

6. Facilitating Access to Spectrum and the Provision of Service to Tribal Lands

279. *Background.* In the *AWS-4 NPRM*, the Commission observed that it has under consideration in the *Tribal Lands NPRM* various provisions and policies intended to promote greater use

[796] *Id.* at 3603-04 ¶ 128.

[797] 47 C.F.R. § 27.3.

[798] *See* 47 C.F.R. Part 1, Subpart F.

[799] 47 C.F.R. § 1.1307.

[800] 47 C.F.R. Part 20; *see also* 47 C.F.R. § 27.3(g).

[801] *See, e.g., 700 MHz Second Report and Order*, 22 FCC Rcd at 15478-79 ¶¶ 550-53.

of spectrum over Tribal Lands.[802] The Commission proposed to extend any rules and policies adopted in that proceeding to any licenses that may be issued through competitive bidding in this proceeding. The Commission sought comment on this approach, including its associated costs and benefits.[803] We received no comments on this issue.

280. *Discussion.* We adopt our proposed approach and defer the application of any rules and policies for facilitating access to spectrum and the provision of service to Tribal Lands to the *Tribal Lands* proceeding.[804] The *Tribal Lands* proceeding, being specifically focused on that issue, is better suited than the instant proceeding to reach conclusions on that issue.

7. Other Matters—Proposed Party Conditions

281. *Mandatory Wholesale and Roaming Requirements.* Several commenters requested that the Commission impose mandatory wholesale and roaming requirements on licensees of AWS-4 operating authority.[805] For example, RCA contends that the Commission should require any licensee to "make a minimum portion of its network available to competitive carriers at cost-based wholesale rates, and to provide roaming at cost-based rates to any competitive carrier whose network is technologically compatible."[806] Similarly, PIO asserts that the Commission should require a licensee "to make up to 50 percent of its capacity available in each Economic Area for open wholesale leasing by any qualified entity, or for roaming by other carriers, on a non-discriminatory basis."[807] Commenters supporting these additional requirements argue they will increase competition and benefit consumers by increasing broadband deployment.[808] Other parties, however, argue against these restrictions, asserting they are unwarranted, economically inefficient and beyond the scope of the proceeding.[809]

282. We decline to impose any mandatory wholesale and roaming requirements in this *Report and Order.* We find these requests beyond the scope of the service rules proceeding before us and would be better addressed in other, non-band specific, proceedings on those topics. For example, roaming requirements for wireless spectrum licensees are the subject of other Commission proceedings.[810] We also note that we have recently initiated a proceeding to broadly examine our policies and rules regarding mobile spectrum holdings, including possible remedies to address potential harms or to help ensure the realization of potential benefits.[811]

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[802] *AWS-4 NPRM*, 27 FCC Rcd at 3604 ¶ 129 (*citing*, Improving Communications Services for Native Nations by Promoting Greater Utilization of Spectrum over Tribal Lands, WT Docket 11-40, *Notice of Proposed Rulemaking*, 26 FCC Rcd 2623 (2011) (*Tribal Lands NPRM*)).

[803] *AWS-4 NPRM*, 27 FCC Rcd at 3604 ¶ 129.

[804] *Tribal Lands NPRM*, 26 FCC Rcd at 2630-31 ¶¶ 19-20 (2011).

[805] *See, e.g.*, NTCA Comments at 3; PIO Comments at 8-11; RCA Comments at 4, 6-7; U.S. Cellular Reply Comments at 4-5.

[806] RCA Comments at 4, 6-7; *see also* PIO Comments at 2, 9; PIO Reply Comments at 2-5.

[807] PIO Comments at 9.

[808] *See, e.g.*, PIO Comments at 16.

[809] *See, e.g.*, AT&T Reply Comments at 10-11; Verizon Wireless Reply Comments at 2-4.

[810] *See, e.g.*, Reexamination of Roaming Obligations of Commercial Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265, *Second Report & Order*, 26 FCC Rcd 5411 (2011), *recon. pending*.

[811] *Mobile Spectrum Holdings Policies NPRM*, 27 FCC Rcd at 11730-32 ¶¶ 43-48.

283. *Wholesale Restrictions.* A number of commenters proposed that, in order to promote competition and prevent the entrenchment of duopoly power, the Commission should impose restrictions on the amount of AWS-4 spectrum that a licensee may make available for access to a particular wireless service provider.[812] For example, T-Mobile suggests that any licensee be required "to obtain the Commission's prior approval before entering into any wholesale agreement that would result in another wireless carrier's traffic accounting for more than a certain substantial percentage (i.e., 25 percent) of the total traffic carried on the AWS-4 licensee's terrestrial network."[813] T-Mobile states that this limitation should apply to any wholesale arrangements, regardless of the other party, for an amount of AWS-4 network capacity above the specified threshold.[814] Other commenters argue for a specific percentage limitation on the amount of wireless traffic that a licensee may make available to a particular wireless carrier[815] or for restrictions focused on the two largest wireless carriers.[816] In contrast, other commenters argue that such restrictions are unwarranted, unworkable and that no technical or economic justifications have been provided that support traffic restrictions generally or that support applying any such restrictions only to Verizon Wireless and AT&T.[817]

284. We decline to impose restrictions on the ability of a licensee of AWS-4 authority to provide access to its AWS-4 traffic capacity to other wireless carriers in this proceeding. We believe that this issue is beyond the scope of this proceeding. We also note that we have recently initiated a proceeding to broadly examine our policies and rules regarding mobile spectrum holdings.[818]

285. *Penalties for Early License Transfers.* Some commenters seek the imposition of unjust enrichment penalties if a licensee of AWS-4 authority sells or otherwise transfers control of its license to one of the two largest mobile data carriers within a specified time period.[819] These commenters argue that such a penalty would partially compensate the public for the value of the spectrum and prevent an AWS-4 licensee from unjustly realizing a windfall.[820] For example, PIO argues that if a licensee does not use the AWS-4 spectrum but instead sells the spectrum to an incumbent mobile carrier, the licensee "would be enriching itself financially at the expense of the public who would suffer from a much more heavily consolidated mobile broadband environment."[821]

286. PIO and RCA state that there are already current models for mitigating unjust enrichment and the Commission should look to them for guidance here.[822] Specifically, these commenters point to the designated entity rules, which contain penalty provisions in the event a designated entity receives a

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[812] *See, e.g.,* PIO Comments at 11-13; RCA Comments at 11-12; T-Mobile Comments at 15-17; USCC Reply Comments at 8-9.

[813] T-Mobile Comments at 6-7.

[814] *Id.*

[815] *See, e.g.*, PIO Comments at 11-13.

[816] *See, e.g.*, RCA Comments at 11-12.

[817] *See, e.g.,* AT&T Reply Comments at 10-11; DISH Reply Comments at 30; Verizon Wireless Reply Comments at 2-4.

[818] *Mobile Spectrum Holdings Policies NPRM*, 27 FCC Rcd 11710.

[819] *See, e.g.,* PIO Comments at 3, 17-19; RCA Comments at 5, 11-12.

[820] PIO Comments at 3, 17-19; RCA Comments at 11-12.

[821] PIO Comments at 18.

