

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

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In the Matter of	)	
	)	
Reexamination of Roaming Obligations of	)	WT Docket No. 05-265
Commercial Mobile Radio Service Providers and	)	
Other Providers of Mobile Data Services	)	

**ORDER ON RECONSIDERATION  
AND  
SECOND FURTHER NOTICE OF PROPOSED RULEMAKING**

**Adopted: April 21, 2010**

**Released: April 21, 2010**

**Comment Date: (45 days after publication in the Federal Register)**

**Reply Comment Date: (75 days after publication in the Federal Register)**

By the Commission: Chairman Genachowski and Commissioners Copps, McDowell, Clyburn and Baker issuing separate statements.

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## I. INTRODUCTION

1. In this order, we take action to increase consumers' access to seamless nationwide mobile services, wherever and whenever they choose, and to promote investment, innovation, and competition in mobile wireless services. In the Order on Reconsideration, we create a framework for voice roaming that will encourage carriers of all sizes to reach reasonable commercial roaming agreements, while also encouraging these carriers to continue investing in the coverage and capacity of their networks. We will adjudicate any disputes that may arise between carriers through a tailored, fact-based process. In the Second Further Notice, consistent with the recommendation of the National Broadband Plan, we open an examination of the critical issue of data roaming, by seeking comment on the rules that should apply to roaming for mobile data services such as mobile broadband service. Mobile data communications present great promise for the Nation for driving the economy and delivering broadband opportunities to all Americans. Our goal is for this country to lead the world in such mobile services by ensuring that consumers have access to competitive broadband data services over the fastest and most extensive competitive wireless broadband data networks.

2. First, in the Order on Reconsideration, we modify the automatic roaming obligation that the Commission adopted for voice and related services in 2007 by eliminating the home roaming exclusion<sup>1</sup>. With this decision, we continue to strive to adopt policies that balance competing interests, including -- promoting competition among multiple carriers; ensuring that consumers have access to seamless coverage nationwide; and providing incentives for all carriers to invest and innovate by using available spectrum and constructing wireless network facilities on a widespread basis. Upon reconsideration, we find that an up-front, categorical exclusion of home roaming from the automatic roaming obligation does not strike the best balance in furthering these goals. As a result of our decision, home roaming will be subject to the automatic roaming requirement and, as a common carrier service, is subject to Sections 201 and 202 of the Act. We will apply the same general presumption of reasonableness to requests for home roaming that we apply to other requests for automatic roaming, and take into account the competing interests when addressing roaming disputes on a case-by-case basis. Specifically, we establish a general presumption that a request for automatic roaming is reasonable, in the first instance, if a requesting CMRS carrier's network is technologically compatible with the would-be host carrier's network, and we will require a CMRS carrier receiving a reasonable request to provide automatic roaming on reasonable and not unreasonably discriminatory terms and conditions. The general presumption of reasonableness, however, is rebuttable, and parties may choose to bring roaming disputes to the Commission for resolution. We will address such disputes on a case-by-case basis, taking into consideration the totality of the circumstances presented to determine whether requiring a roaming agreement would best further our public interest goals in such particular case.

3. Second, we address in a Second Further Notice of Proposed Rulemaking whether to extend roaming obligations to data services that are provided without interconnection to the public switched network -- including mobile broadband services. Broadband deployment is a key priority for the

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<sup>1</sup> Roaming arrangements between commercial mobile wireless services carriers allow customers of one mobile wireless carrier to automatically receive service from another carrier's network when they are in areas that their carrier's network does not cover.

Commission, and the deployment of mobile data networks will be essential to achieve the goal of making broadband connectivity available everywhere in the United States. We also seek to foster competition and the development of mobile data services with seamless and ubiquitous coverage. Ubiquitous coverage will enhance the unique social and economic benefits that a mobile service provides by enabling consumers to access information wherever they are, while competition will help to promote investment and innovation and protect consumer interests. We seek to develop a more detailed and updated record before we make a final determination regarding broadband data roaming. In 2007, the Commission sought comment on this issue in a five-paragraph *Further Notice*. In response, parties filed certain specific proposals regarding the rules, if any, that should govern roaming for mobile data services. Since that time, there have been numerous developments in the industry and advancements in technology that are likely to be relevant to our analysis, and that have affected at least one party's positions in this proceeding. To help us determine the right approach for mobile broadband roaming, we want to ensure that such developments are fully incorporated into our decision making on this important issue. Accordingly, we seek comment on the specific, concrete proposals offered in response to the 2007 Further Notice, as well as seeking additional proposals that parties may choose to offer response to the Second Further Notice. In addition, we expand the scope of our proceeding by seeking comment on obligations governing the provision of roaming for such data services by providers that are not CMRS carriers as well as by providers that also provide CMRS services.<sup>2</sup>

