

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands)	WT Docket No. 12-70
)	
Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz)	ET Docket No. 10-142
)	
Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands)	WT Docket No. 04-356
)	

COMMENTS OF SPRINT NEXTEL CORPORATION

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SUMMARY

Sprint Nextel supports the Commission's efforts in this proceeding to assign additional spectrum for mobile broadband use. The Commission should: (1) expeditiously license the AWS-4 Spectrum that is the focus of this proceeding; and (2) auction and license the H Block spectrum located adjacent to core PCS operations. Making the H Block available for PCS operations is in the public interest as the H Block represents the only auction-ready spectrum cleared of incumbent licensees and ready for immediate licensing and deployment. Auctioning the H Block as required by recent legislation will promote competition, allow carriers to better meet the growing demand for mobile data communications, expand roaming opportunities, and provide nearby PCS licensees with an opportunity to obtain additional spectrum. PCS licensees can utilize existing equipment for any H Block deployment, resulting in cost savings to the industry and consumers. In addition, competitive national carriers would have a strong incentive to enter into collaborative arrangements with regional and rural carriers to develop the auctioned H Block quickly and efficiently.

As part of its efforts to make additional spectrum available, the Commission must ensure, however, that existing PCS licensees receive adequate interference protection from future AWS-4 and H Block operations. For example, Sprint Nextel's PCS G Block is located adjacent to the H Block downlink and 5 MHz away from the AWS-4 Spectrum uplink. Technological advances and power limitations may help mitigate some potential interference issues between H Block operations and PCS licensees, but the Commission should adopt its proposed interference protection measures specifically designed to protect licensees located below 1995 MHz, including Sprint Nextel's PCS G Block operations and other incumbent PCS spectrum services. Given the interference concerns involving both AWS and PCS operations raised in this

proceeding, the Commission's proposal to create a 5 MHz guard band located between the AWS-4 uplink and H Block downlink warrants serious consideration.

The Commission must also reaffirm the reimbursement obligations of future licensees operating in the H and lower J Blocks to Sprint Nextel for its successfully completed clearing of the former Broadcast Auxiliary Service incumbents from this spectrum to make it available for wireless broadband communications services. Under the Commission's longstanding *Emerging Technologies* doctrine, early band entrants must receive reimbursement for a *pro rata* share of their band-clearing costs from later beneficiaries of the cleared spectrum. The Commission should require the beneficiaries of Sprint Nextel's clearance efforts in the H and lower J Blocks to reimburse Sprint Nextel for a *pro rata* share of its BAS relocation costs. The Commission should also establish clear standards of proof and an effective collection mechanism for reimbursement claims in order to provide the regulatory certainty necessary to support future relocation proceedings and encourage the deployment of new technologies.

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COMMENTS OF SPRINT NEXTEL CORPORATION

I. INTRODUCTION

Sprint Nextel Corporation (“Sprint Nextel”), pursuant to the Commission’s April 17, 2012 Public Notice,¹ respectfully submits these comments in response to the Notice of Proposed Rulemaking and Notice of Inquiry (“NPRM/NOI”) in the above-captioned proceedings.² Sprint Nextel supports the auction and assignment of additional broadband spectrum, provided that adequate interference protections are established and maintained for adjacent wireless operations, including core Personal Communications Services (“PCS”) operations adjacent to the

¹ See *Wireless Telecommunications Bureau Announces Pleading Cycle for Comments and Reply Comments on Advanced Wireless Services in the 2 GHz Band*, WT Docket Nos. 12-70 and 04-356, and ET Docket No. 10-142, DA 12-603 (rel. April 17, 2012) (“Public Notice”).

² See *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands; Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz; Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, WT Docket Nos. 12-70 and 04-356, and ET Docket No. 10-142, Notice of Proposed Rulemaking and Notice of Inquiry, FCC 12-32 (rel. Mar. 21, 2012) (“NPRM/NOI”).

1995-2000 MHz H Block. The Commission should move quickly to fully license both the PCS H Block, as required by the Middle Class Tax Relief and Job Creation Act of 2012,³ and the “AWS-4” Spectrum that is the principal focus of this rulemaking proceeding. Moreover, to ensure that the Commission’s important *Emerging Technologies* principles remain effective and viable for anticipated future rebanding initiatives, the Commission must reaffirm them by requiring future beneficiaries of the H and lower J Block spectrum to meet their reimbursement obligations to Sprint Nextel for the costly and time-consuming process of clearing and relocating prior Broadcast Auxiliary Service (“BAS”) incumbents from these valuable national spectrum resources to make them available for broadband use.