[822] *Id.* at 3, 18-19; RCA Comments at 11-12.

benefit in the competitive bidding process and subsequently transfers its license(s).[823] These commenters assert that such a condition would make it more likely that the AWS-4 spectrum will be deployed in a manner consistent with the public interest.[824]

287. In response, other parties oppose such an approach. For example, DISH asserts that the commenters did not offer "a statutory basis or Commission precedent to support such a departure from the Commission's secondary market policies."[825] Verizon Wireless argues that the proposed unjust enrichment rules are superfluous and overly broad because the Commission will review any application to assign or transfer spectrum licenses.[826] Verizon Wireless further contends that, because the proposals are only intended to apply to two companies, the proposals are less about the unjust enrichment of a licensee of AWS-4 authority and more about preventing AT&T and Verizon Wireless from acquiring new spectrum.[827] For similar reasons, AT&T also opposes unjust enrichment conditions.[828]

288. We will not, in this proceeding, adopt a system for imposing unjust enrichment penalties in the event that a licensee of AWS-4 operating authority seeks to transfer its license to one of the two largest mobile data providers. Nor will we impose additional restrictions on the licensee's ability to transfer or otherwise assign its terrestrial spectrum rights. Rather, the Commission will continue to review any proposed transfers of control or assignments of AWS-4 authority under its requirements then in place. Finally, we note that we have recently initiated a proceeding to examine spectrum concentration issues and that, during the pendency of this proceeding, we will continue to apply our case-by-case approach to secondary markets transactions and initial license applications as necessary.[829]

H. Relocation and Cost Sharing

1. Emerging Technologies Policies

289. As the Commission explained in the *AWS-4 NPRM*, the Emerging Technologies (ET) procedures represent a broad set of tools that the Commission uses to aid the process of making spectrum available for new uses.[830] Generally, the Commission applies the ET procedures when it is necessary to relocate incumbent licensees to introduce new services into a frequency band. The Commission sets a "sunset date"—a date by which incumbent licensees may not cause interference to new band entrants. Prior to the sunset date, the new entrants may negotiate with incumbents to gain early entry into the band and, if necessary, may relocate the incumbents to comparable facilities. Because new entrants may have to relocate incumbents from a larger frequency range or greater geographic area than where the new

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[823] *Id.*

[824] PIO Comments at 19; RCA Comments at 11-12.

[825] DISH Reply Comments at 30.

[826] Verizon Wireless Reply Comments at 5.

[827] *Id.* at 4-5.

[828] AT&T Reply at 10-11.

[829] *Mobile Spectrum Holdings Policies NPRM*, 27 FCC Rcd 11710.

[830] *See* Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, ET Docket No. 92-9, *First Report and Order and Third Notice of Proposed Rule Making*, 7 FCC Rcd 6886 (1992) ("*Emerging Technologies First R&O*"); *Second Report and Order*, 8 FCC Rcd 6495 (1993); *Third Report and Order and Memorandum Opinion and Order*, 8 FCC Rcd 6589 (1993) ("*Emerging Technologies Third R&O and MO&O*"); *Memorandum Opinion and Order*, 9 FCC Rcd 1943 (1994); *Second Memorandum Opinion and Order*, 9 FCC Rcd 7797 (1994); *aff'd Association of Public Safety Communications Officials-International, Inc. v. FCC*, 76 F.3d 395 (D.C. Cir. 1996) (collectively, "*Emerging Technologies* proceeding").

entrants will operate, the Commission also typically establishes a companion set of cost-sharing procedures. These procedures allow the operators that have relocated incumbents to be reimbursed a portion of their relocation expenses from new entrants that benefit from the spectrum clearance. The application of specific relocation and cost sharing processes under the ET framework generally varies for each frequency band, and is based on the types of incumbent licensees and particular band characteristics.[831] We discuss, below, the particular relocation and cost sharing procedures that we adopt for the 2000-2020 MHz and 2180-2200 MHz bands.

2. Relocation and Cost-Sharing for 2000-2020 MHz

290. *Background.* The lower portion of the AWS-4 band (2000-2020 MHz) is part of the 1990-2025 MHz band that the Commission reallocated from the Broadcast Auxiliary Service (BAS) to emerging technologies such as PCS, AWS, and MSS.[832] Consistent with the relocation principles first established in the Commission's *Emerging Technologies* proceeding, each new entrant had an independent responsibility to relocate incumbent BAS licensees.[833] Sprint Nextel (Sprint), which is the PCS licensee at 1990-1995 MHz, completed the BAS transition for the entire 35 megahertz in 2010.[834] In 2011, Sprint notified the Commission that it entered in a private settlement with DISH to resolve its dispute with MSS licensees with respect to MSS licensees' obligation to reimburse Sprint for their share of the BAS relocation costs.[835] In the *AWS-4 NPRM*, we asked whether any relocation and cost-sharing issues for the 2000-2020 MHz band remained if the Commission were to assign terrestrial licenses under Part 27.[836]

291. *Discussion.* We find that no additional relocation or cost-sharing procedures are necessary for the 2000-2020 MHz AWS-4 band. In addition, although we do not adopt cost-sharing rules in this *Report and Order*, we clarify that AWS-2 licensees will continue to be responsible for reimbursing Sprint for 2/7th of the BAS relocation costs (*i.e.*, the proportional share of the costs associated with Sprint relocating 10 megahertz of BAS spectrum that may be used by AWS-2 entrants) and that such cost-sharing issues will be addressed in a separate proceeding.

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[831] *See* Amendment of Part 2 of the Commission's Rules to Allocated Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, WT Docket No. 02-353, *Ninth Report and Order and Order*, 21 FCC Rcd 4473, 4479 ¶ 11 n.35 (2006) (*AWS Ninth R&O*).

[832] *See* 47 C.F.R. § 74.690. Of the total 35 megahertz of spectrum, five megahertz was authorized for PCS and held by Sprint Nextel; 10 megahertz is authorized for, and to be auctioned and licensed as, AWS; and 20 megahertz was authorized for MSS.

[833] Improving Public Safety Communications in the 800 MHz Band, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, *Fifth Report and Order, Eleventh Report and Order, Sixth Report and Order, and Declaratory Ruling*, 25 FCC Rcd 13874 at 13876 ¶ 5 (2010) (*2010 BAS Ruling*). Each new entrant also had a responsibility to reimburse an earlier entrant for its share of the costs for the relocation of BAS from the 1990-2025 MHz band. *See, e.g., id.*, 25 FCC Rcd at 13876 ¶ 6.

[834] Letter from Brett S. Haan, 800 MHz Transition Administrator, LLC, to David L. Furth, Deputy Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission at 2 (May 13, 2011), *citing* Letter from Robert H. McNamara, Sprint Nextel Corporation, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 02-55 (dated July 15, 2010).

[835] *See* Applications of New DBSD Satellite Services G.P., Debtor-in-Possession, and TerreStar Licensee Inc., Debtor-in-Possession, *Withdrawal of Petition to Condition Approval of Sprint Nextel Corporation*, IB Docket No. 11-149 (Nov. 3, 2011) (informing the Commission that Sprint had reached an agreement with DISH to settle its outstanding disputes).

[836] *AWS-4 NPRM*, 27 FCC Rcd at 3605 ¶ 131.

292. *Relocation.* As explained in the *AWS-4 NPRM*, Sprint undertook the relocation of BAS from the entire 35 megahertz at 1990-2025 MHz and notified the Commission that this transition was completed in 2010.[837] No party raised outstanding relocation issues, unrelated to cost-sharing (which is discussed below), for the 1990-2025 MHz band in response to the *AWS-4 NPRM.* Therefore, we find no need to adopt additional relocation procedures for the 1990-2025 MHz band.