## II. BACKGROUND

4. Since 1996, the Commission has required that cellular, broadband Personal Communications Services (PCS), and certain Specialized Mobile Radio (SMR) providers make manual roaming service available upon request to customers of other carriers, provided that the roamers' handsets are "technically compatible" with the roamed-on network.<sup>3</sup> In the *Roaming NPRM* adopted in 2005, the Commission sought to develop a record with up-to-date information regarding the state of the CMRS marketplace in an effort to determine whether there was a need for a regulatory regime for roaming services.<sup>4</sup> Based on the

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<sup>2</sup> We have also modified the title for WT Docket No. 05-265, which was previously "Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers," to now read "Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services," reflecting the expanded scope of this proceeding.

<sup>3</sup> See Interconnection and Resale Obligations of Commercial Mobile Radio Service Providers, CC Docket No. 94-54, *Second Report and Order and Third Notice of Proposed Rulemaking*, 11 FCC Rcd 9462, 9468-69 ¶ 10 (1996) (*Interconnection and Resale Order*); 47 C.F.R. § 20.12(c).

<sup>4</sup> Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, *Memorandum Opinion & Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 15047 (2005) ("*Roaming MO&O*" and "*Roaming NPRM*" respectively). There are two forms of roaming services-- manual and automatic. With manual roaming, the subscriber must establish a relationship with the host carrier on whose system he or she wants to roam in order to make a call. See *Reexamination NPRM*, 20 FCC Rcd at 15049 ¶ 3. Typically, the roaming subscriber accomplishes this in the course of attempting to originate a call by giving a valid credit card number to the carrier providing the roaming service. By contrast, with automatic roaming, the roaming subscriber is able to originate or terminate a call without taking any special actions. *Id.* Automatic roaming requires a pre-existing contractual agreement between the subscriber's home system and the host system. *Id.*

record developed in response to the *Roaming NPRM*, the Commission adopted the *2007 Report and Order* in August 2007.<sup>5</sup>

5. In the *2007 Report and Order*, the Commission clarified that automatic roaming is a common carrier obligation for CMRS carriers, requiring them to provide roaming services to other carriers upon reasonable request on a just, reasonable, and non-discriminatory basis pursuant to Sections 201 and 202 of the Communications Act.<sup>6</sup> The Commission found that, if a CMRS carrier receives a reasonable request for automatic roaming, pursuant to Section 332(c)(1)(B) and Section 201(a), it serves the public interest for that CMRS carrier to provide automatic roaming service to the requesting carrier on reasonable and nondiscriminatory terms and conditions.<sup>7</sup> To provide guidance as to the reasonableness of automatic roaming requests, the Commission established the presumption that a request for automatic roaming is reasonable, in the first instance, if the requesting carrier's network is technologically compatible with the host carrier's network and the request involves automatic roaming services outside of the requesting carrier's home market(s).<sup>8</sup> The Commission also codified this automatic roaming obligation in section 20.12(d) of its rules.<sup>9</sup> At the same time, the Commission established a home roaming exclusion relating to this automatic roaming obligation, stating that a would-be host CMRS carrier is not required to provide automatic roaming to a requesting CMRS carrier in the requesting carrier's home market.<sup>10</sup> The Commission defined the requesting carrier's home market to include any geographic location where that carrier has a wireless license or spectrum usage rights (*e.g.*, spectrum leasing arrangements) that could be used to provide CMRS.<sup>11</sup>

6. Regarding the scope of the automatic roaming obligation, the Commission found that the services covered by the automatic roaming obligation are the same services that had expressly been subject to manual roaming and other regulatory obligations – namely, real-time, two-way switched voice or data services, provided by CMRS carriers, that are interconnected with the public switched network and utilize an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls.<sup>12</sup> The Commission also decided to apply an automatic roaming obligation to the provision of push-to-talk and text-messaging services.<sup>13</sup>

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<sup>5</sup> Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 15817 (2007) (“*2007 Report and Order*” and “*2007 Further Notice*” respectively).