II. SPRINT NEXTEL SUPPORTS THE COMMISSION’S EFFORTS TO INCREASE SPECTRUM AVAILABLE FOR MOBILE BROADBAND USE

Efficient spectrum management is one of the Commission’s core functions.⁴ Sprint Nextel agrees with the Commission’s longstanding policy statement that “[s]pectrum is a valuable and finite public resource that must be allocated and assigned in a manner that will provide the greatest possible benefit to the American public.”⁵ As recognized in the NPRM/NOI, increasing the quantity and quality of spectrum available for mobile broadband users is important as more Americans rely on smartphones, tablets, and high-speed networks for their daily communications needs.⁶ Not only are increasing numbers of Americans subscribed to mobile data services, but the amount of data used by wireless consumers also continues to

³ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6401 (2012).

⁴ *Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium*, Policy Statement, 14 FCC Rcd. 19868, ¶ 6 (1999) (“Spectrum Policy Statement”). The Commission is charged with considering marketplace demands when allocating scarce spectrum resources for mobile services. See 47 U.S.C. § 332(a)(2).

⁵ Spectrum Policy Statement, at ¶ 7.

⁶ NPRM/NOI, at ¶ 10.

increase.⁷ Making additional spectrum available for mobile broadband is one important element for satisfying longer-term consumer demand, and the Commission's recent proposals provide the regulatory foundation for putting valuable but underutilized spectrum to commercial use.⁸ The proposals also mark an important step towards meeting the National Broadband Plan's recommendations that the Commission make 500 MHz of spectrum available for wireless broadband use by 2020 and 300 MHz of spectrum available for mobile flexible use by 2015.⁹

A. Sprint Nextel Supports the Licensing of Additional Spectrum for Flexible Use

The Middle Class Tax Relief and Job Creation Act of 2012 directs the Commission to auction up to 65 MHz of spectrum by February 2015 and establishes procedures to conduct a voluntary, two-sided incentive auction of up to 120 MHz of additional spectrum currently used for over-the-air television broadcasting.¹⁰ Of the entire 185 MHz potentially available for auction, however, only the H Block is entirely cleared of incumbents and ready for immediate auction and deployment.¹¹

Equally important, holding an H Block auction would help the wireless industry become more competitive and address the growing demand for data. Among other things, auctioning the H Block has the potential to achieve: (1) more competition; (2) more capacity for meeting the growing demand for data; (3) expanded scale economies; and (4) enhanced broadband roaming.

⁷ Mobile Broadband: The Benefits of Additional Spectrum, Federal Communications Commission Omnibus Broadband Initiative, OBI Technical Paper No. 6, at 4 (October 2010).

⁸ NPRM/NOI, at ¶¶ 4-9. In addition to the 40 MHz of spectrum contemplated by the NPRM/NOI, 10 MHz of valuable H Block spectrum should also be developed, for a total of 50 MHz.

⁹ Connecting America: The National Broadband Plan, Recommendation 5.8, at 84-85 (2010) ("National Broadband Plan").

¹⁰ See Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §§ 6101-6414.

¹¹ Sprint Nextel holds the nationwide PCS G Block license located at 1910-1915 and 1990-1995 MHz, adjacent to the H Block.

- **More Competition.** Licensing H Block spectrum could allow new entrants to offer mobile broadband service or encourage incumbents to offer expanded broadband services. As more carriers enter the spectrum to begin operations, increased mobile broadband competition could benefit consumers in reduced prices and improved service.
- **More Capacity to Meet Growing Data Demand.** As described above, consumer demand for mobile data continues to rise and shows no signs of abating in the near future. Auctioning the H Block represents an important opportunity that will allow carriers to access additional capacity in the near-term necessary to meet this growing data demand.
- **Expanded Scale Economies.** Although not without some unique features, the H Block allows carriers and equipment vendors to leverage the highly developed ecosystem of PCS devices, base stations, and development activity that already exists in the PCS Bands. Rural, regional, and competitive carriers, for example, can incorporate the H Block frequencies into their existing PCS operations to provide additional capacity for their existing networks. Even though new devices and transmitting elements might be required, that equipment could be based on existing PCS designs, which should result in cost savings in broadband deployment with the potential for positive ripple effects throughout the industry.
- **Expanded Roaming.** Licensing the H Block has the potential to close coverage gaps and help make LTE available more quickly in rural areas. For example, a rural winner of H Block spectrum might find it desirable to partner with competitive national carriers to enter roaming, joint build, and other collaborative arrangements. Wireless users would benefit from expanded rural coverage; smaller carriers would benefit from expanded capacity in the core PCS Bands.

In short, the PCS Bands already represent some of the most intensely used spectrum available today, and PCS licensees – especially non-dominant, competitive carriers that need to leverage existing ecosystem investments as much as possible – can rely on the H Block to improve capacity, expand roaming opportunities, and enhance existing coverage.¹²

Action on the H Block is also long overdue. In 2004, the Commission allocated two key blocks of paired spectrum for Advanced Wireless Services (“AWS”): (1) the 1915-1920/1995-2000 MHz H Block and (2) the 2020-2025/2175-2180 MHz J Block.¹³ In its 2004 Service Rules Notice, the Commission accurately stated that the continued rise in mobile subscribers and data usage rates necessitated the allocation of additional spectrum in order to keep pace with mobile carriers’ plans to upgrade their networks with new technologies allowing for faster mobile Internet access speeds, richer content, and more advanced applications.¹⁴ The Commission should conclude the rulemaking it began eight years ago and act now to supplement existing PCS spectrum with the H Block.