293. *Cost Sharing.* Even though Sprint only benefits from the use of five megahertz of spectrum (1990-1995 MHz), Sprint incurred significant costs in clearing the remaining thirty megahertz of spectrum (1995-2025 MHz) to the benefit of other entrants. The Commission has consistently affirmed its general cost-sharing policy that an entrant who has relocated incumbents from reallocated spectrum is entitled to reimbursement for a portion of the band clearing costs from other entrants benefitting from that relocation.[838] The Commission has emphasized that all entrants to the 1990-2025 MHz band may be required to bear a proportional share of the costs incurred in the BAS clearance, on a *pro rata* basis according to the amount of spectrum each entrant is assigned.[839] Of the total 35 megahertz of spectrum, five megahertz was authorized for PCS and held by Sprint; 10 megahertz is authorized for (but yet to be auctioned and licensed as) AWS-2; and 20 megahertz was authorized for MSS. Sprint clarified in the record that DISH satisfied the cost-sharing obligations associated with 20 megahertz of spectrum in the 1990-2025 MHz band and that the only remaining cost-sharing obligations in this band are attributable to the 10 megahertz of spectrum authorized for AWS-2.[840]

294. We conclude that, consistent with the Commission's policy that all entrants to the 1990-2025 MHz band bear a proportional share of the costs incurred in the BAS clearance on a *pro rata* basis according to the amount of spectrum each entrant is assigned, future AWS-2 licensees who enter the band prior to the sunset date will be responsible for reimbursing Sprint for 2/7^{ths} of the BAS relocation costs (*i.e.*, the proportional share of the costs associate with Sprint relocating 10 megahertz of BAS spectrum that will be used by AWS-2 entrants).[841] We believe that this determination represents the most fair and balanced approach for all parties. The Commission will address the application on these cost-sharing obligations on AWS-2 licensees, including Sprint's proposal to set the sunset date for reimbursement at ten years after the issuance of the first AWS licenses in these bands separately in the *H Block NPRM.*

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[837] *AWS-4 NPRM,* 27 FCC Rcd at 3605 ¶ 131.

[838] *See, e.g., 2010 BAS Ruling*); *AWS Ninth R&O,* 21 FCC Rcd at 4513-4516 ¶¶ 74-79; *See Microwave Cost Sharing First Report and Order and Further Notice of Proposed Rule Making,* 11 FCC Rcd 8825, 8861 ¶ 71 (2000) ("*Microwave Cost Sharing First R&O and FNPRM*"); Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, WT Docket No. 95-157, *Notice of Proposed Rulemaking*, 11 FCC Rcd 1923, 1931, ¶ 16 (1995).

[839] Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket Nos. 00-258 and 95-18, *Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order*, 19 FCC Rcd 20720, 20750 ¶ 63 (2004) ("*AWS Sixth R&O*"); Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, *Report and Order, Fourth Report and Order, Fourth Memorandum Opinion and Order, and Order*, 19 FCC Rcd 14969, 15099 ¶¶ 261-262 (2004) ("*800 MHz R&O*").

[840] Sprint Comments at 15. Sprint was the only party to comment specifically on cost-sharing issues for the 2020-2025 MHz band.

[841] Each five megahertz block of spectrum in the 1990-2025 MHz band represents one-seventh of the relocated BAS spectrum. Sprint has stated that the *pro rata* share of the overall BAS relocation costs attributable to each five megahertz of relocated BAS spectrum amounts to $94,875,516. Letter from Marc S. Martin, Counsel for Sprint Nextel Corporation, K&L Gates, to Marlene H. Dortch, Sec'y, FCC, WT Docket Nos. 12-70, 04-356, ET Docket No. 10-142, at 2 (filed Jul. 9, 2012).

3. Relocation and Cost Sharing for 1915-1920 MHz.

295. Although relocation and cost sharing for the 1915-1920 MHz band were not raised in the *AWS-4 NPRM*, UTAM, Inc. filed comments seeking reimbursement in this proceeding for its costs in clearing the 1915-1920 MHz block, i.e., the AWS-2 Lower H block.[842] UTAM is the frequency coordinator for the unlicensed personal communications service (UPCS) and was designated by the Commission to relocate incumbent licensees in the 1910-1930 MHz band to support the introduction and deployment of UPCS devices.[843] Because the Commission has not yet auctioned the H Block, UTAM has yet to be compensated for its relocation efforts. UTAM expressed concern that "converting the 2000-2020 MHz band from an MSS uplink to a terrestrial uplink" band would result in harmful interference to the 1995-2000 MHz block.[844] This could make the Upper H block unusable, resulting in both the Upper and Lower H blocks remaining unlicensed and, consequently, UTAM not being reimbursed for clearing the Lower H block. UTAM argues, therefore, that we should require the licensee of AWS-4 operating authority to reimburse UTAM while affording the licensee a reimbursement right to collect the amount from AWS-2 licensees once the 1915-1920 MHz band is auctioned.[845] We disagree that the licensees of AWS-4 authority should be held responsible for this outstanding cost-sharing obligation. As noted above, cost-sharing procedures under the ET framework allow the operators that have relocated incumbents to be reimbursed a portion of their relocation expenses from new entrants that benefit from the spectrum clearance. In this case, we find no benefit to the licensees of AWS-4 operating authority for UTAM's clearing of 1915-1920 MHz. To be clear, we recognize UTAM's outstanding claim for full reimbursement of its expenses for clearing fixed microwave incumbents from the 1915-1920 MHz band. Additionally, as discussed above, we expect that the technical rules we are adopting will have a positive effect on the utility of the 1995-2000 MHz band relative to the existing MSS and MSS/ATC rules.[846] Consistent with precedent, we defer cost-sharing issues for the 1915-1920 MHz band until we establish service rules for that band, which we expect to do in the near future.[847]

4. Relocation and Cost-Sharing for 2180-2200 MHz

a. Relocation

296. *Background.* The upper portion of AWS-4 (2180-2200 MHz) is part of the 2160-2200 MHz band that the Commission previously reallocated from the Fixed Microwave Services (FS) to emerging technologies.[848] In the *AWS-4 NPRM,* the Commission observed that our licensing records show approximately 700 active FS licenses in the 2180-2200 MHz band and that most of these incumbents appear to be state or local governmental entities, utilities, railroads, and other businesses with FS links licensed in the Microwave Public Safety Pool (MW) or the Microwave Industrial/Business Pool

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[842] UTAM Comments at 2-6; UTAM Reply Comments at 1-4; *see AWS Sixth Report & Order*, 19 FCC Rcd at 20726-20740 ¶¶ 8-41; *AWS-2 NPRM*, 19 FCC Rcd at 19264 ¶ 2.

[843] *See* 47 C.F.R. § 15.307 (applications for certification of UPCS equipment must include an affidavit from UTAM, Inc. certifying that the applicant is a participating member of UTAM, Inc.); *see generally* biannual reports filed by UTAM in GEN Docket No. 90-314.

[844] UTAM Comments at 4.

[845] *Id.* at 4-6.

[846] *See supra* Section III.B. (Technical Issues).

[847] *See 2010 BAS Ruling*, 25 FCC Rcd at 13903-13904 ¶ 72.

[848] *See* 47 C.F.R. § 101.69.

(MG) for private, internal communication.[849] FS links in the 2180-2200 MHz band typically are paired, for two-way operation, with FS links in the 2130-2150 MHz band. The Commission previously adopted relocation and cost-sharing rules for AWS-1 licensees in the 2110-2155 MHz band, and we proposed in the *AWS-4 NPRM* to adopt similar rules for licensees of AWS-4 operating authority to govern relocation and cost-sharing in the 2180-2200 MHz band.[850]

297. In the *AWS-4 NPRM,* the Commission proposed to apply the rules that govern the relocation of FS incumbents from the 2110-2155 MHz band by AWS-1 licensees to the relocation of FS incumbents from the 2180-2200 MHz band by an AWS-4 entrant.[851] Under the existing rules, AWS-1 licensees must coordinate their frequency usage with all potentially affected co-channel and adjacent channel incumbents prior to initiating operations from any base or fixed station.[852] If interference would occur,[853] the AWS-1 licensee can initiate a mandatory negotiation period.[854] If no agreement is reached during the mandatory negotiation period, the AWS-1 licensee can initiate involuntary relocation procedures.[855] Under the Commission's proposal, these processes would also apply to AWS-4 entrants, too.