<sup>6</sup> *2007 Report and Order*, 22 FCC Rcd at 15818 ¶ 1.

<sup>7</sup> *Id* at 15827 ¶ 26.

<sup>8</sup> *Id* at 15831 ¶ 33.

<sup>9</sup> *Id* at 15840 ¶ 63; 47 C.F.R. §§ 20.3, 20.12(d).

<sup>10</sup> *See 2007 Report and Order*, 22 FCC Rcd at 15835 ¶ 48.

<sup>11</sup> *Id* ; 47 C.F.R. § 20.3.

<sup>12</sup> 47 C.F.R. § 20.12(a)(2). The Commission has used this formulation to define the scope of CMRS carriers, and services subject to certain regulatory obligations, including E911, 47 C.F.R. § 20.18(a), Hearing Aid Compatibility, 47 C.F.R. § 20.19(a), and manual roaming, 47 C.F.R. § 20.12(a). It initially developed this standard to define the subset of CMRS carriers that would be subject to the Commission's resale requirements, which have sunset. *Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services*, CC Docket No. 94-54, *First Report and Order*, 11 FCC Rcd 18455, 18464 ¶ 16 (1996). The Commission noted that CMRS carriers not meeting this definition, such as local dispatch providers that also permitted interconnected calls over a non-cellular (continued....)

7. At that time, the Commission declined to extend the scope of the automatic roaming obligation to include non-interconnected services, such as wireless broadband Internet access services.<sup>14</sup> The Commission stated that it was premature to impose any roaming obligation on data services that are not CMRS and not interconnected to the public switched network.<sup>15</sup> Instead, the Commission sought comment on the issue in a short further notice of proposed rulemaking (*2007 Further Notice*).<sup>16</sup>

8. We received five petitions for reconsideration of the *2007 Report and Order*, four oppositions to the petitions, five replies to the oppositions, and three comments in support of the petitions.<sup>17</sup> In their respective petitions for reconsideration, Leap Wireless, MetroPCS, SpectrumCo, Sprint Nextel, and T-Mobile each ask us to reconsider the ruling that host CMRS carriers are not obligated to provide automatic roaming in the requesting carrier's home markets.<sup>18</sup> In addition, Sprint Nextel requests that we reconsider the decision to extend automatic roaming obligations to push-to-talk services.<sup>19</sup> Finally, SpectrumCo asks us to reconsider the decision to limit the automatic roaming obligation only to services that use the public switched network.<sup>20</sup>

### III. ORDER ON RECONSIDERATION

9. In this Order on Reconsideration, we first eliminate the home roaming exclusion adopted in 2007. Instead, we will treat requests for automatic roaming in home markets under the same framework as other requests for automatic roaming. Second, we deny Sprint Nextel's request to reconsider the decision to extend automatic roaming obligations to push-to-talk. Finally, we address the issues raised in SpectrumCo's petition for reconsideration in the Second Further Notice below.

#### A. Elimination of Home Roaming Exclusion

10. In this Order on Reconsideration, we strive to adopt policies that balance competing interests of promoting competition, encouraging new entry, protecting consumers, and fostering investment. As discussed below, however, these goals are sometimes in tension. To best further these goals, we eliminate the home roaming exclusion and generally presume that a request for automatic roaming will be reasonable in the first instance if the requesting carrier's network is technologically compatible. This general presumption of reasonableness, however, is rebuttable. We find that such presumption of

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system configuration or one-way interconnected voice services, "do not compete substantially with cellular and broadband PCS providers," and therefore decided not to impose any resale requirements on those carriers. *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> *2007 Report and Order*, 22 FCC Rcd at 15839 ¶ 60.

<sup>15</sup> *Id.*

<sup>16</sup> *Id.* at 15839 ¶ 60, 15845 ¶ 77.

<sup>17</sup> See Appendix B for the list.

<sup>18</sup> See, e.g., Leap Wireless Petition for Reconsideration at 4-19; MetroPCS Petition for Reconsideration at 4-9; SpectrumCo Petition for Reconsideration at 3-10; Sprint Nextel Petition for Reconsideration at 7-10; T-Mobile Petition for Reconsideration at 1-8; Leap Wireless Reply to Opposition at 1-10; MetroPCS Reply to Opposition at 2-8; SpectrumCo Reply to Opposition at 4; Sprint Nextel Reply to Opposition at 9-10; and T-Mobile Reply to Opposition at 1-7.

