

optimal transition period that would reduce costs to the extent practicable while maximizing benefits?

55. In providing responses to these questions, we ask commenters to take into account only those costs and benefits that directly result from the implementation of particular rules that could be adopted. Commenters should identify the various costs and benefits associated with a particular requirement. Further, to the extent possible, commenters should provide specific data and information, such as actual or estimated dollar figures for each specific cost or benefit addressed, including a description of how the data or information was calculated or obtained, and any supporting documentation or other evidentiary support.

56. *Legal authority.* Finally, we seek comment on our authority to mandate a device interoperability requirement should interference concerns be reasonably addressed and there be no industry solution in place. The record is divided on this issue. On the one hand, Petitioners argue that the Commission should find the current contractual arrangements between wireless providers and equipment providers unlawful under Section 201(b), which prohibits unjust or unreasonable practices in connection with communications services, and Section 202(a), which prohibits unjust or unreasonable discrimination.<sup>139</sup> Petitioners also claim that a device interoperability requirement would fall within the purview of Section 1 of the Communications Act, which directs the Commission to establish policies that promote the provision of communications service to all people of the United States, without discrimination.<sup>140</sup> Petitioners argue that, at a minimum, “Section 1 can be combined by the Commission with other ‘express delegations of authority’ to enable the Commission to exercise ancillary jurisdiction over issues that are reasonably related to the policies stated in Section 1.”<sup>141</sup> Commenters also reference additional sections of the Communications Act as support for Commission authority, including: Section 4(i), which specifies that the Commission “may . . . make such rules and regulations . . . as may be necessary in the execution of its functions”;<sup>142</sup> Section 254(b)(3), which sets forth universal service principles;<sup>143</sup> Section 303(g), to “encourage the larger and more effective use of radio in the public interest;”<sup>144</sup> Section 303(r), which directs the Commission to prescribe such restrictions and conditions as necessary to carry out the provisions of the Act;<sup>145</sup> Section 307(b), which directs the Commission to consider a “fair, efficient and equitable” distribution of radio services in applications for licenses, modifications, and renewals,<sup>146</sup> and Section 706, which encourages the reasonable and timely deployment of advanced telecommunications capability to all Americans through “measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.”<sup>147</sup>

<sup>139</sup> Petition at 7-8 (citing 47 U.S.C. §§ 201(b), 202(a)); *see also* Triad 700 Comments at 11.

<sup>140</sup> Petition at 9 (citing 47 U.S.C. § 151).

<sup>141</sup> Petitioners Reply Comments at 65 (citing *Comcast v. FCC*, 600 F.3d 642, 657 (D.C. Cir. 2010) (slip op. at 19) (“*Comcast*”).

<sup>142</sup> Petition at 1 (citing 47 U.S.C. § 154(i)).

<sup>143</sup> Petition at 8; Triad 700 Comments at 11 (citing 47 U.S.C. § 254(b)(3)).

<sup>144</sup> Vulcan Reply Comments at 8 (citing 47 U.S.C. § 303(g)).

<sup>145</sup> Petition at 1 (citing 47 U.S.C. § 303(r)).

<sup>146</sup> Petition at 9 (citing 47 U.S.C. § 307(b)). *See also* PVT Comments at 6; Blooston Comments at 6 (arguing that the larger providers’ equipment design and procurement practices are contrary to the Commission’s obligation “to ensure ‘a fair, efficient and equitable distribution of radio service’ to all states . . .”).

<sup>147</sup> Triad 700 Comments at 11 (citing 47 U.S.C. § 1302(a)).

57. On the other hand, other commenters argue that Petitioners fail to cite a valid legal basis to adopt such an interoperability requirement. Both Verizon and AT&T argue that Sections 201 and 202 prohibit providers from unreasonable practices or discrimination among consumers.<sup>148</sup> Verizon and AT&T also argue that the other provisions referenced by supporters of an interoperability requirement do not grant the Commission the authority to regulate equipment,<sup>149</sup> or else are not substantive grants of authority for Commission action.<sup>150</sup>

58. We observe that, under Title III of the Communications Act, the Commission has broad and extensive authority to manage the use of spectrum.<sup>151</sup> This authority includes the power and obligation to condition our licensing actions on compliance with requirements that we deem consistent with the public interest, convenience, and necessity,<sup>152</sup> including operational requirements, if the condition or obligations will further the goals of the Communications Act without contradicting any basic parameters of the agency's authority.<sup>153</sup> It also includes the powers to "prescribe the nature of the service to be rendered by each class of licensed stations and each station within any class,"<sup>154</sup> to "generally encourage the larger and more effective use of radio in the public interest,"<sup>155</sup> and to modify licenses if, in

<sup>148</sup> Verizon Comments at 18; AT&T Reply Comments at 19.