298. In the *AWS-4 NPRM,* the Commission also proposed to sunset AWS-4 relocation obligations ten years after the first AWS-4 license is issued in the band.[856] Under the ET policies, the Commission sunsets the relocation obligation owed by new licensees to incumbents. For example, MSS/ATC relocation obligations to FS in the 2180-2200 MHz band will sunset in December 2013.[857] Similarly, for the 2110–2150 MHz, 2160–2175 MHz, and 2175–2180 MHz bands, the sunsets occur "ten years after the first ET license is issued in the respective band."[858] Thus, because AWS-1 licenses were first-issued in 2006, the sunset for relocation obligations for FS incumbents in the 2130-2150 MHz band will occur in 2016. The Commission recognized in the *AWS-4 NPRM* that the 2013 sunset date applies to 2180-2200 MHz for MSS/ATC.[859] However, the Commission stated that, under its proposal to permit full terrestrial use under Part 27, it would be appropriate to treat the AWS-4 band the same as other AWS bands by setting the sunset ten-years after the band is licensed for AWS.[860] The Commission therefore

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[849] *AWS-4 NPRM,* 27 FCC Rcd at 3605 ¶ 132.

[850] *Id.* at 3605-3607 ¶¶ 132-135.

[851] *Id.* at 3605-3606 ¶¶ 132-134.

[852] 47 C.F.R. § 27.1131 ("Coordination shall be conducted in accordance with the provisions of [47 C.F.R.] § 24.237.").

[853] 47 C.F.R. §§ 27.1131, 27.1160, 101.82.

[854] 47 C.F.R. §§ 101.69, 101.73.

[855] *See* 47 C.F.R. § 101.75.

[856] *AWS-4 NPRM,* 27 FCC Rcd at 3606 ¶ 134; *see* 47 C.F.R. § 101.75.

[857] 47 C.F.R. § 101.79(a)(2); *see* Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile Satellite Service, ET Docket No. 95-18, ET Docket No. 00-258, IB Docket No. 01-185, *Third Report and Order and Third Memorandum Opinion and Order,* 18 FCC Rcd 23638, 23675 ¶ 77 (2003) ("*MSS Third R&O*").

[858] 47 C.F.R. § 101.79(a)(1).

[859] *AWS-4 NPRM,* 27 FCC Rcd at 3606 ¶ 134.

[860] *Id.*

proposed to revise Section 101.79(a)(2) of the Commission's rules[861] to include Part 27 sunset rules in the 2180-2200 MHz band, setting a 10-year sunset date.[862] The Commission also proposed removing footnote NG168 from the U.S. Table of Frequency Allocations.[863] The Commission explained that this would clarify, that after the applicable sunset date, grandfathered fixed microwave systems will be governed by the procedures in Section 101.79.[864]

299. *Discussion.* We adopt the proposed approach to apply rules for the relocation of FS incumbents from the 2180-2200 MHz band by an AWS-4 entrant based on similar rules that apply to the relocation of FS incumbents from the 2110-2155 MHz band by AWS-1 licensees. We also establish a 10-year sunset date from the grant of the first license or issuance of a modification of a license to authorize the use of the 2180-2200 MHz band for AWS-4 under Part 27.

300. We received minimal comment on this issue. DISH opposed this approach, arguing that the Commission should allow FS operations to terminate in 2013 because current MSS/ATC obligations to relocate FS incumbents in the 2180-2200 MHz band will sunset in December 2013 and FS incumbents have been on notice for more than 20 years that they would likely need to relocate their services.[865] Conversely, the Utilities Telecom Council (UTC) supports the Commission's proposal to establish a ten-year sunset for AWS-4 relocation obligations in the 2180-2200 MHz band, claiming that this will provide FS incumbents with an equal opportunity to negotiate relocation with AWS-4 entrants as was provided for negotiation with other entrants.[866]

301. Under the AWS-4 service rules that we are adopting, the MSS/AWS-4 licensee will be required to build a terrestrial network to serve a large portion of the country. Thus, the deployment of a ubiquitous AWS-4 network creates a much greater certainty that incumbents would need to relocate from the band than might have been anticipated under the existing MSS/ATC regime.[867] Because of the large number of FS incumbents still present in the band, we find that it serves the public interest to impose an obligation on an AWS-4 entrant to relocate FS incumbents from the 2180-2200 MHz band, and that this obligation should be independent and distinct from the existing MSS/ATC relocation obligation. Consequently, this relocation obligation shall not sunset at the December 2013 date applicable under the MSS/ATC rules but instead shall be determined by the AWS-4 relocation rules which we are now adopting.

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[861] *See AWS-4 NPRM*, 27 FCC Rcd at 3632-33, App. A (proposed 47 C.F.R. § 101.79).

[862] *AWS-4 NPRM,* 27 FCC Rcd at 3606 ¶ 134.

[863] NG168, which has subsequently been renumbered as NG43, limits the use of the 2180-2200 MHz band to MSS and ancillary terrestrial components, establishes a cut-off date for new primary fixed and mobile services, and sets December 9, 2013 as the date by which all fixed and mobile service licensees shall operate on a secondary basis.

[864] *AWS-4 NPRM,* 27 FCC Rcd at 3606 ¶ 134.

[865] DISH Comments at 33.

[866] UTC Comments at 1-2; *see also* Motorola Comments at 1-2 (noting that the Commission is correct to look to the AWS-1 rules as a model for AWS-4 for technical matters as well as other regulatory issues).

[867] Unless otherwise specified, our ET policies do not require an incumbent licensee to cease operating after the relocation obligation period ends for new entrants. Instead, incumbent primary licensees may continue to operate on a primary basis but must vacate the spectrum within six months of receiving written notice from a new entrant intending to turn on a system within the interference range of the incumbent. *See, e.g.* 47 C.F.R. § 101.79(a). Incumbent secondary licensees must vacate the spectrum within 30 days of receiving a written notification from a new entrant. *See, e.g.*, 47 C.F.R. § 101.103(d) (30-day notification period for frequency coordination).

302. Although DISH is correct that FS incumbents in the 2180-2200 MHz band were subject to relocation by MSS licensees,[868] we find it appropriate to impose relocation obligations on licensees of AWS-4 authority at this time because we now adopt service rules for a new wireless terrestrial service under Part 27. The Commission generally adopts relocation procedures at the time that it adopts rules for the provision of new services in bands that are used by incumbent licensees. The MSS/ATC relocation rules are based on unique circumstances that were only applicable to MSS. The Commission departed from its traditional relocation rules in adopting a mandatory negotiation period for relocation of FS incumbents by MSS licensees in the 2180-2200 MHz band as well as providing a specific date for the start of the ten-year sunset period instead of the issuance of the first license or start of the first relocation negotiations.[869] The Commission believed that the modifications to the traditional relocation/negotiation procedures was warranted due to the presence of special circumstances specific to MSS and hoped that it would expedite the relocation of FS incumbents from the 2180-2200 MHz band.[870] The Commission also has stated that those special circumstances are not applicable to relocations by AWS licensees and declined to depart from the traditional trigger for determining the mandatory negotiation period and the sunset dates for the relocation of FS incumbents by AWS licensees.[871]

303. Although we agree with DISH that FS incumbents had considerable notice that they would likely need to relocate their services, we are not persuaded that this should be the predominant factor in our decision. We note that, under the ET procedures, the date at which the incumbents first received notice that they would be relocated has not determined the starting date for the relocation sunset period. For example, when the Commission allocated spectrum for AWS, including at 2130-2150 MHz in 2002, and thereafter adopted service rules, modified relocation rules, and adopted cost-sharing rules, it continued to impose an obligation on AWS-1 licensees to relocate FS incumbents at 2130-2150 MHz for ten years from the date on which the first AWS-1 license was granted, even though those FS incumbents were already on notice that they would be subject to relocation. Similarly, the Commission decided to relocate BAS incumbents in the 1990-2025 MHz band to make way for MSS in 1997, but did not begin the ten-year relocation period until 2000 and later extended the sunset date to 2013.[872]

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[868] DISH Comments at 33.