<sup>19</sup> See Sprint Nextel Petition for Reconsideration at 2-7; Sprint Nextel Reply to Opposition at 1-8.

<sup>20</sup> See SpectrumCo Petition for Reconsideration at 1-15; SpectrumCo Reply to Opposition at 4-5.

reasonableness will facilitate all roaming arrangements between carriers, including those for home roaming, ultimately benefiting consumers. Yet, in the event of a dispute, it also will allow us to take into consideration the totality of the circumstances presented to determine whether requiring a roaming agreement would best further our public interest goals in such particular case.

### 1. Background

11. In the *2007 Report and Order*, the Commission clarified, and codified in its rules, that automatic roaming is a common carrier service subject to the protections of Sections 201 and 202 of the Communications Act.<sup>21</sup> In particular, the Commission determined that, when a reasonable request is made by a technologically compatible CMRS carrier, a host CMRS carrier is obligated under Sections 332(c)(1)(B) and 201(a) to provide automatic roaming on a just, reasonable, and non-discriminatory basis to the requesting carrier outside of the requesting carrier's home market.<sup>22</sup> The Commission defined the home market as any geographic location where the requesting carrier has a wireless license or spectrum usage rights that could be used to provide CMRS.<sup>23</sup> In excluding home roaming, the Commission found that imposing an automatic roaming obligation in home markets where the requesting carrier already has the spectrum to compete directly with the would-be host carrier would not serve the public interest.<sup>24</sup> In reaching this decision, the Commission found "requiring home roaming could harm facilities-based competition and negatively affect build-out in these markets, thus adversely impacting network quality, reliability and coverage."<sup>25</sup> The Commission also, however, recognized the importance of home roaming and encouraged all CMRS carriers to negotiate automatic roaming in home markets, stating that its decision should not be construed as prohibiting a requesting carrier from seeking to negotiate home roaming agreements.<sup>26</sup>

12. In their petitions for reconsideration, Sprint Nextel, T-Mobile, MetroPCS, Leap Wireless, and SpectrumCo each ask us to reconsider the Commission's ruling that host carriers are not obligated to provide automatic roaming to a requesting carrier in any areas where the requesting carrier holds a wireless license or leases spectrum, and to eliminate the home roaming exclusion.<sup>27</sup> In support of the petitions for reconsideration filed by MetroPCS and Leap Wireless, three parties -- Blooston Rural Carriers (Blooston) and Rural Telecommunications Group (RTG), and U.S. Cellular Corporation (U.S. Cellular) -- filed comments in support of the petitions for reconsideration.<sup>28</sup> Others also urge us to

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<sup>21</sup> *2007 Report and Order*, 22 FCC Rcd at 15826 ¶ 23.

<sup>22</sup> *See 2007 Report and Order*, 22 FCC Rcd at 15831, 15835-37 ¶¶ 33, 48-55.

<sup>23</sup> *See* 47 C.F.R. § 20.3 (stating that a home carrier is the facilities-based CMRS carrier which requests automatic roaming service from a host carrier on behalf of its customers).

<sup>24</sup> *2007 Report and Order*, 22 FCC Rcd at 15835 ¶ 49.

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> *See, e.g.*, Leap Wireless Petition for Reconsideration at 4-19; MetroPCS Petition for Reconsideration at 4-9; SpectrumCo Petition for Reconsideration at 3-10; Sprint Nextel Petition for Reconsideration at 7-10; T-Mobile Petition for Reconsideration at 1-8; Leap Wireless Reply to Opposition at 1-10; MetroPCS Reply to Opposition at 2-8; SpectrumCo Reply to Opposition at 4; Sprint Nextel Reply to Opposition at 9-10; and T-Mobile Reply to Opposition at 1-7.