<sup>149</sup> Verizon Comments at 17-19; AT&T Reply Comments at 19.

<sup>150</sup> Verizon Comments at 17-19 (stating that Sections 4(i) and 303(r) "merely grant rulemaking authority to the Commission to carry out the substantive provisions of the Act, and contain no substantive grant of authority themselves"). Verizon states that Sections 1 and 706 are "statements of Congressional policy" and, as such, are not grants of Congressional authority for any specific regulatory action. Verizon Reply Comments at 10 (citing *Comcast*, 600 F.3d at 654 (slip op. at 17)). Both AT&T and Verizon dismiss Section 254(b)(3) as inapplicable in this case. AT&T Reply Comments at 19; Verizon Reply Comments at 10. AT&T and Verizon further argue that Section 307(b) applies only to radio station licensing, not regulation of equipment. Verizon Comments at 18-19; AT&T Reply Comments at 19.

<sup>151</sup> See, e.g., 47 U.S.C. § 301 (stating that "[i]t is the purpose of this Act, among other things, to maintain the control of the United States over all the channels of radio transmission; and to provide for the use of such channels, but not the ownership thereof, by persons for limited periods of time, under licenses granted by Federal authority, and no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license").

<sup>152</sup> See, e.g., 47 U.S.C. §§ 301 (authorizing the Commission to issue licenses for use of radio spectrum); 304 (stating that "[n]o station license shall be granted by the Commission until the applicant therefore shall have waived any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise"); 307(a) (stating that Commission shall grant licenses "if public convenience, interest, or necessity will be served thereby, subject to the limitations of [the Communications Act]"); 309(j)(3) (requiring the Commission to design and conduct competitive bidding systems for issuance of licenses to promote the purposes of section 1 of the Act and specified statutory objectives, including "the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas").

<sup>153</sup> See, e.g., 47 U.S.C. § 303(r) (stating that if "the public convenience, interest, or necessity requires [, the Commission] shall. . . prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this Act"); *Schurz Communications, Inc. v. FCC*, 982 F.2d 1043 (7th Cir. 1992) (Communications Act invests Commission with "enormous discretion" in promulgating licensee obligations that the agency determines will serve the public interest).

<sup>154</sup> 47 U.S.C. § 303(b).

<sup>155</sup> 47 U.S.C. § 303(g). See also 47 U.S.C. § 151 (creating the Commission for the purpose of regulating communications in order to make available to all people of the United States a rapid, efficient, nationwide and world-wide communication service with adequate facilities at reasonable prices).

the judgment of the Commission, such action will promote the public interest, convenience, and necessity.<sup>156</sup> Furthermore, the Communications Act provides the Commission with broad powers under such provisions as Section 302(a) to promulgate regulations designed to address radio frequency (RF) interference, including the regulation of devices that are capable of emitting RF energy,<sup>157</sup> and Section 303(e) and (f), which empower the Commission to regulate licensees and the equipment and apparatus they use.<sup>158</sup>

59. We seek comment on the Commission's statutory authority to adopt a device interoperability requirement. We note that the Commission has previously required interoperability across licensed spectrum as a means to "insure full coverage in all markets and compatibility on a nationwide basis."<sup>159</sup> In addition, by promoting the availability of subscriber handsets and network buildout of Lower 700 MHz A Block licenses, an interoperability requirement of the type discussed here can facilitate the provision of roaming services, which is subject to Commission rules.<sup>160</sup> We seek comment on our analysis of these Title III statutory provisions as a basis for our authority to take the actions proposed herein.

#### IV. CONCLUSION

60. In this *Notice of Proposed Rulemaking*, we are focused primarily on resolving a long-running dispute over the threat of interference to Lower 700 MHz B and C Block licensees either by agreement on the part of these licensees to be interoperable with the Lower 700 MHz A Block licensees, or by a regulatory mandate for such interoperability. Should the Commission find that interference concerns are truly minimal or can be reasonably mitigated, then the Commission, along with industry, must determine the next best steps to ensure interoperability. Our aim is to explore various options through this proceeding that help achieve the ultimate goal of interoperability.