[869] *See* Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile Satellite Service, ET Docket No. 95-18, ET Docket No. 00-258, IB Docket No. 01-185, *Third Report and Order and Third Memorandum Opinion and Order,* 18 FCC Rcd 23638, 23675 ¶ 77 (2003) ("*MSS Third R&O*"). The mandatory negotiation period for non-public safety incumbents ended on December 8, 2004, and the mandatory negotiation period for public safety incumbents ended December 8, 2005. 47 C.F.R. § 101.69(e)(1), (2). MSS relocation obligations to FS in the 2180-2200 MHz band will sunset in December 2013 (ten years after the mandatory negotiation period began for MSS licensees). 47 C.F.R. § 101.79(a)(2).

[870] *See MSS Third R&O,* 18 FCC Rcd at 23675 ¶ 77. Rather than the mandatory negotiations commencing when the MSS licensee informs the FS incumbent in writing of its desire to negotiate, the Commission modified its rules and specified the starting date of the mandatory negotiation period between MSS licensees and FS incumbents, as well as the starting date of the related ten-year sunset period for relocation of FS incumbents by MSS licensees in the 2180-2200 MHz band. *See MSS Third R&O,* 18 FCC Rcd at 23675 ¶ 77; *see also id.* (noting that "MSS proponents have argued that the ATC component recently authorized for MSS licensees would be instrumental in accelerating their ability to move forward with the relocation process.").

[871] *AWS Sixth R&O,* 19 FCC Rcd at 20763 ¶ 102.

[872] *See* Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for use by the Mobile Satellite Service, ET Docket No. 95-18, ET Docket No. 00-258, IB Docket No. 01-185, *First Report and Order and Further Notice of Proposed Rulemaking,,* 12 FCC Rcd 7388, 7401 ¶ 30 (1997); *MSS Third R&O*, 18 FCC Rcd at 23649-50, 23661-62 ¶¶ 19, 47.

304. For all of the reasons discussed above, we conclude that it is in the public interest to adopt relocation rules for licensees of AWS-4 authority, including the trigger for determining the mandatory negotiation period and the sunset date for relocation obligations, that are based on our traditional *Emerging Technologies* proceedings and similar to rules that have governed the relocation of incumbent licensees by AWS-1 licensees and other terrestrial wireless licensees. We believe that our action will promote a harmonized approach under Part 27 to the relocation of FS incumbents by terrestrial wireless licensees across the AWS bands and will provide FS incumbents in the 2180-2200 MHz band with a meaningful opportunity to negotiate relocation agreements with a licensee of AWS-4 authority.

305. The specific rules that we adopt are set-forth in the attached Appendix A and, as explained above, are based on similar rules that apply to the relocation of FS incumbents from the 2110-2155 MHz band by AWS-1 licensees.[873] No parties commented on modifying the proposed rules themselves. In general, licensees of AWS-4 authority will be required to coordinate their frequency usage with all potentially affected co-channel and adjacent channel FS incumbents operating in the 2180-2200 MHz band prior to initiating operations from any base or fixed station. If interference would occur,[874] the licensee of AWS-4 authority can initiate a mandatory negotiation period (two-years for non-public safety, three-years for public safety) during which each party must negotiate in good faith for the purpose of agreeing to terms under which the FS licensees would: (1) relocate their operations to other fixed microwave bands or other media; or alternatively (2) accept a sharing arrangement with the licensee of AWS-4 authority that may result in an otherwise impermissible level of interference to the FS operations.[875] If no agreement is reached during the mandatory negotiation period, the licensee of AWS-4 authority can initiate involuntary relocation procedures.[876]

306. We also establish a 10-year sunset date from the grant of the first license or issuance of a modification of a license to authorize the use of the 2180-2200 MHz band for AWS-4 under Part 27.[877] We addressed arguments raised by DISH with respect to the sunset above. In addition, we adopt our proposal to delete the reference in footnote NG168 in the U.S. Table of Frequency Allocations to all Fixed and Mobile facilities operating on a secondary basis not later than December 9, 2013.[878] No parties commented on our proposal to modify this footnote. As we explained in the *AWS-4 NPRM,* grandfathered fixed microwave systems will be governed by the procedures in Section 101.79 after the applicable sunset date.[879]

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[873] *See supra* Section III.H.4.a. (Relocation and Cost-Sharing for 2180-2200 MHz - Relocation)

[874] 47 C.F.R. §§ 27.1131, 27.1160, 101.82.

[875] 47 C.F.R. §§ 101.69, 101.73.

[876] *See* 47 C.F.R. § 101.75.

[877] *Id.*

[878] NG168 stated that "Except as permitted below, the use of the 2180-2200 MHz band is limited to the MSS and ancillary terrestrial component offered in conjunction with an MSS network, subject to the Commission's rules for ancillary terrestrial components and subject to all applicable conditions and provisions of an MSS authorization. In the 2180-2200 MHz band, where the receipt date of the initial application for facilities in the fixed and mobile services was prior to January 16, 1992, said facilities shall operate on a primary basis and all later-applied-for facilities shall operate on a secondary basis to the mobile-satellite service (MSS); and not later than December 9, 2013, all such facilities shall operate on a secondary basis." This footnote has since been renumbered as NG43.

[879] *AWS-4 NPRM,* 27 FCC Rcd at 3606 ¶ 134; *see also infra* Section IV (Ancillary Terrestrial Component in the 2 GHz MSS Band) (deleting footnote 168, as well, because ATC is eliminated in the 2180-2200 MHz band).

b. Cost-Sharing

307. *Background.* In the *AWS-4 NPRM,* the Commission proposed to extend to the AWS-4 band the cost-sharing rules adopted for AWS-1 licensees. As noted above, FS links in the 2180-2200 MHz band typically are paired, for two-way operation, with FS links in the 2130-2150 MHz band. The Commission previously established a cost-sharing plan for MSS, MSS/ATC, and AWS-1 licensees in these paired bands.[880] Pursuant to the proposal, the cost-sharing plan would sunset for licensees of AWS-4 operating authority on the same date on which the relocation obligation sunsets.[881] The Commission also proposed conforming amendments to Parts 27 and 101 to include AWS-4 under the relocation and cost-sharing rules generally and to delete references to MSS/ATC.[882]

308. *Discussion.* We adopt the proposals set forth in the *AWS-4 NPRM* to extend the cost-sharing rules adopted for AWS-1 licensees to the AWS-4 band. This will result in the cost-sharing requirements sunsetting on the same date as the relocation obligations. UTC supports the Commission's proposal to apply cost-sharing rules similar to those adopted for AWS-1 licensees and contends that our failure to do so would provide a windfall to AWS-4 entrants.[883] The Commission has emphasized that it is desirable to harmonize the FS relocation procedures among the various AWS designated bands to the greatest extent feasible.[884] The Commission specifically noted that relocation procedures that are consistent throughout the band can be expected to foster a more efficient rollout of AWS and minimize confusion among the parties, and thereby serve the public interest.[885] We believe that adopting rules based on the Part 27 cost-sharing rules that apply to AWS-1 licensees will accelerate the relocation process and promote rapid deployment of new advanced wireless services in the band. The Part 27 cost-sharing rules were designed to accommodate the deployment of new wireless terrestrial services and have a proven record of success. We also observe that the Commission refined the Part 27 cost-sharing plan based on the experience and record of the cost-sharing plan that applied to PCS under Part 24. We therefore believe that our adoption of similar rules in this instance will expedite the relocation of FS incumbents and the introduction of new services. We further find that this approach will serve the public interest because it will distribute relocation costs more equitably among the beneficiaries of the relocation, encourage the simultaneous relocation of multi-link communications systems, and accelerate the relocation process, thereby promoting more rapid deployment of new services. We reach this conclusion for the reasons stated in this paragraph and irrespective of UTC's windfall argument. Accordingly, we adopt rules in Appendix A based on the formal cost-sharing procedures codified in Part

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[880] 47 C.F.R. § 101.82. The cost-sharing plan is administered by clearinghouses selected by the Commission's Wireless Telecommunications Bureau under delegated authority. *See* 47 C.F.R. § 27.1162; *see also id.* ("This clearinghouse(s) will administer the cost-sharing plan by, *inter alia,* determining the cost-sharing obligation of AWS and other ET entities for the relocation of FMS incumbents from the 2110-2150 MHz and 2160-2200 MHz bands.").