As Sprint Nextel and Nextel Communications, Inc. (“Nextel”) stated in their prior comments,¹⁵ licensing the H Block for flexible use promotes more efficient spectrum markets

¹² National Broadband Plan, Recommendation 5.8, at 84.

¹³ *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, Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order, 19 FCC Rcd. 20720, ¶ 1 (2004) (“2004 AWS Order”).

¹⁴ *Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands; Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, WT Docket Nos. 04-356 and 02-353, Notice of Proposed Rulemaking, 19 FCC Rcd. 19263, ¶¶ 3-4 (2004) (“2004 Service Rules Notice”).

¹⁵ See, e.g., Comments of Sprint Nextel Corporation, ET Docket No. 10-142, WT Docket Nos. 04-356 and 07-195 (filed July 8, 2011) (“Sprint Nextel Spectrum Task Force Comments”); Comments of Sprint Nextel Corporation, WT Docket 04-356 (filed Jul. 25, 2008) (“Sprint Nextel 2008 H Block Comments”); Reply Comments of Sprint Nextel Corporation, WT Docket No. 07-195 (filed Jan. 14, 2008); Comments of Sprint Nextel Corporation, WT Docket No. 07-195 (filed Dec. 14, 2007); Reply Comments of Sprint Nextel Corporation, IB Docket No. 05-221 (filed Aug. 15, 2005); Comments of Nextel Communications, WT Docket Nos. 02-353 and 04-356 (filed Dec. 8, 2004) (“Nextel 2004 H Block Comments”).

and serves the public interest by allowing carriers to respond more quickly to consumer demands and offer more robust service.¹⁶ Mobile carriers are highly likely to use H Block spectrum to complement and extend their existing PCS networks.¹⁷ As described further below, Sprint Nextel looks forward to assisting the Commission in adopting technically sound service rules which enable PCS operations in the H Block.¹⁸

B. Assigning the AWS-4 Licenses to the Incumbent MSS Licensee Would Be Efficient

As the incumbent Mobile Satellite Service (“MSS”) licensee already has ancillary authority to operate terrestrial stations in the 2 GHz Band nationwide,¹⁹ the Commission’s proposal that the future AWS-4 licenses in this band should likewise be assigned to the incumbent MSS licensee appears to be the most efficient approach.²⁰ Doing so should reduce the technical complications related to both potential inter- and intraband interference issues, and result in a more expeditious AWS-4 licensing process. While potential interference considerations will remain, as discussed elsewhere in these comments, Sprint Nextel believes the Commission’s proposed general approach to AWS-4 licensing will likely be the most efficient approach and could lead to enhanced wireless competition to the benefit of wireless consumers.

¹⁶ Nextel 2004 H Block Comments, at 3.

¹⁷ See Nextel 2004 H Block Comments, at 4. See also Sprint Nextel Spectrum Task Force Comments, at 2; Sprint Nextel 2008 H Block Comments, at 1.

¹⁸ As Sprint Nextel noted in its previous comments, commercial use of the H Block presents some interference concerns to PCS systems. See Sprint Nextel Spectrum Task Force Comments at 3-4; Reply Comments of Sprint Nextel Corporation, WT Docket No. 04-356, at 2-8 (filed Aug. 11, 2008). As discussed further below, the Commission will need to address these interference issues in its H Block service or auction rules. These interference concerns should not cause the Commission to delay the auctioning of the H Block, as bidders can factor in the necessary service rule limitations into their valuations of the spectrum.

¹⁹ NPRM/NOI, at ¶ 76.

²⁰ *Id.* at ¶ 71.

III. THE COMMISSION SHOULD ENSURE PCS LICENSEES RECEIVE ADEQUATE INTERFERENCE PROTECTION FROM FUTURE H BLOCK AND AWS-4 LICENSEES

Licensing the H Block for wireless broadband use and granting terrestrial authority to the incumbent 2 GHz MSS licensee will require rule provisions that continue to protect nearby PCS spectrum licensees against harmful interference. The proposed AWS-4 Spectrum uplink is adjacent to the H Block downlink, and located only 5 MHz away from Sprint Nextel's PCS G Block downlink.²¹ The Commission has stated that the service rules developed for the future H Block licensees would not "stand as an impediment to the provision of Broadband PCS-type services in the band."²² In addition, the Commission has already acknowledged the importance of continued interference protections to the PCS Bands, noting that it seeks to establish rules that permit flexible use while "effectively protecting operations in adjacent bands from harmful interference."²³

A. H Block Interference Considerations

In the past, commenters including Sprint Nextel have noted that some of the Commission's proposals for the 2 GHz Band related to the H Block have the potential to cause harmful interference to PCS systems.²⁴ As a result, maintaining adequate interference protections will be in line with the Commission's past proposals, and comport with the Congressional directives contained in the Middle Class Tax Relief and Job Creation Act of 2012

²¹ *Id.* at ¶ 21.