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<sup>156</sup> See 47 U.S.C. § 316(a)(1) (stating that "[a]ny station license or construction permit may be modified by the Commission either for a limited time or for the duration of the term thereof, if in the judgment of the Commission such action will promote the public interest, convenience, and necessity"); see also *Committee for Effective Cellular Rules v. FCC*, 53 F.3d 1309 (D.C. Cir. 1995).

<sup>157</sup> See, e.g., 47 U.S.C. § 302a(a) (providing Commission with authority, consistent with the public interest, convenience and necessity, to make reasonable regulations "governing the interference potential of devices which in their operation are capable of emitting radio frequency energy by radiation, conduction, or other means in sufficient degree to cause harmful interference to radio communications").

<sup>158</sup> See, e.g., 47 U.S.C. §§ 303(e) (providing Commission with authority to "[r]egulate the kind of apparatus to be used with respect to its external effects and the purity and sharpness of the emissions from each station and from the apparatus therein") and 303(f) (providing Commission with authority to "[m]ake such regulations not inconsistent with law as it may deem necessary to prevent interference between stations and to carry out the provisions of this Act").

<sup>159</sup> See *Cellular Report & Order*, 86 FCC 2d at 482.

<sup>160</sup> See 47 U.S.C. § 303(r). The Commission has imposed voice roaming requirements for interconnected CMRS providers under, *inter alia*, its Title II authority, and requirements to promote the availability of data roaming arrangements under, *inter alia*, its Title III authority. See, e.g., *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, WT Docket No. 05-265, *Order on Reconsideration and Second Further Notice of Proposed Rulemaking*, 25 FCC Rcd 4181, 4184 ¶ 5 (2010) (based on Commission's Title II authority); *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, WT Docket No. 05-265, *Second Report and Order*, 26 FCC Rcd 5411, 5439-46 ¶¶ 61-68 (2011) (based on Commission's Title III authority).

## V. PROCEDURAL MATTERS

### A. Ex Parte Rules

61. The proceeding initiated by this Notice of Proposed Rulemaking shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.<sup>161</sup> Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must: (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made; and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

### B. Filing Requirements

62. Pursuant to Sections 1.415 and 1.419 of the Commission’s rules,<sup>162</sup> interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using: (1) the Commission’s Electronic Comment Filing System (“ECFS”), (2) the Federal Government’s eRulemaking Portal, or (3) by filing paper copies.<sup>163</sup>

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>.
- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC Headquarters at 445 12<sup>th</sup> St., SW, Room TW-

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<sup>161</sup> 47 C.F.R. §§ 1.1200 *et seq.*

<sup>162</sup> *See id.* §§ 1.415, 1.419.

<sup>163</sup> *See* Electronic Filing of Documents in Rulemaking Proceedings, GC Docket No. 97-113, *Report and Order*, 13 FCC Rcd 11322 (1998).

A325, Washington, DC 20554. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. The filing hours are 8:00 a.m. to 7:00 p.m.

- o Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- o U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12<sup>th</sup> Street, SW, Washington DC 20554.

63. Comments, reply comments, and *ex parte* submissions will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12<sup>th</sup> Street, S.W., CY-A257, Washington, D.C., 20554. These documents will also be available via ECFS. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

64. To request information in accessible formats (Braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the FCC's Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY). This document can also be downloaded in Word and Portable Document Format (PDF) at: <http://www.fcc.gov>.

65. For additional information on this proceeding, contact Brenda Boykin of the Spectrum and Competition Policy Division, Wireless Telecommunications Bureau, at (202) 418-2062.

#### **C. Initial Regulatory Flexibility Act Analysis**

66. As required by the Regulatory Flexibility Act of 1980 ("RFA"),<sup>164</sup> the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) relating to this NPRM. The IRFA is attached to this NPRM as an Appendix. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this Notice of Proposed Rulemaking as set forth on the first page of this document and have a separate and distinct heading designating them as responses to the IRFA.

#### **D. Paperwork Reduction Act**

67. This document does not contain proposed information collection(s) subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4).