<sup>28</sup> *See, e.g.*, Blooston Comments at 2-4; RTG Comments at 2-10; and U.S. Cellular Comments at 1-7.

eliminate the home roaming exclusion.<sup>29</sup> AT&T and Verizon Wireless filed oppositions to the petitions, supporting the Commission's 2007 decision with respect to home roaming.<sup>30</sup>

13. In seeking reconsideration, petitioners challenge the Commission's policy rationale for excluding home roaming from the automatic roaming obligation, which was based on the public interest goal of encouraging facilities-based competition and services. They dispute that the home roaming exclusion is justified to protect incentives to invest and buildout in rural areas, asserting that in many such areas with very low population densities, it is uneconomic for an additional carrier to build out, especially when the carrier only has access to upper band spectrum.<sup>31</sup> They similarly assert it is infeasible for carriers offering service on a nationwide or broad regional basis to construct networks that cover 100 percent of their territories.<sup>32</sup>

14. Conversely, petitioners argue that the home roaming exclusion may itself reduce investment in network construction and facilities-based competition.<sup>33</sup> They also argue the Commission's decision to establish the home roaming exclusion fails to recognize the impediments new entrants face in constructing their networks,<sup>34</sup> and state the failure to address this barrier to entry will disproportionately

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<sup>29</sup> See, e.g., Letter from Gigi Sohn, President, Public Knowledge on behalf of the Public Interest Spectrum Coalition to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 13, 2008 and Letter from Coral Wireless d/b/a MobiPCS, Corr Wireless Comm., LLC, Leap Wireless International, Inc., MetroPCS Communications, Inc., NTCA, OPASTCO, NTELOS, Inc., Revol Wireless, Rural Cellular Association, Rural Telecommunications Group, Inc., and Southern Communications Services, Inc. d/b/a SouthernLINC Wireless, to the Hon. Julius Genachowski, Chairman, FCC, WT Docket No. 05-265, filed July 28, 2009 at 3.

<sup>30</sup> See, e.g., AT&T Opposition to Petitions for Reconsideration at 2-10; Verizon Wireless Opposition to Petitions for Reconsideration at 1-10. As discussed more fully elsewhere in this *Order on Reconsideration*, in later filings Verizon Wireless and, to a lesser extent, AT&T, suggest that they would not object to a home roaming requirement in certain limited circumstances.

<sup>31</sup> See, e.g., Letter from William F. Maher, Jr., Counsel, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 05-265, Dec. 15, 2009 at 1 (T-Mobile Dec. 15, 2009 *Ex Parte*); Sprint Petition for Reconsideration at 2; Letter from Maria L. Cattafesta, Senior Counsel, Government Affairs, Sprint Nextel, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 17, 2009 (Sprint Nextel Dec. 17, 2009 *Ex Parte*) at 3. To highlight the importance of roaming to both carriers and consumers, Sprint Nextel subsequently submitted in a later *ex parte* filing some data from *CTIA's June 2009 Wireless Industry Indices*, including the following regarding roaming billable minutes of use ("MOUs") for the first half of 2009 which totaled 66,382,209,607.5 representing 6.1 percent of all reported MOUs for that same period and which is a significant increase from the 59,706,618,5937 roaming billable MOUs reported for the first half of 2008, representing 5.3 percent of all reported MOUs for that period. See Letter from Maria L. Cattafesta, Senior Counsel, Government Affairs, Sprint Nextel, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed January 20, 2010 at 2.

<sup>32</sup> See, e.g., T-Mobile Petition for Reconsideration at 1, 3-6.; Leap Wireless Petition for Reconsideration at 6. See also Sprint Petition for Reconsideration at 2; MetroPCS Petition for Reconsideration at 17.

<sup>33</sup> See, e.g., T-Mobile Dec. 15, 2009 *Ex Parte* at 1-2. Should the Commission entertain offering only temporary relief from the home roaming exclusion as opposed to eliminating the exclusion completely, T-Mobile states it would reduce its incentives to engage in rural build-out since it will not be assured that reasonably priced roaming will be permanently available in adjacent areas. *Id.*

<sup>34</sup> See, e.g., SpectrumCo Petition for Reconsideration at 3-10; Leap Wireless Petition for Reconsideration at 4-5; RTG and OPASTCO Comments at 9; Letter from Carl W. Northrop, Paul, Hastings, Janofsky & Walker, LLP, on behalf of MetroPCS, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Nov. 5, 2009 at 1-2 (MetroPCS Nov. 5, 2009 *Ex Parte*). See also Letter from Philip Verveer to Marlene Dortch dated July 24, 2008 in WT Docket 05-265; MetroPCS Petition for Reconsideration at 8 and U.S. Cellular Comments at 4.