²² 2004 Service Rules Notice, at ¶ 16.

²³ NPRM/NOI, at ¶ 34.

²⁴ Sprint Nextel Spectrum Task Force Comments at 3-4 ("H Block uplink operations at 1915-1920 MHz would pose a serious interference threat to G Block transmissions and other PCS operations."). *See* Comments of T-Mobile USA, Inc., ET Docket No. 10-142, WT Docket Nos. 04-356 and 07-195, at 11 (filed July 8, 2011); Reply Comments of Sprint Nextel Corporation, WT Docket No. 04-356, at 2-8 (filed Aug. 11, 2008); Comments of CTIA –The Wireless Association®, WT Docket Nos. 04-356 and 02-353, at ii (filed Dec. 8, 2004); Comments of Ericsson Inc and Sony Ericsson Mobile Communications (USA) Inc., WT Docket Nos. 04-356 and 07-195, at 12-13 (filed July 25, 2008).

prohibiting the Commission from allocating the H Block for commercial use or granting related licenses if the Commission determines that the H Block cannot be used without causing harmful interference to existing licensees.²⁵

Nextel previously identified four general interference scenarios presented by proposals for the H Block that remain relevant today: (1) H Block uplink/PCS uplinks; (2) H Block uplink/unlicensed PCS (“UPCS”) and PCS downlinks; (3) H Block downlink/PCS downlinks; and (4) H Block downlink/MSS uplink/AWS-4 uplinks.²⁶ As discussed below, since that time various strategic changes and technological developments have reduced some interference considerations, but raised others.

- **H Block uplink/PCS uplinks.** As Nextel previously explained, H Block device transmissions will look no different than transmissions from any other PCS device in the 1850-1915 MHz band.²⁷ Compatible duplexing and requiring attenuation of out-of-band emissions (“OOBE”) from H Block devices by $43+10\log(P)$ dB should minimize harmful interference.
- **H Block uplink/UPCS and PCS downlinks.** UPCS is not entitled to interference protections from licensed services under the Commission’s rules.²⁸ Furthermore, PCS base stations and UPCS devices should not cause harmful interference with the H Block uplink due to the use of identical emissions mask and power limits. With respect to PCS downlinks, three primary interference concerns arise: overload, intermodulation, and OOBE. Of these, intermodulation remains the primary concern because overload and

²⁵ Middle Class Tax Relief and Job Creation Act of 2012, §§ 6401(b)(2)(A), (b)(4).

²⁶ See Nextel 2004 H Block Comments, at 7-49.

²⁷ *Id.* at 10.

²⁸ *Id.* (citing 2004 Service Rules Notice, at ¶ 88).

OOBE interference can be solved through fairly routine rules described in Nextel's initial comments filed in 2004.²⁹ With respect to intermodulation, the means to substantially mitigate this interference risk was discussed in joint comments previously submitted by Sprint Corporation, Nextel, and Verizon Wireless, which suggested the imposition of power limitations on operations in the 1917-1920 MHz portion of the H Block uplink.³⁰ As was anticipated in Nextel's 2004 H Block Comments, technological improvements since that time may have enabled better handling of interference concerns because the LTE air interface offers a far more granular means of controlling power in the H Block uplink spectrum than CDMA EVDO.³¹ In light of these technological advances, application of the previously proposed power limits on the upper portion of the H Block uplink spectrum provides an effective means of minimizing harmful intermodulation interference risks.

- **H Block downlink/PCS downlinks.** Nextel has previously noted that likely technological similarities and the application of PCS-like rules to H Block base station transmitters mean the H Block downlink band transmissions will be similar to any other PCS downlink band transmissions, and the application of standard OOBE limits should protect other PCS base stations.³² Sprint Nextel continues to believe that any interference concerns between H Block downlinks and PCS downlinks are not novel and can be readily mitigated.

²⁹ See *id.* at 11-49.

³⁰ See Joint Reply Comments of Sprint Corporation, Verizon Wireless and Nextel Communications, WT Docket Nos. 04-356 and 02-353 (filed Feb. 8, 2005).

³¹ See Nextel 2004 H Block Comments, at 13.

³² *Id.* at 11.

- **H Block downlink/MSS uplink/AWS-4 uplinks.** Much of the interference considerations with respect to 2000-2020 MHz MSS uplink operations depend on the characteristics of the satellites.³³ The 1995-2000 MHz H Block downlink band would be susceptible to MSS and AWS-4 uplink interference under certain conditions. Such mobile-to-mobile interference is highly probabilistic, but establishing primary terrestrial uses in the satellite spectrum could pose additional interference risks. As further discussed below, the 5 MHz guard band proposed and discussed by the Commission may offer a prudent measure to ameliorate potential interference.