### **VI. ORDERING CLAUSES**

68. Accordingly, IT IS ORDERED, pursuant to Sections 1, 2, 4(i), 4(j), 301, 302(a), 303(b), 303(e), 303(f), 303(g), 303(r), 304, 307(a), 309(j)(3), and 316(a)(1) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 154(j), 301, 302a(a), 303(b), 303(e), 303(f), 303(g), 303(r), 304, 307(a), 309(j)(3), and 316(a)(1), and Sections 1.401 *et seq.* of the Commission's Rules, 47 C.F.R. §§ 1.401 *et seq.*, that this Notice in WT Docket No. 12-69 IS ADOPTED.

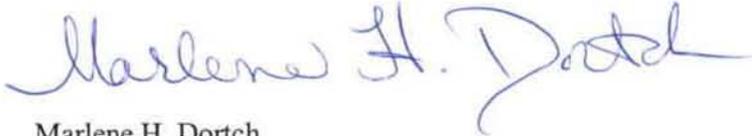
69. IT IS FURTHER ORDERED that the Petition for Rulemaking of the 700 MHz Block A Good Faith Purchaser Alliance IS GRANTED to the extent described herein.

<sup>164</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 *et seq.*, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 (CWAAA).

70. IT IS FURTHER ORDERED that the proceeding in RM-11592 IS HEREBY TERMINATED.

71. IT IS FURTHER ORDERED that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Marlene H. Dortch  
Secretary

## APPENDIX

### Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (the RFA),<sup>1</sup> the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact of the policies and rules proposed in the Notice of Proposed Rulemaking (NPRM) on a substantial number of small entities. Written public comments are requested on the IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadline for comments on the NPRM provided in the item. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).<sup>2</sup> In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.<sup>3</sup>

#### A. Need for, and Objectives of, the Proposed Rules

2. Certain Lower 700 MHz A Block licensees have asserted that the development of two distinct band classes within the Lower 700 MHz band has hampered their ability to have meaningful access to a wide range of advanced devices. The Commission initiates this rulemaking proceeding to promote interoperability in the Lower 700 MHz band. The Commission states that the Communications Act directs the Commission to, among other things, promote the widest possible deployment of communications services, ensure the most efficient use of spectrum, and protect and promote vibrant competition in the marketplace. In this NPRM, the Commission's objective is to evaluate whether the customers of Lower 700 MHz B and C Block licensees would experience harmful interference, and if so to what degree, if the Lower 700 MHz were interoperable. Assuming that interoperability would cause limited or no harmful interference to Lower 700 MHz B and C Block licensees or that such interference can reasonably be mitigated through industry efforts and/or through modifications to the Commission's technical rules or other regulatory measures, the Commission asks whether there is likely to be a timely industry solution to interoperability in the Lower 700 MHz band, or whether additional regulatory measures will be necessary to promote interoperability across the Lower 700 MHz band, such as requiring Lower 700 MHz A, B, or C Block licensees, with respect to their networks operating in this spectrum, to use only mobile user equipment that has the capability to operate across all of these paired commercial 700 MHz blocks.

3. The Commission considers whether a requirement that mobile user equipment be capable of operating on all paired commercial Lower 700 MHz spectrum could foster deployment of facilities-based mobile broadband networks, particularly in rural and unserved areas. The Commission also considers whether such a requirement would increase the likelihood that the Lower A Block licensees can obtain the necessary financing to deploy networks and devices, particularly in smaller and regional areas. The Commission considers the extent to which Lower A Block licensees have successfully negotiated with equipment vendors, whether an interoperability requirement will enable the A Block licensees to benefit from economies of scale with respect to mobile devices, and whether manufacturers require a provider to purchase a minimum number of devices. The Commission considers whether interoperability would promote reasonable roaming arrangements among 700 MHz providers and would increase the number of providers that are technologically compatible for roaming partnership.

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<sup>1</sup> The RFA, *see* 5 U.S.C. §§ 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (“SBREFA”), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>2</sup> *See* 5 U.S.C. § 603(a).