[881] *See* 47 C.F.R. § 27.1174.

[882] *See AWS-4 NPRM,* 27 FCC Rcd at 3628-33, App. A (proposed rules).

[883] UTC Comments at 1-2. Although DISH did not directly comment on issues relating to cost-sharing with respect to the relocation of FS incumbents from the 2180-2200 MHz band, DISH stated that FS operations to terminate in 2013. DISH Comments at 33.

[884] *AWS Ninth R&O,* 21 FCC Rcd at 4506 ¶ 60; Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, *Eighth Report and Order, Fifth Notice of Proposed Rule Making, and Order,* 20 FCC Rcd 15866, 15883 ¶ 34 (2005) ("*AWS Eighth R&O and Fifth Notice*").

[885] *AWS Ninth R&O,* 21 FCC Rcd at 4506 ¶ 60; *AWS Eighth R&O and Fifth Notice,* 20 FCC Rcd at 15883 ¶ 34.

27 of our rules to apportion relocation costs among those entrants that benefit from the relocation of FS incumbents in the 2180-2200 MHz band.

309. Consistent with our proposal to extend the cost-sharing rules adopted for AWS-1 licensees to the AWS-4 band, we also adopt rules to permit for voluntary self-relocating FS incumbents to obtain reimbursement from those licensees of AWS-4 authority benefiting from the self-relocation. Incumbent participation will provide FS incumbents with the flexibility to relocate themselves and the right to obtain reimbursement of their relocation costs, adjusted by depreciation, up to the reimbursement cap, from new AWS-4 entrants in the band. Incumbent participation also will accelerate the relocation process by promoting system wide relocations and result in faster clearing of the band, thereby expediting the deployment of new advanced wireless services to the public. Therefore, we require licensees of AWS-4 authority to reimburse FS incumbents that voluntarily self-relocate from the 2110-2150 MHz and 2160-2200 MHz bands and AWS licensees will be entitled to *pro rata* cost sharing from other AWS licensees that also benefited from the self-relocation.

310. With respect to cost-sharing obligations on MSS operators for FS incumbent self-relocation in the 2180-2200 MHz band, we recognize that the Commission previously declined to impose cost sharing on MSS operators for voluntary self-relocation by FS incumbents in that band.[886] Accordingly, for FS incumbents that elect to self-relocate their paired channels in the 2130-2150 MHz and 2180-2200 MHz bands, we will impose cost-sharing obligations on AWS licensees but not on MSS operators.[887] Where a voluntarily relocating microwave incumbent relocates a paired microwave link with paths in the 2130–2150 MHz and 2180–2200 MHz, it may not seek reimbursement from MSS operators but is entitled to reimbursement from the first AWS beneficiary for its actual costs for relocating the paired link, subject to the reimbursement cap in Section 27.1164(b).[888] This amount is subject to depreciation as specified in § 27.1164(b). An AWS licensee who is obligated to reimburse relocation costs under this rule is entitled to obtain reimbursement from other AWS beneficiaries in accordance with Sections 27.1164 and 27.1168.[889] For purposes of applying the cost-sharing formula relative to other AWS licensees that benefit from the self-relocation, depreciation shall run from the date

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[886] *See MSS Third R&O*, 18 FCC Rcd at 23673 ¶ 73 (a reimbursement scheme for voluntary self-relocation was not envisioned by the MSS/FS relocation plan and thus a cost sharing plan for MSS reimbursing FS incumbents who voluntarily relocate was not warranted).

[887] To the extent that a party is both an AWS licensee and a 2 GHz MSS operator, its AWS obligations shall govern its relocation and cost sharing obligations should the two sets of obligations conflict.

[888] 47 C.F.R. § 27.1166(f). Because MSS licensees were not obligated to reimburse a voluntarily relocating FS incumbent with a paired microwave link with paths in the 2130–2150 MHz and 2180–2200 MHz bands, a voluntary relocating FS incumbent was only entitled to partial reimbursement from the first AWS beneficiary, equal to fifty percent of its actual costs for relocating the paired link, or half of the reimbursement cap in Section 27.1164(b), whichever was less. With the adoption of rules in this *Report and Order* to permit for voluntary self-relocating FS incumbents to obtain reimbursement from licensees of AWS-4 authority benefiting from the self-relocation, a reimbursement obligation for self-relocations will exist for AWS licensees that benefit from the relocation of the paths in the 2130–2150 MHz and 2180–2200 MHz bands as of the effective date of this *Report and Order*. To the extent that an FS incumbent with paths in the 2130–2150 MHz and 2180–2200 MHz bands undertook self-relocation prior to the effective date of this *Report and Order*, the voluntary relocating FS incumbent is entitled to only partial reimbursement, as discussed above. We will rely on the notice requirement set-forth in Section 27.1166(a)(2) for determining the date of self-relocation. *See* 47 C.F.R. § 27.1166(a)(2) (requiring a voluntarily relocating microwave incumbent to submit documentation of the relocation of the link to the clearinghouse within 30 calendar days of the date that the incumbent notifies the Commission that it intends to discontinue, or has discontinued, the use of the link, pursuant to 47 C.F.R. § 101.305 of the Commission's rules).

[889] 47 C.F.R. § 27.1166(f).

on which the clearinghouse issues the notice of an obligation to reimburse the voluntarily relocating microwave incumbent.[890]

311. We require AWS-4 relocators to file their reimbursement requests with the clearinghouse[891] within 30 calendar days of the date the relocator signs a relocation agreement with an incumbent. Terrestrial operations trigger incumbent microwave relocations on a link-by-link basis,[892] and the Commission imposed a mandatory requirement that all terrestrial operators—AWS and MSS ATC—that relocate FS incumbents from the 2110-2150 MHz and 2160-2200 MHz bands use a clearinghouse.[893] No party proposed that we modify the rules requiring the use of a clearinghouse by terrestrial wireless licenses for cost-sharing. The clearinghouses have considerable experience in determining the cost-sharing obligation of AWS and other ET entities for the relocation of FS incumbents from the 2110-2150 MHz and 2160-2200 MHz bands, and the Commission selected clearinghouses to serve as neutral third-parties in the cost-sharing process.[894] We continue to believe that a mandatory requirement will allow the clearinghouses to accurately track cost-sharing obligations as they relate to all terrestrial operations[895] and expedite the relocation of FS incumbents from the 2180-2200 MHz band by minimizing disputes over the reimbursement of those costs. For similar reasons and consistent with precedent, we will also require self-relocating microwave incumbents in the 2180-2200 MHz band to file their reimbursement requests with the clearinghouse within 30 calendar days of the date that they submit their notice of service discontinuance with the Commission.[896]

312. We further require all licensees of AWS-4 authority that are constructing a new site or modifying an existing site to file site-specific data with the clearinghouse prior to initiating operations for a new or modified site. The site data must provide a detailed description of the proposed site's spectral frequency use and geographic location.[897] We will also impose a continuing duty on those entities to maintain the accuracy of the data on file with the clearinghouse. We find that such an approach will ensure fairness in the process and preclude new AWS-4 entrants from conducting independent

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[890] *Id.*

[891] On October 4, 2006, the Wireless Telecommunications Bureau found PCIA--The Wireless Infrastructure Association (PCIA) and the CTIA Spectrum Clearinghouse, LLC qualified to serve as clearinghouses that will administer the Commission's cost-sharing plan and determining the cost-sharing obligation of AWS and other ET entities for the relocation of FS incumbents from the 2110-2150 MHz and 2160-2200 MHz bands. *See* Wireless Telecommunications Bureau Finds CTIA and PCIA Qualified to Administer the Relocation Cost-Sharing Plan For Licensees in the 2.1 GHz Bands, *Public Notice*, 21 FCC Rcd 11265 (2006).