B. Other PCS Interference Considerations

In light of its current proposals, the Commission must adopt service rules and band plans that protect core PCS operation from harmful interference from licensees located in spectrum newly allocated for mobile broadband use. The NPRM/NOI proposes specific interference protections to protect licensees located below 1995 MHz, such as Sprint Nextel's PCS G Block operations, from harmful interference from future AWS-4 Spectrum licensees.³⁴ In order to protect PCS mobile receivers from interference, the current MSS/Ancillary Terrestrial Component ("ATC") rules specify an attenuation of $70+10*\log_{10}(P)$ dB below 1995 MHz.³⁵ The Commission proposes to extend this emission limit to the terrestrial operations of future AWS-4 Spectrum licensees.³⁶ This standard has adequately protected PCS operations from unwanted

³³ For example, the question of whether the MSS satellites are capable of rejecting signals transmitted outside of the MSS Band is relevant for interference analysis.

³⁴ NPRM/NOI, at ¶ 35.

³⁵ See 47 C.F.R. § 25.252(c)(2).

³⁶ NPRM/NOI, at ¶ 35. Sprint Nextel notes that the $70+10*\log_{10}(P)$ dB standard was not waived in any of Commission's past MSS/ATC proceedings, and no party has requested a waiver from this standard as part of their ATC designation. *Id.* at ¶ 35 n. 79.

interference from nearby ATC operations and should apply with equal force to future AWS-4 licensees.

C. The Proposed 5 MHz Guard Band

Due to the interference concerns posed by the proposed AWS-4 band plan to both PCS and H Block operations discussed above, it would appear that the Commission's proposed 5 MHz guard band, created by shifting the AWS-4 uplink band from 2000-2020 MHz to 2005-2025 MHz and encompassing the lower J Block, warrants serious consideration.³⁷ Comments in prior 2 GHz proceedings have suggested the AWS-4 uplink shift as an appropriate way to protect PCS operations while causing minimal disruption to nearby licensees.³⁸ Shifting the AWS-4 uplink band from 2000-2020 MHz to 2005-2025 MHz could mitigate potential interference with AWS H Block and PCS G Block licensees while increasing the value of the H Block and AWS-4 spectrum by minimizing potential interference concerns. The 5 MHz guard band could also put the lower J Block spectrum to productive use for AWS. As a result, the Commission's proposed 5 MHz guard band has the potential to produce both technical and economic benefits, subject to further study and evaluation.³⁹

³⁷ *Id.* at ¶ 42.

³⁸ *See id.* (citing Comments of Ericsson, ET Docket No. 10-142, WT Docket Nos. 04-356 and 07-195, at 9 (July 8, 2011)).

³⁹ Sprint Nextel's comments are made in response to the Commission's request for comment on its proposal of a 5 MHz guard band, NPRM/NOI, at ¶ 42, and nothing herein is intended to support Commission action that could adversely affect the rights and obligations granted to DISH Network under its licenses in the 2000-2020 MHz spectrum. *See, e.g., In re DBSD North America, Inc., Debtor-in-Possession, et al.*, IB Docket Nos. 11-150 and 11-149, Order, DA 12-332 (rel. March 2, 2012).

IV. THE COMMISSION MUST ALSO REAFFIRM THE REIMBURSEMENT OBLIGATIONS MANDATED BY REGULATION OF FUTURE AWS LICENSEES OPERATING IN THE H AND LOWER J BLOCKS

The Commission should also continue to support its *Emerging Technologies* principles as part of its AWS-4 band plan and any H Block auctions.⁴⁰ The *Emerging Technologies* principles “have been a fundamental part of the Commission’s past efforts to unlock value and promote investment through the relocation process.”⁴¹ Those principles have been successfully employed in numerous spectrum relocation initiatives, including for PCS, MSS, and AWS operations, and important industry participants routinely advocate their use.⁴² While the specific application of the doctrine has varied in each relocation initiative, the Commission’s overall goal of promoting private investment and efficient spectrum clearance efforts through its cost recovery mechanisms has remained the same.⁴³

The Commission’s *Emerging Technologies* principles “represent a broad set of tools that the Commission has used to aid the process of making spectrum available for new uses.”⁴⁴

⁴⁰ NPRM/NOI, at ¶ 130. 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, Third Report and Order and Third Memorandum Opinion and Order, 18 FCC Rcd. 26338, ¶¶ 7-10 (2003) (noting that the BAS Relocation was intended to follow principles embodied in the *Emerging Technologies Proceeding*). See also *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); Second Report and Order, 8 FCC Rcd. 6495 (1993); Third Report and Order and Memorandum Opinion and Order, 8 FCC Rcd. 6589 (1993); Memorandum Opinion and Order, 9 FCC Rcd. 1943 (1994); Second Memorandum Opinion and Order, 9 FCC Rcd. 7797 (1994), *aff’d Ass’n of Pub. Safety Comm’ns Officials-Int’l, Inc. v. FCC*, 76 F.3d 395 (D.C. Cir. 1996) (collectively, the “*Emerging Technologies Proceeding*”).