<sup>3</sup> *Id.*

4. With respect to the technical issues, the Commission states that the Commission must ultimately resolve the central question as to whether a single band class would cause widespread harmful interference to Lower 700 MHz B and C Block licensees, who would otherwise use Band Class 17 devices rather than Band Class 12. The Commission's goal is to determine the extent of two primary interference concerns for providers operating in the Lower 700 MHz B and C Blocks if these providers substitute Band Class 12 for Band Class 17 in newly-offered devices: (1) reverse intermodulation interference from adjacent DTV Channel 51 operations; and (2) blocking interference from neighboring high-powered operations in the Lower 700 MHz E Block. The Commission considers and seeks comment on the extent of the interference risk from adjacent Channel 51 and Lower Block E transmissions for Band Class 12 devices operating in the Lower B and C Blocks, the effectiveness of existing mitigation measures, and the extent of any innovative technical measures in the near future, or that can be developed. The Commission also considers how licensees can continue to support its existing grandfathered Band Class 17 devices and Band Class 12 devices.

5. Through the NPRM, the Commission's objective is to develop a record to determine whether there are measures it should take to address Lower 700 MHz interference concerns that may be preventing a voluntary adoption of Band Class 12 by Lower B and C Block licensees. For instance, the Commission seeks comment on whether to modify its technical rules for Lower 700 MHz D and E Block operations. In addition, the Commission considers steps to take to reduce the threat of potential interference to balance the needs and rights of Channel 51 incumbents with Lower 700 MHz licensees.

6. The Commission thinks that an industry solution to the question of interoperability in the Lower 700 MHz band would be preferable to a regulatory approach because such a solution allows the market greater flexibility in responding to evolving consumer needs and dynamic and fast-paced technological developments. The Commission considers what would be a reasonable timeframe for a voluntary migration to interoperability and how such timing may affect consumers and competition.

7. However, the Commission recognizes that if the industry fails to move timely toward interoperability once interference concerns are adequately addressed, by regulation or otherwise, additional regulatory steps might be appropriate to further the public interest. If interference concerns are reasonable addressed and the Commission is left with no other option to maximize innovation and investment in the Lower 700 MHz band besides mandating mobile device interoperability, one approach to achieve the Commission's goals would be to require Lower 700 MHz A, B, or C Block licensees, with respect to their networks operating in this spectrum, to use only mobile user equipment that has the capability to operate across all of these blocks. For example, the Commission considers whether to prohibit those licensees deploying LTE in the Lower 700 MHz band from offering mobile units that operate on Band Class 17, which provides for operation on only the Lower 700 MHz B and C Blocks. In order to facilitate the goal of a smooth transition to interoperable mobile equipment use in the Lower 700 MHz band, the Commission would propose a transition period of no longer than two years after the effective date of an interoperability requirement. The Commission also would propose to grandfather the use of devices already in use by consumers as of the transition deadline, so that consumers using existing Band Class 17 equipment would not be adversely affected.

#### **B. Legal Basis**

8. The authority for the actions taken in this Notice is contained in Sections 1, 2, 4(i), 4(j), 301, 302(a), 303(b), 303(e), 303(f), 303(g), 303(r), 304, 307(a), 309(j)(3), and 316(a)(1) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 154(j), 301, 302a(a), 303(b), 303(e), 303(f), 303(g), 303(r), 304, 307(a), 309(j)(3), and 316(a)(1), and Sections 1.401 *et seq.* of the Commission's Rules, 47 C.F.R. §§ 1.401 *et seq.*

#### **C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply**

9. The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”<sup>4</sup> In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.<sup>5</sup> A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).<sup>6</sup>

10. In the following paragraphs, the Commission further describes and estimates the number of small entity licensees that may be affected by an interoperability rule. Implementing a mobile user equipment interoperability requirement in the Lower 700 MHz band affects 700 MHz spectrum licensees.

11. This IRFA analyzes the number of small entities affected on a service-by-service basis. When identifying small entities that could be affected by the Commission’s new rules, this IRFA provides information that describes auction results, including the number of small entities that were winning bidders. However, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily reflect the total number of small entities currently in a particular service. The Commission does not generally require that licensees later provide business size information, except in the context of an assignment or a transfer of control application that involves unjust enrichment issues.

12. *Wireless Telecommunications Carrier (except satellite)*. The appropriate size standard under SBA rules is for the category Wireless Telecommunications Carriers. The size standard for that category is that a business is small if it has 1,500 or fewer employees.<sup>7</sup> Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our proposed action.<sup>8</sup>

13. *Upper 700 MHz Band Licensees*. In the *700 MHz Second Report and Order*, the Commission revised its rules regarding Upper 700 MHz licenses.<sup>9</sup> On January 24, 2008, the Commission

<sup>4</sup> 5 U.S.C. § 601(6).