[892] *See AWS Ninth R&O,* 21 FCC Rcd at 4522 ¶ 94.

[893] *See AWS Ninth R&O,* 21 FCC Rcd at 4522-4523 ¶¶ 94-96. Pursuant to 47 C.F.R. § 25.149(a)(1), ATC base stations transmit in the MSS downlink band (2180–2200 MHz).

[894] 47 C.F.R. § 27.1162. Because of the considerable experience of the clearinghouses and their role as neutral, third parties in the cost-sharing process, most cost-sharing disputes are resolved between the parties or through the clearinghouses. *See, e.g.,* 47 C.F.R. § 27.1172(a) (requiring parties to submit cost-sharing disputes, in the first instance, to the clearinghouse for resolution).

[895] *See AWS Ninth R&O,* 21 FCC Rcd at 4523 ¶ 96.

[896] 47 C.F.R. § 27.1166(a)(2).

[897] The site-specific data must at least include the applicant's name and address, the name of the transmitting base station, the geographic coordinates corresponding to that base station, the frequencies and polarizations to be added, changed, or deleted, and the emission designator. Because this information is included in the prior coordination notice (PCN) required by 47 C.F.R. § 101.103(d), entities can satisfy the site data filing requirement by submitting their PCN to the clearinghouse instead.

interference studies for the purpose or effect of evading the requirement to file site-specific data with the clearinghouse prior to initiating operations.[898]

313. Utilizing the site-specific data submitted by licensees of AWS-4 authority, the clearinghouse determines the cost-sharing obligations of each entrant by applying the Proximity Threshold Test. We find that the presence of an entrant's site within the Proximity Threshold Box, regardless of whether it predates or postdates relocation of the incumbent, and regardless of the potential for actual interference, will trigger a cost-sharing obligation.[899] Accordingly, any entrant that engineers around the FS incumbent will trigger a cost-sharing obligation once relocation of the FS incumbent occurs.[900]

314. Consistent with precedent, we establish a specific date on which the cost-sharing plans that we adopt here will sunset. We find that the sunset date for cost sharing purposes is the date on which the relocation obligation for the subject band terminates.[901] Although we realize that we are adopting a sunset date that differs from the sunset date for cost-sharing obligations of AWS-1 licensees, we find that establishing sunset dates for cost sharing purposes that are commensurate with the sunset date for AWS relocation obligations in each band appropriately balances the interests of all affected parties and ensures the equitable distribution of costs among those entrants benefiting from the relocations. We reiterate, however, that AWS entrants that trigger a cost-sharing obligation prior to the sunset date must satisfy their payment obligation in full.[902]

315. We continue to require participants in the cost-sharing plan to submit their disputes to the clearinghouse for resolution in the first instance.[903] Where parties are unable to resolve their issues before the clearinghouse, parties are encouraged to use expedited ADR procedures, such as binding arbitration, mediation, or other ADR techniques.[904] Except for the independent third party appraisal of the compensable relocation costs for a voluntarily relocating microwave incumbent and documentation of the relocation agreement or discontinuance of service required for a relocator or self-relocator's reimbursement claim, both of which must be submitted in their entirety, we require participants in the

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[898] 47 C.F.R. § 27.1131 (all AWS licensees, prior to initiating operations, must coordinate their frequency usage with co-channel and adjacent channel incumbent, Part 101 fixed point-to-point microwave licensees in the 2110-2155 MHz band, in accordance with 47 C.F.R. § 24.237); 47 C.F.R. § 101.103(d) (proposed frequency usage must be prior coordinated with existing licensees).

[899] *See, e.g., Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd at 8892-3, Appendix A ¶¶ 32-33 (The Proximity Threshold Test is less expensive and easier to administer than the interference criteria of TIA TSB 10-F because under the test, a PCS base station will either fall inside the reimbursement "box" or out of it.)

[900] Our rules also preclude entrants that have triggered a cost-sharing obligation from avoiding that obligation by deconstructing or modifying their facilities. Once an entrant submits its site-specific data with the clearinghouse and triggers a cost sharing obligation because it is within the Proximity Threshold "box," it is required to pay its cost sharing obligations in full. The "post-trigger" deconstruction or modification of the entrant's facilities will neither eliminate nor mitigate such payment obligations. 47 C.F.R. § 27.1168(b).

[901] In accordance with the rules adopted herein, the relocation sunset date is ten years after the grant of the first license or modification of a license authorizing the use of the 2180-2200 MHz band for AWS-4 under Part 27.

[902] We clarify that a clearinghouse determines when an entrant triggered a cost sharing obligation pursuant to the Proximity Threshold Test. Regardless of the reason, entrants that somehow evade notifying the clearinghouse of the fact that they triggered a cost sharing obligation will nevertheless be responsible for the full payment of their obligation. *See, e.g.*, 47 C.F.R. §§ 27.1168, 27.1170; *see also AWS Ninth R&O*, 21 FCC Rcd at 4517 ¶ 82 n. 295.

[903] *See* 47 C.F.R. § 27.1188(a).

[904] *Id.*

cost-sharing plan to provide only the uniform cost data requested by the clearinghouse subject to the continuing requirements that relocators and self-relocators maintain documentation of cost-related issues until the sunset date and provide such documentation, upon request, to the clearinghouse, the Commission, or entrants that trigger a cost-sharing obligation. In addition, we also require that parties of interest contesting the clearinghouse's determination of specific cost-sharing obligations must provide evidentiary support to demonstrate that their calculation is reasonable and made in good faith.[905] Specifically, these parties are expected to exercise due diligence to obtain the information necessary to prepare an independent estimate of the relocation costs in question and to file the independent estimate and supporting documentation with the clearinghouse.[906]

316. We expect new entrants and incumbent licensees to act in good faith in all matters relating to the cost-sharing process herein established. Although the Commission has generally required "good faith" in the context of parties' participation in negotiations,[907] self-relocating incumbents benefit through their participation in the cost-sharing regime and therefore we expect them to act in good faith in seeking reimbursement for recoverable costs in accordance with the Commission's rules. We find that the question of whether a particular party was acting in good faith is best addressed on a case-by-case basis. By retaining sufficient flexibility to craft an appropriate remedy for a given violation in light of the particular circumstances at hand, we can ensure that any party who violates our good faith requirements, either by acting in bad faith or by filing frivolous or harassing claims of violations, will suffer sufficient penalties to outweigh any advantage it hoped to gain by its violation.[908]

IV. ANCILLARY TERRESTRIAL COMPONENT IN THE 2 GHZ MSS BAND

317. *Background.* In the *AWS-4 NPRM*, the Commission proposed eliminating the ATC rules for the 2 GHz band.[909] The Commission recognized that an authorization of terrestrial operations under Part 27 of the Commission's rules for the AWS-4 band, while also maintaining ATC operations would be redundant and potentially confusing to operators.[910] Additionally, the Commission observed that the ATC regulations no longer represented the best framework for terrestrial mobile broadband to develop in the 2 GHz band. Thus, the Commission proposed eliminating ATC rules for this band.[911] As part of effectuating the replacement of ATC with Part 27 rules, the Commission also proposed deleting footnote NG168 from the U.S. Table of Allocations.[912]

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[905] *See* 47 C.F.R. § 27.1188(b).

[906] *Id.*

[907] *See, e.g., AWS Ninth R&O,* 21 FCC Rcd at 4519 ¶ 85; *Emerging Technologies Third R&O and MO&O*, 8 FCC Rcd at 6595, ¶¶ 15-16; *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd at 8838, ¶¶ 20-22; Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, ET Docket No. 95-18, *Second Report and Order and Second Memorandum Opinion and Order*, 15 FCC Rcd 12315, 12331 ¶ 47 (2000) ("*MSS Second R&O and Second MO&O*").