harm rural consumers.<sup>35</sup> Petitioners also assert that building a competitive system as a new entrant can be time consuming due to the increasing difficulty of finding suitable sites and obtaining all of the local, state, and federal regulatory approvals necessary to put the sites to use.<sup>36</sup> Several petitioners assert the exclusion will particularly hurt those new entrants whose spectrum is in an area that must be cleared before it is available for commercial use.<sup>37</sup> In addition, petitioners assert the home roaming exclusion changed the status quo with regard to carriers' previously existing practices in negotiating roaming agreements, and it may result in reduction in the availability of such arrangements and harm to carriers whose business plans were formed in reliance on the previous regime.<sup>38</sup> Some assert that availability of roaming services has also diminished as a result of CMRS consolidation.<sup>39</sup>

15. In contrast to petitioners, both AT&T and Verizon Wireless initially urge the Commission to retain the home roaming rules as adopted.<sup>40</sup> AT&T disagrees with arguments that the Commission was precluded from excluding home roaming because it deemed automatic roaming to be a common carrier

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<sup>35</sup> See, e.g., Letter from James H. Barker and Barry J. Blonien, Latham & Watkins, LLP, and Pantelis Michalopoulos and Marc Paul, Steptoe & Johnson, LLP, on behalf of Leap Wireless, to Marlene Dortch, Secretary, FCC, WT Docket Nos. 08-95 and 05-265, filed May 19, 2009 at 10 (Leap Wireless May 19, 2009 *Ex Parte*). See also Leap Wireless Reply at 10 (providing an expert report finding that the home roaming exclusion will compound market failure in areas where competition is most at risk: rural, high cost, and hard-to reach areas). See also Attachment at 17, RTG *Ex Parte* to Marlene Dortch, Secretary, FCC from Caressa Bennet, Bennet & Bennet, filed July 16, 2009, attaching Reply Comments filed on July 13, 2009 in the Commission's 14th CMRS Competition Report proceeding (WT Docket No. 09-66) (for subscribers of some small and rural carriers without relief, in part, from the home roaming exclusion, RTG states that, in order to achieve continuation of the same speeds and services to which subscribers are accustomed in their home coverage area, it is likely they will be forced to purchase the services and devices of another major CMRS operator in addition to their small or rural provider's services (meaning they will need two handsets and two service plans)).

<sup>36</sup> See MetroPCS Petition for Reconsideration at 8. U.S. Cellular agrees and notes that it is generally far more difficult than it was decades ago to construct wireless base stations, owing to increased regulatory scrutiny from all levels of government and increased opposition to wireless towers by some members of the public. U.S. Cellular Comments at 4.

<sup>37</sup> See SpectrumCo Petition for Reconsideration at 4; MetroPCS Petition for Reconsideration at 7, 16; T-Mobile Petition for Reconsideration at 6; Leap Wireless Petition for Reconsideration at 2.

<sup>38</sup> See Letter from Kathleen O'Brien Ham, Vice President Federal Regulatory Affairs, T-Mobile to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 7, 2008 at 2, 4; Leap Wireless Petition for Reconsideration at 3-4, 14-15. See also Letter from Kathleen O'Brien Ham, Vice President Federal Regulatory Affairs, T-Mobile to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed June 18, 2009 at 1 (T-Mobile June 18, 2009 *Ex Parte*); Letter from James H. Barker on behalf of Leap Wireless to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed July 23, 2008 at 1-3; Letter from Carl W. Northrop, Paul, Hastings, Janofsky & Walker, LLP, on behalf of MetroPCS, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed August 14, 2008 at 5.

<sup>39</sup> See, e.g., MetroPCS Reply at 4 n. 10; Letter from Kathleen O'Brien Ham to Marlene H. Dortch, Secretary, FCC, WT Docket No. 05-265, filed Nov. 30, 2009 (T-Mobile Nov. 30, 2009 *Ex Parte*) at 3. See also White Paper entitled Economic Analysis of the Provision of Roaming Service in the Wireless Service Industry, attached to the T-Mobile Nov. 30, 2009 *Ex Parte* at 9-11 (stating that, in the last eight years, there have been important changes in the ownership structure in the wireless service markets, particularly with respect to several important regional network operators that have been acquired by other firms such as, for example, ALLTEL, Dobson, Edge and RCC in more recent years, and noting the firms that own large shares of these previously-independent networks are now more in direct competition in the consumer market with providers looking to extend their coverage via roaming).