<sup>5</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

<sup>6</sup> 15 U.S.C. § 632.

<sup>7</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>8</sup> See [http://factfinder.census.gov/servlet/TBQTable?\\_bm=y&-fds\\_name=EC0700A1&-geo\\_id=&-skip=600&-ds\\_name=EC0751SSSZ5&-lang=en](http://factfinder.census.gov/servlet/TBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-skip=600&-ds_name=EC0751SSSZ5&-lang=en)

<sup>9</sup> Service Rules for the 698-746, 747-762 and 777-792 MHz Band, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephone, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket No. 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 06-169,

(continued...)

commenced Auction 73 in which several licenses in the Upper 700 MHz band were available for licensing: 12 Regional Economic Area Grouping licenses in the C Block, and one nationwide license in the D Block.<sup>10</sup> The auction concluded on March 18, 2008, with 3 winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) and winning five licenses.

14. *Lower 700 MHz Band Licensees.* The Commission previously adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.<sup>11</sup> The Commission defined a “small business” as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.<sup>12</sup> A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.<sup>13</sup> Additionally, the lower 700 MHz Service had a third category of small business status for Metropolitan/Rural Service Area (MSA/RSA) licenses—“entrepreneur”—which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.<sup>14</sup> The SBA approved these small size standards.<sup>15</sup> An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) was conducted in 2002. Of the 740 licenses available for auction, 484 licenses were won by 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won licenses.<sup>16</sup> A second auction commenced on May 28, 2003, closed on June 13, 2003, and included 256 licenses.<sup>17</sup> Seventeen winning bidders claimed small or very small business status, and nine winning bidders claimed entrepreneur status.<sup>18</sup> In 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz band. All three winning bidders claimed small business status.

15. In 2007, the Commission reexamined its rules governing the 700 MHz band in the *700 MHz Second Report and Order*.<sup>19</sup> An auction of A, B and E Block 700 MHz licenses was held in 2008.<sup>20</sup>

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Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State, and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, Declaratory Ruling on Reporting Requirement Under Commission’s Part 1 Anti-Collusion Rule, WT Docket No. 07-166, *Second Report and Order*, 22 FCC Rcd 15289 (2007) (*700 MHz Second Report and Order*).

<sup>10</sup> See Auction of 700 MHz Band Licenses Closes, *Public Notice*, 23 FCC Rcd 4572 (WTB 2008).

<sup>11</sup> See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022 (2002).

<sup>12</sup> See *id.*, 17 FCC Rcd at 1087-88 ¶ 172.

<sup>13</sup> See *id.*

<sup>14</sup> See *id.*, 17 FCC Rcd at 1088 ¶ 173.

<sup>15</sup> See Letter from Aida Alvarez, Administrator, SBA, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, FCC (Aug. 10, 1999).

<sup>16</sup> See Lower 700 MHz Band Auction Closes, *Public Notice*, 17 FCC Rcd 17272 (2002).

<sup>17</sup> See Lower 700 MHz Band Auction Closes, *Public Notice*, 18 FCC Rcd 11873 (2003).

<sup>18</sup> See *id.*

<sup>19</sup> *700 MHz Second Report and Order*, 22 FCC Rcd at 15359 n.434.

Twenty winning bidders claimed small business status (those with attributable average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years). Thirty three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years).

16. *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."<sup>21</sup> The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees. According to Census Bureau data for 2007, there were a total of 939 establishments in this category that operated for part or all of the entire year. According to Census bureau data for 2007, there were a total of 919 firms in this category that operated for the entire year. Of this total, 771 had less than 100 employees and 148 had more than 100 employees.<sup>22</sup> Thus, under that size standard, the majority of firms can be considered small.

**D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities**

17. This NPRM proposes no new reporting or recording keeping requirements.

**E. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered**

18. The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>23</sup>

19. As an alternative to a regulatory approach, the Commission considers the impact of a timely voluntary industry solution to interoperability in the Lower 700 MHz band. The Commission considers how this alternative approach may affect consumers and competition. The Commission seeks comment on the economic impact of this approach on licensees, including small entities. In addition, the Commission seeks comment on other alternative approaches to interoperability in the Lower 700 MHz band that would reduce or eliminate economic adversity on licensees, including small entities.