⁴¹ *Improving Public Safety Communications in the 800 MHz Band*, WT Docket No. 02-55, ET Docket Nos. 00-258 and 95-18, Fifth Report and Order, Eleventh Report and Order, Sixth Report and Order, and Declaratory Ruling, 25 FCC Rcd. 13874, ¶ 2 (2010) (“2010 Declaratory Ruling”).

⁴² See, e.g., Comments of CTIA – The Wireless Association®, *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, at 14 (filed Nov. 25, 2005) (“CTIA broadly supports the use of cost sharing, consistent with the prior 1.9 GHz rules, in the 2.1 GHz band. More specifically, all those that benefit from the relocation of BRS incumbents should be required to pay a proportional share of the costs of relocation”).

⁴³ See NPRM/NOI, at ¶ 130. See, e.g., 47 C.F.R. § 24.239 (cost sharing requirements for broadband PCS).

⁴⁴ NPRM/NOI, at ¶ 130.

Specifically, the *Emerging Technologies* principles and implementing rules require early entrants in a band allocated for new services to be reimbursed for a *pro rata* share of their costs of clearing incumbent licensees located in the spectrum from later beneficiaries of those band-clearing efforts.⁴⁵ In other words, one of the “important underlying principles of the relocation policy is that licensees that ultimately benefit from the spectrum cleared by the first entrant shall bear the cost of reimbursing the first entrant for the accrual of that benefit.”⁴⁶ These cost sharing obligations ensure that later band entrants do not act as “free riders” on the early entrant’s efforts by avoiding substantial relocation costs.⁴⁷ With reimbursement procedures in place, early entrants can begin relocating incumbents, clearing the spectrum for use by new technologies in a timely and efficient manner.

As the Commission is aware, the lower portion of the proposed AWS-4 Spectrum was originally licensed for BAS operations.⁴⁸ In 2000, the Commission reallocated the 1990-2025 MHz segment of the BAS Band to MSS and established a relocation plan for incumbent BAS operations located at 1990-2025 MHz (the “BAS Relocation”).⁴⁹ The Commission later reallocated the spectrum located in the H and J Blocks to AWS operations.⁵⁰ Following years of inactivity in clearing BAS incumbents, Sprint Nextel agreed in 2004 to undertake the BAS

⁴⁵ See, e.g., *Improving Public Safety Communications in the 800 MHz Band*, WT Docket No. 02-55, ET Docket No. 00-258, ET Docket No. 95-18, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order, 19 FCC Rcd. 14969, ¶ 261 (2004) (“800 MHz Reconfiguration Decision”); 2010 Declaratory Ruling, at ¶ 6 n.6 (“Pursuant to these principles, an earlier entrant to a band who relocated incumbents can receive reimbursement from a later entrant for a portion of the band clearing costs.”)

⁴⁶ 2010 Declaratory Ruling, at ¶ 21.

⁴⁷ See *Amendment to the Commission’s Rules Regarding a Plan for Sharing the Costs of Microwave Relocation*, WT Docket 95-157, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd. 8825, ¶ 7 (1996).

⁴⁸ NPRM/NOI, at ¶ 131.

⁴⁹ 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, Second Report and Order and Second Memorandum Opinion and Order, 15 FCC Rcd. 12315 (2000).

⁵⁰ See 2004 AWS Order, at ¶ 1.

Relocation as part of its acceptance of the Commission's 800 MHz Reconfiguration Decision.⁵¹

Consistent with its earlier orders and the longstanding cost sharing principles of the *Emerging Technologies Proceeding*, the Commission determined that Sprint Nextel, as the first new entrant to clear the former BAS spectrum, was entitled to reimbursement from the later-entering MSS and AWS licensees on a *pro rata* basis for the costs Sprint Nextel incurred in clearing that spectrum.⁵²

Sprint Nextel successfully completed the BAS Relocation on July 15, 2010.⁵³ Following completion of the BAS Relocation, Sprint Nextel sought reimbursement for its band-clearing costs from the MSS licensees at 2000-2020 MHz.⁵⁴ That effort was complicated by the subsequent bankruptcy declarations of both MSS licensees. Sprint Nextel settled its reimbursement claim with the successor 2000-2020 MHz licensee after substantial and extended litigation in numerous courts.⁵⁵ Consequently, no reimbursement obligations remain for Sprint Nextel's clearance of the 2000-2020 MHz spectrum for MSS licensees.