<sup>40</sup> AT&T Opposition at 3. See also Verizon Wireless Opposition at 4.

service subject to Sections 201 and 202 of the Act,<sup>41</sup> and states the Commission appropriately determined that a home roaming requirement would undermine facilities-based service and discourage competition based on coverage and service quality.<sup>42</sup> According to AT&T, the argument that denial of home roaming will deter new entrants is unavailing, because neither automatic roaming nor home roaming has ever been required before, and the petitioners were willing to enter the CMRS market without an automatic roaming requirement in place at the time.<sup>43</sup> Finally, AT&T also argues that, in essence, petitioners seek the ability to resell the service of facilities-based carriers in the markets in which they hold licenses.<sup>44</sup> Similarly, in its opposition, Verizon Wireless initially argues repealing the home roaming exclusion would undermine the clear pro-competitive benefits that flow from carriers differentiating themselves on the basis of superior coverage in the home market, and would also undermine the requesting carriers' incentive to build network facilities to improve coverage in their areas.<sup>45</sup> Verizon Wireless also initially argues the home roaming exclusion should be retained because it encourages build-out in high cost areas and serves the public interest by allowing carriers that have made the investment to construct facilities in high cost areas to differentiate themselves on the basis of superior coverage.<sup>46</sup>

16. However, in *ex parte* submissions filed after the close of the pleading cycle on reconsideration, Verizon Wireless and, to a lesser extent, AT&T suggest that they would not object to a home roaming requirement in certain limited circumstances. In its August 8, 2008 *ex parte*, for example, AT&T continues to argue that the home roaming exclusion promotes competition and innovation but concedes, to the extent a carrier holds encumbered AWS-1 and/or 700 MHz spectrum, limited relaxation of the home roaming exclusion may be appropriate.<sup>47</sup> In its July 23, 2009 *ex parte*, Verizon Wireless proposes a rule under which a host carrier would be required to offer automatic roaming to any requesting carrier for a period of two years in any area where the requesting carrier holds spectrum but does not offer service.<sup>48</sup> Verizon Wireless's proposed rule would also provide an additional one year of home roaming (for a total of three years) if the requesting carrier has met build-out requirements.<sup>49</sup>

17. A number of parties submitted more recent *ex parte* filings reiterating their requests for the Commission to eliminate the home market exclusion.<sup>50</sup> In its December 11, 2009 *ex parte* filing, AT&T

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<sup>41</sup> AT&T Opposition at 10.

<sup>42</sup> AT&T Opposition at 3-6. *See also* Verizon Wireless Opposition at 4-6.

<sup>43</sup> AT&T Opposition at 6.

<sup>44</sup> AT&T Opposition at 7.

<sup>45</sup> Verizon Wireless Opposition at 4-5.

<sup>46</sup> Verizon Wireless Opposition at 8. Verizon Wireless also initially contended the competitive marketplace will continue to lead carriers to negotiate automatic roaming agreements even where not required under the Commission's rules. Verizon Wireless Opposition at 10.

<sup>47</sup> Letter from M. Robert Sutherland, AT&T, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 8, 2008 at 1, 3-4.

<sup>48</sup> Verizon Wireless July 23, 2009 *Ex Parte*, Attachment at 2.

<sup>49</sup> *Id.*

<sup>50</sup> *See* T-Mobile Nov. 30, 2009 *Ex Parte*, and attached paper, *Economic Analysis of the Provision Of Roaming Services in the Wireless Service Industry*, Dr. Andrzej Skrzypacz, Professor of Economics, Stanford University Graduate School of Business, WT Docket No. 05-265; Letter from Carl W. Northrop, Paul, Hastings, Janofsky & Walker, LLP, on behalf of MetroPCS, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 8, (continued....)

responds to these more recent requests to eliminate the home roaming exclusion, arguing that competition and voluntarily negotiated roaming arrangements flourished prior to the *2007 Report and Order* and continue to flourish today.<sup>51</sup>