20. Whether the Commission implements an interoperability requirement, or an industry

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<sup>20</sup> See Auction of 700 MHz Band Licenses Closes, *Public Notice*, 23 FCC Rcd 4572 (2008).

<sup>21</sup> The NAICS Code for this service is 334220. See 13 C.F.R 121.201. See also [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-fds\\_name=EC0700A1&-geo\\_id=&-skip=300&-ds\\_name=EC0731SG2&-lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-skip=300&-ds_name=EC0731SG2&-lang=en)

<sup>22</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-geo\\_id=&-fds\\_name=EC0700A1&-skip=4500&-ds\\_name=EC0731SG3&-lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-skip=4500&-ds_name=EC0731SG3&-lang=en)

<sup>23</sup> See 5 U.S.C. § 603(c).

solution, it seeks comment on the relevant costs and benefits on small entities. The Commission considers the potential benefits to consumers, innovation, and investment. In addition, it considers the revenue implications, cost savings, or adverse economic impact of an interoperability rule or an industry-based solution for Lower 700 MHz providers and device manufacturers.

**F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules**

21. None.

**STATEMENT OF  
CHAIRMAN JULIUS GENACHOWSKI**

Re: *Promoting Interoperability in the 700 MHz Commercial Spectrum, WT Docket No. 12-69;  
Interoperability of Mobile User Equipment Across Paired Commercial Spectrum Blocks in the  
700 MHz Band, RM-11592*

Since the completion of the 700 MHz auction in 2008, we have seen the emergence of two non-interoperable band classes for devices. This was an unanticipated development, and it is having consequences that raise real concerns.

We have heard from providers in one of the bands – the A band – that the lack of interoperability is making it difficult to obtain mobile broadband devices. That difficulty, they have said, is slowing mobile broadband roll-outs and buildouts, and making it harder for those providers to compete. And so this issue affects central FCC goals.

To help facilitate solutions to the interoperability challenges, we have over the past months increased the agency's engagement with 3GPP -- the principal mobile broadband standards setting body.

To continue this work and to help drive toward a solution, today we initiate a proceeding on interoperability. A key issue will be interference -- whether a unified band class would result in harmful interference to Lower 700 MHz B and C Block licensees, and whether, if interference exists, it reasonably can be mitigated.

I hope and expect that industry will take the lead in developing an interoperability solution to allow for additional deployment of mobile broadband networks and increase the choice of providers available to consumers. An industry-led solution would be the preferable solution, and multiple stakeholders have indicated that a unified band class can be win-win if interference concerns are addressed. Of course, we are launching this proceeding because no solution has been reached yet and we will be closely monitoring progress in addition to developing a record as part of this proceeding.

I'd like to thank Commissioner Clyburn for her strong work to bring this issue to the fore, and Commissioner McDowell for his constructive input that is reflected in the Notice.

I want to thank the FCC staff for their work on this item.

**STATEMENT OF  
COMMISSIONER ROBERT M. MCDOWELL**

Re: *Promoting Interoperability in the 700 MHz Commercial Spectrum, WT Docket No. 12-69;  
Interoperability of Mobile User Equipment Across Paired Commercial Spectrum Blocks in the  
700 MHz Band, RM-11592*

I am voting to approve today's notice of proposed rulemaking regarding interoperable communications in the lower 700 MHz band. I thank all of the interested parties for sharing their insights and marketplace experiences on this topic. And, I am grateful to the Chairman for his willingness to accept edits to create a more dispassionate examination and thereby allow for more analytical comment.

Although I support today's action, I hope that all interested parties will come to the negotiating table and work in good faith to develop their own solution. Government mandates should be a last resort. That maxim is especially relevant here because minimal regulation in the wireless sector has created an environment that has maximized opportunities for investment, innovation, competition and job creation. Before disrupting this fruitful environment with new government mandates, all stakeholders, including industry and consumers, should work as hard as they can to produce a private sector solution. An independently created interoperability framework stands a far better chance of success than would a top-down government regulation. In other words, the private sector is better at this than we are. In fact, we might not be here today were it not for earlier mandates handed down in July of 2007 from which I dissented.

Finally, in this case, I support our decision to refrain from including draft rules at this time. Putting forth proposed rules at this delicate stage may only distort the private sector's creative process. With this in mind, many of our questions are open-ended to elicit greater insight regarding the costs and technical feasibility of potential implementation. Accordingly, I approve of this prudent approach to develop the record further before drafting proposed rules.