⁵¹ See 800 MHz Reconfiguration Decision, at ¶ 261.

⁵² See *id.*

⁵³ 2010 Declaratory Ruling, at ¶ 1 (citing Completion of the Broadcast Auxiliary Transition, Letter from Sprint Nextel, WT Docket No. 02-55, ET Docket Nos. 00-258 and 95-18, (filed July 15, 2010)).

⁵⁴ See 2010 Declaratory Ruling, at ¶ 8. Following DISH Network Corporation's proposed acquisition of New DBSD Satellite Services G.P. and TerreStar Networks Inc., Sprint Nextel also sought reimbursement from DISH. See *Applications of New DBSD Satellite Services G.P., Debtor-in-Possession, and TerreStar Licensee Inc., Debtor-in-Possession*, IB Docket No. 11-149, Petition of Sprint Nextel to Condition Approval (filed Oct. 17, 2011); *Applications of New DBSD Satellite Services G.P., Debtor-in-Possession, and TerreStar Licensee Inc., Debtor-in-Possession*, IB Docket No. 11-150, Petition of Sprint Nextel to Condition Approval or to Deny (filed Oct. 17, 2011).

⁵⁵ 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 Nos. 11-149 and 11-150 (Nov. 3, 2011) (informing the Commission that Sprint Nextel had reached an agreement with DISH to settle its outstanding disputes).

A. The Commission Should Reaffirm Sprint Nextel’s Right to Reimbursement Mandated by Regulation from Future AWS Licensees in the H and Lower J Blocks

While the Commission is correct that the primary cost sharing disputes between Sprint Nextel and the MSS licensees specific to the 2000-2020 MHz spectrum band were settled privately,⁵⁶ important *Emerging Technologies* considerations still exist with respect to the remainder of the former BAS Band. Reimbursements for BAS clearing and relocation costs incurred by Sprint Nextel on behalf of future AWS licensees of the H Block (1915-1920 MHz and 1995-2000 MHz) and lower J Block (2020-2025 MHz) were neither addressed nor affected by the settlement agreement between Sprint Nextel and the current MSS licensee, and reimbursement obligations remain with respect to that spectrum.⁵⁷ In order to preserve the Commission’s *Emerging Technologies* policy here and in future relocation efforts, the Commission should continue to affirm the reimbursement obligations of beneficiaries of this cleared spectrum.

As the Commission has not yet established service rules or issued AWS licenses in the H or J Blocks,⁵⁸ this proceeding provides an opportunity for the Commission to take definitive advance action to ensure that the delay in licensing AWS operations in the H and J Blocks does not detrimentally affect Sprint Nextel’s reimbursement rights in this proceeding, or foreclose the possibility of future relocation efforts by weakening the Commission’s *Emerging Technologies* doctrine.⁵⁹ As with prior licensing proceedings, the Commission should require any AWS

⁵⁶ NPRM/NOI, at ¶ 131.

⁵⁷ See 800 MHz Reconfiguration Decision, at ¶ 261.

⁵⁸ 2010 Declaratory Ruling, at ¶ 8; *Improving Public Safety Communications in the 800 MHz Band*, WT Docket No. 02-55, ET Docket No. 00-258 and ET Docket No. 95-18, Report and Order and Further Notice of Proposed Rulemaking 24 FCC Red. 7904, ¶¶ 71, 76 (2009) (“2009 Further Notice”).

⁵⁹ 2009 Further Notice, at ¶ 88 (stating that the determination of how to apportion an AWS licensee’s *pro rata* share “will depend on future Commission action to adopt service rules for the AWS licensees in the 1995-2000 MHz and 2020-2025 MHz band”) (emphasis added).

licensee in the H and lower J Blocks that benefits from Sprint Nextel's BAS Relocation efforts to reimburse Sprint Nextel for a *pro rata* share of its BAS Relocation costs.⁶⁰ Such reimbursement should adequately compensate Sprint Nextel, eliminate the "free rider" problem, and encourage new licensees to enter the band.

B. Reimbursement Calculations should be made on a *Pro Rata* Basis Tied to Population and contain a Set Payment Requirement

In the course of reaffirming the reimbursement obligations tied to the H and lower J Block spectrum cleared by Sprint Nextel, the Commission should take this opportunity to establish improved cost recovery mechanisms that serve the interests of all stakeholders by eliminating uncertainty and making the timing of reimbursement definitive.⁶¹ In light of the anticipated spectrum auctions and AWS licensing processes, Sprint Nextel proposes that the established reimbursement amounts be allocated among future licensees on a *pro rata* basis tied to the markets licensed, with the reimbursement shares calculated on a population-weighted basis.⁶² This allocation will enable the Commission, future AWS licensees, and Sprint Nextel to properly tie reimbursement obligations to the number of customers served by the licensees, while