[908] *See, e.g., AWS Ninth R&O,* 21 FCC Rcd at 4519 ¶ 85; *Emerging Technologies Third R&O and MO&O*, 8 FCC Rcd at 6595 ¶¶ 15-16; *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd at 8838 ¶¶ 20-22; *MSS Second R&O and Second MO&O*, 15 FCC Rcd at 12331 ¶ 47.

[909] *AWS-4 NPRM*, 27 FCC Rcd at 3607 ¶ 136.

[910] *Id.*

[911] *Id.*

[912] *Id.*

318. *Discussion.* We adopt the proposal to eliminate the ATC rules for the 2 GHz band and delete footnote NG168 (now numbered NG43) from the U.S. Table of Allocations. We conclude that authorizing two, distinct terrestrial mobile operations in the band would result in confusion and redundancy. Furthermore, as the Commission observed in the *AWS-4 NPRM*, the changing circumstances in the 2 GHz MSS band demonstrate that ATC regulations are no longer the best framework for developing and deploying terrestrial broadband operations in the band.[913] Finally, the record reflects no opposition to our adopting the proposals. We therefore conclude that the potential benefits of our proposals would outweigh any potential costs. In eliminating the ATC rules for the 2 GHz MSS band, we emphasize that our action does not result in changes to the ATC rules for either the L-band or the Big LEO band; rather, we intend to address issues pertaining to the ATC rules for those bands in one or more separate proceedings at a later date.[914]

V. ORDER OF PROPOSED MODIFICATION

319. As noted above, although the 2000-2020 MHz and 2180-2200 MHz bands are currently assigned to two different licensees, Gamma Acquisitions L.L.C. (Gamma) and New DBSD Satellite Services G.P. (New DBSD), both licenses are wholly owned subsidiaries of DISH.[915] In paragraph 175 above, we direct these 2 GHz MSS licensees to determine how to effectuate the reconfiguration of the 2 GHz MSS band into an A-B/A-B arrangement by each licensee selecting a duplex pair in response to this Order of Proposed Modification. For the reasons discussed throughout this *Report and Order*, we conclude that it is in the public interest, convenience, and necessity to propose modifying the existing 2 GHz MSS licenses as follows:

- To modify the 2 GHz MSS licenses of Gamma Acquisition L.L.C. (call sign E060430) and New DBSD Satellite Services G.P. (call sign E070272) to reflect the duplex pairing that each licensee selects in its response to this Order of Proposed Modification, consistent with paragraph 175, above;
- To add AWS-4 terrestrial operating authority, as detailed in this *Report and Order and Order of Proposed Modification*, to the 2 GHz MSS licenses of both Gamma Acquisition L.L.C. (call sign E060430) and New DBSD Satellite Services G.P. (call sign E070272) consistent with the 2 GHz MSS licensees' duplex pairing selections;
- To require Gamma Acquisition L.L.C. and New DBSD Satellite Services G.P. to accept any OOBE interference to MSS or terrestrial operations in 2000-2005 MHz from lawful operations from future 1995-2000 MHz licensees;
- To require Gamma Acquisitions L.L.C. and New DBSD Satellite Services G.P. to accept any in band interference in some or all of 2000-2020 MHz from lawful operations from 1995-2000 MHz licensees; and
- To eliminate the ATC authority in the 2000-2020 MHz and 2180-2200 MHz spectrum bands of both Gamma Acquisition L.L.C. and New DBSD Satellite Services G.P.[916]

320. In this connection, we believe that the proposed license modifications would serve the public interest by allowing for additional terrestrial broadband spectrum, while minimizing harmful interference. In accordance with Section 316(a) of the Communications Act, as amended, and Section

[913] *Id.*

[914] *Id.*

[915] *See supra* ¶ 14.

[916] *See infra* Section IV. (Ancillary Terrestrial Component in the 2 GHz MSS Band).

1.87(a) of the Commission's rules, we will not issue a modification order(s) until Gamma Acquisition L.L.C. and New DBSD Satellite Services G.P. have received notice of our proposed action and have had an opportunity to protest.[917] We direct the staff to send this Report and Order and Order of Proposed Modification by certified mail, return receipt requested to Gamma Acquisition L.L.C., and to New DBSD Satellite Services G.P. Pursuant to Section 316(a)(1) of the Act and Section 1.87(a) of the Commission's rules, receipt of this *Report and Order and Order of Proposed Modification* by certified mail, return receipt requested, shall constitute notification in writing of our *Order of Proposed Modification* proposing to modify the 2 GHz MSS licenses of Gamma Acquisition L.L.C. and New DBSD Satellite Services G.P. and of the grounds and reasons therefore.[918] Gamma Acquisition L.L.C. and New DBSD Satellite Services G.P. shall have thirty days from the date of such receipt to protest such Order of Proposed Modification. To protest the proposed modifications, Gamma Acquisition L.L.C. or New DBSD Satellite Services G.P. must, within thirty days of receiving notice of this *Report and Order and Order of Proposed Modification*, submit a written statement with sufficient evidence to show that the modification would not be in the public interest. The protest must be filed in the Electronic Comment Filing System (ECFS) under WT Docket No. 12-70[919] or with the Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W., Room TW-A235, Washington, D.C. 20554; the protesting party must, within 30 days of receiving notice of this *Report and Order and Order of Proposed Modification*, send a copy of the protest via electronic mail to Kevin Holmes of the Broadband Division of the Wireless Telecommunications Bureau at Kevin.Holmes@fcc.gov.[920] Once the 30 day protest period has lapsed, Gamma Acquisition L.L.C.'s and New DBSD Satellite Services G.P.'s right to file a protest expires, and the Commission may modify the licenses as noticed.[921] Finally, in the event that Gamma Acquisition L.L.C. or New DBSD Satellite Services G.P. rejects any aspect of the proposed license modification, it will be deemed to have rejected the entire license modification.

321. We delegate to the Wireless Telecommunications Bureau and the International Bureau the authority to issue a license modification order for Gamma Acquisition L.L.C. (call sign E060430) and for New DBSD Satellite Services G.P. (call sign E070272), but only to the extent consistent with paragraphs 319-320 above.

322. *Ex Parte Status.* Unless otherwise provided by the Commission or its staff pursuant to Section 1.1200(a),[922] a license modification proceeding under Title III of the Communications Act is treated as a restricted proceeding for *ex parte* purposes under Section 1.1208 of the Commission's

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[917] 18 U.S.C. § 316(a); 47 C.F.R. § 1.87(a).

[918] *Id.*

[919] As discussed in paragraph 322 below, we are using WT Docket No. 12-70 for any filings related to the instant Order of Proposed Mofication for administrative convenience only.

[920] This address is proper only for protests submitted by U.S. mail. For hand-delivered or messenger-delivered paper filings, the proper address is 236 Massachusetts Ave., N.E., Suite 110, Washington, D.C. 2002. For documents sent by overnight delivery service other than United States Postal Service Express Mail and Priority Mail, the proper address is 9300 East Hampton Dr., Capitol Heights, MD 20743. For further information, contact the Office of the Secretary at (202) 418-0300 or mdortch@fcc.gov.

[921] We also note, as set forth in Section 316(a)(2), that "[a]ny other licensee or permittee who believes its license or permit would be modified by the proposed action may also protest the proposed action before its effective date." 47 U.S.C. § 316(a)(2); *see also* 47 C.F.R. § 1.87(c).

[922] 47 CFR §§ 1.1200(a) ("[w]here the public interest so requires in a particular proceeding, the Commission and its staff retain the discretion to modify the applicable ex parte rules by order, letter, or public notice.").