As always, I thank our Wireless Telecommunications Bureau team for your work in this area.

**STATEMENT OF  
COMMISSIONER MIGNON L. CLYBURN**

Re: *Promoting Interoperability in the 700 MHz Commercial Spectrum, WT Docket No. 12-69; Interoperability of Mobile User Equipment Across Paired Commercial Spectrum Blocks in the 700 MHz Band, RM-11592*

Last month, Congress received much deserved praise for passing legislation that gives the Commission authority to conduct voluntary incentive auctions. If finding new ways to repurpose spectrum for commercial mobile broadband services is a national priority, then removing a barrier to productive use of perhaps the most valuable spectrum the Commission has ever repurposed, should be just as important. I am grateful to Chairman Genachowski for releasing this NPRM this quarter. Amy Levine, Rick Kaplan, and Tom Peters deserve special mention for leading the staff to prepare an NPRM that shows us a path towards resolving this interoperability issue. But, the industry and the Commission owe American consumers much more. They deserve resolution of the issues and an interoperable lower 700 MHz band as quickly as possible.

We have owed the American public the competition and innovation in mobile broadband services that the 700 MHz band promises, since at least 2006, when the Commission initiated the proceeding to adopt service rules for the band. That proceeding was widely and closely followed not just by communications licensees and the lawyers that frequently lobby the Commission.

It also drew rapt attention from application developers, other technology innovators, and members of the public who do not often follow our proceedings. More than 250,000 different entities filed comments. Why? Because of the excellent propagation characteristics of the 700 MHz band.

The technological potential of this spectrum band is so great that the Commission tried to anticipate the impact that the acquisition of licenses for the band could have on competition throughout the mobile wireless ecosystem. The Commission found that wireless service providers had been requiring mobile device manufacturers to block consumer access to certain services such as Wi-Fi technology. Wi-Fi can improve the consumer experience by reducing network congestion and providing faster data throughput rates. Therefore, the Commission determined that the practice of blocking access to Wi-Fi was unrelated to reasonable network management, or technological necessity, and was an improper barrier to consumer choice. Accordingly, the Commission imposed an open access condition on the Upper C Block of the 700 MHz Band to encourage additional innovation and consumer choice at a critical stage in the evolution of wireless broadband services.

Unfortunately, the Commission did not foresee another way that the 700 MHz band could be used to harm consumer access to services. It did not anticipate there would be a standard setting process, which would divide the lower 700 MHz band, and would impede the ability of devices for A Block licenses to work on B Block and C Block networks. This lack of interoperability means fewer device and service choices for consumers. Fewer competitive options result in higher prices.

The Commission's failure to anticipate the lack of interoperability was perhaps excusable, in 2007, when it adopted the service rules for the 700 MHz band. That is because, as this NPRM explains, since the early 1980's, the Commission has sent strong messages that it expects wireless service licensees to offer consumers equipment that was capable of operating over the entire range of an allocated spectrum band. As the Commission stated, such interoperability, would "insure full coverage in all markets and compatibility on a nationwide basis."

In any event, the Commission's failure to anticipate this particular anticompetitive development means the Commission needs to move as quickly as possible to achieve true interoperability, in the lower 700 MHz band. I understand the interest in giving the industry some time to arrive at a voluntary solution. I agree that, generally speaking, such an approach can offer a market greater flexibility to respond to evolving consumer needs and fast-paced technological developments. But, the industry has already had more than four years to find a solution. This industry knows how to arrive at interoperability. In fact, as I alluded to before, until the splintering of the lower 700 MHz band occurred, the entire mobile wireless industry had been operating with the understanding that this Commission expects interoperability within all spectrum bands.

Therefore, the staff should not only carefully, but expeditiously, consider and resolve the claims about interference from Channel 51 licensees and from high power operations in the lower E Block. The staff should also be vigilant, in monitoring the industry effort, to find a voluntary solution. This NPRM provides sufficient notice about the rules the Commission might adopt if the industry does not achieve true interoperability across the lower 700 MHz band. At a minimum, those are the goals the voluntary solution should achieve. We need to quickly arrive at an appropriate method to measure the progress of those efforts. If sufficient progress is not being made, we should not hesitate to adopt these proposed rules. I look forward to an industry solution, or the adoption of rules, by the end of this calendar year.