⁶⁰ In accordance with prior proceedings, Sprint Nextel proposes that any H or J Block licensee that enters the band within ten years after the issuance of the first AWS license would incur a reimbursement obligation to Sprint Nextel. See 47 C.F.R. § 22.602(j) (concerning the 2110-2130 MHz and 2160-2180 MHz bands); 47 C.F.R. § 101.79(a)(1) (concerning the 2110-2150 MHz and 2160-2175 MHz and 2175-2180 MHz bands); see also NPRM/NOI, at ¶ 134 (proposing ten-year reimbursement period for relocation of incumbents located at 2180-2200 MHz following the issuance of the first AWS-4 license in the band). The Commission previously indicated it would address other AWS reimbursement issues with respect to 1995-2000 MHz and 2020-2025 MHz at a later date. 2010 Declaratory Ruling, at ¶¶ 8 n.15, 45. Sprint Nextel also notes that nothing in the Commission's rules published in the Code of Federal Regulations states that the reimbursement sunset date applicable to the MSS bands (*i.e.*, AWS-4) also applies to the H and J Blocks.

⁶¹ The Commission may resolve the specific procedures governing H and J Block reimbursement in the service rules proceeding regarding these bands or when setting the auction rules for the H Block spectrum under the Middle Class Tax Relief and Job Creation Act of 2012. See 2010 Declaratory Ruling, at ¶ 50; 2009 Further Notice, at ¶ 88.

⁶² Allocation of the reimbursement amounts on a *pro rata*, population-weighted basis is an equitable approach, as it would ensure that licensees make reimbursement payments in proportion to the benefits they receive from their share of spectrum.

minimizing the risk that any licensee might shoulder a disproportionate share of its respective reimbursement obligations.

In addition, the Commission should establish clear standards of proof with respect to reimbursement amounts as part of any auction or license issuance to minimize the risk of payment disputes and ensure that the spectrum is licensed and utilized in a timely and efficient manner. For example, the Commission should unambiguously state that compliance with its cost submission procedures and documentation requirements is sufficient to establish conclusively for all purposes the amount that an early entrant like Sprint Nextel is entitled to recover as reimbursement from later-entering AWS licensees.

Since Sprint Nextel already completed the BAS Relocation in 2010, the amount owed by future AWS licensees can be established with certainty. The Commission can greatly increase efficiency and certainty in the AWS reimbursement process by giving prior approval to or taking administrative notice of the specific amounts Sprint Nextel expended as appropriate for reimbursement with respect to the AWS spectrum. By approving and requiring upfront payment of those amounts, the Commission can ensure prospective AWS licensees are aware of the extent of their obligation to fully reimburse Sprint Nextel for their *pro rata* share of the BAS Relocation costs as mandated by regulation prior to receiving their licenses. Prospective licensees should be required, prior to the issuance of a license or as part of the auction process, to assure payment in the form of an irrevocable letter of credit or cash deposit to be held in escrow. Upon license grant, the band clearing entity such as Sprint Nextel, would be entitled to present the letter of credit for payment or release of the escrow.⁶³ Each future beneficiary of the H and lower J Block

⁶³ See 800 MHz Reconfiguration Decision, at ¶ 30 (imposing letter of credit obligation on Sprint Nextel to secure its BAS Relocation commitments); *Connect America Fund*, WC Docket No. 10-90, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd. 17663, ¶ 444 (2011) (imposing letter of credit obligation on Mobility Fund recipients under the Universal Service Fund). For example, the Commission has also indicated that,

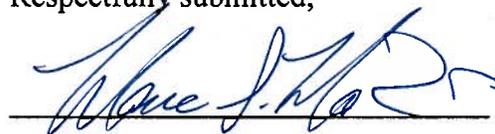
spectrum would therefore be fully aware of the reimbursement amount it will owe to Sprint Nextel and would have already established its ability to meet the Commission's *Emerging Technologies* requirements in advance of its occupation of the cleared spectrum, creating the regulatory certainty necessary to drive investment and innovation in the mobile broadband service industry. By establishing clear burdens of proof and an effective collection mechanism in the AWS proceeding, the Commission will prevent later entrants from launching protracted challenges that would only delay the development of the spectrum and unnecessarily burden Commission staff. It will also establish a clear, reliable, and efficient framework for resolving future reimbursement disputes and thereby avoid needless delays and uncertainties.

V. CONCLUSION

For the foregoing reasons, Sprint Nextel supports the Commission's proposals to auction the H Block and grant terrestrial broadband service authority to the 2 GHz MSS incumbent licensee, subject to adequate interference protections for Sprint Nextel's PCS operations and confirmation of Sprint Nextel's reimbursement rights against future AWS licensees operating in the H and lower J Blocks consistent with the Commission's *Emerging Technologies* principles.

with respect to new AWS licensees in the 2000-2020 MHz band, band entry will occur upon grant of the licensee's long form application. *See* 2010 Declaratory Ruling, at ¶ 50.

Respectfully submitted,



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