## 2. Discussion

18. Based on the record before us, we conclude that it is in the public interest to modify our rules with respect to automatic roaming by eliminating the home roaming exclusion that the Commission previously applied to the automatic roaming requirement for voice and related services.<sup>52</sup> Thus, we will presume a request for automatic roaming to be reasonable, in the first instance, if the requesting carriers' network is technologically compatible, regardless of whether the request is for areas inside or outside of the requesting carrier's home market, and we will require a CMRS carrier receiving a reasonable request to provide automatic roaming service to the requesting carrier on reasonable and not unreasonably-discriminatory terms and conditions. We continue to support the goal of promoting facilities-based competition by providing incentives for carriers to construct wireless network facilities on the spectrum available to them. Upon reconsideration, however, we conclude that the up-front categorical home roaming exclusion adopted by the *2007 Report and Order* would in many circumstances discourage, rather than encourage, the facilities-based competition it sought to promote. We also remain mindful of the need in the roaming context to balance a number of competing interests, including -- promoting competition (including facilities-based competition), encouraging new entry, protecting consumers, and fostering innovation and investment.

19. Although some parties have advocated that we modify the home market exclusion in any of a number of ways, for example, by delaying its applicability for some period after a carrier obtains an initial spectrum license, we decide that the better and simpler course is to eliminate the exclusion and address in particular cases the competing interests, including the concerns that motivated the adoption of the

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2009 (MetroPCS Dec. 8, 2009 ex parte); Letter from William F. Maher, Jr., Counsel, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 05-265, Dec. 15, 2009 (T-Mobile Dec. 15, 2009 ex parte); Letter from Carl W. Northrop, Paul, Hastings, Janofsky & Walker, LLP, on behalf of MetroPCS, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 17, 2009; Letter from Matthew F. Wood, Associate Director, Media Access Project, on behalf of Consumers Union, Free Press, and Media Access Project, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 17, 2009 (Public Interest Participants Dec. 17, 2009 ex parte); Letter from Maria L. Cattafesta, Senior Counsel, Government Affairs, Sprint Nextel, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 17, 2009 (Sprint Nextel Dec. 17, 2009 ex parte); Letter from Carl W. Northrop, Paul, Hastings, Janofsky & Walker, LLP, on behalf of MetroPCS, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Jan. 6, 2010 (MetroPCS Jan. 6, 2010 ex parte); Letter from Caressa D. Bennet, on behalf of Rural Telecommunications Group, Inc., to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Jan. 27, 2010.

<sup>51</sup> *Ex Parte* from Michael P. Goggin, AT&T, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 22, 2009 at 1 (AT&T Dec. 22, 2009 *Ex Parte*).

<sup>52</sup> *See, e.g.*, Leap Wireless Petition for Reconsideration & Reply; MetroPCS Petition for Reconsideration & Reply; SpectrumCo Petition for Reconsideration & Reply; Sprint Nextel Petition for Reconsideration & Reply; T-Mobile Petition for Reconsideration & Reply; RTG/OPASTCO Comments; Blooston Rural Carriers' Comments; U.S. Cellular Comments; Letter from Gigi Sohn, President, Public Knowledge on behalf of the Public Interest Spectrum Coalition to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 13, 2008; Letter from Coral Wireless d/b/a MobiPCS, Corr Wireless Comm., LLC, Leap Wireless International, Inc., MetroPCS Communications, Inc., NTCA, OPASTCO, NTELOS, Inc., Revol Wireless, Rural Cellular Association, Rural Telecommunications Group, Inc., and Southern Communications Services, Inc. d/b/a SouthernLINC Wireless, to the Hon. Julius Genachowski, Chairman, FCC, WT Docket No. 05-265, filed July 28, 2009.

exclusion.<sup>53</sup> Through the elimination of the home roaming exclusion, we seek to encourage parties to negotiate roaming agreements – based on reasonable terms and conditions – that fill in gaps in their network coverage, including in areas where they hold spectrum rights. Our expectation is that, with the revised rule adopted in this Order setting out an underlying obligation to provide automatic roaming, we have laid the foundation to enable carriers to successfully negotiate reasonable roaming arrangements, including requests for home roaming.

20. We stand ready, however, to the extent necessary, to resolve roaming disputes including whether a particular requesting carrier's request is reasonable, or whether a would-be host carrier has met its obligation to provide roaming on reasonable and not unreasonably discriminatory terms and conditions. This case-by-case analysis, through the dispute resolution process, will enable us to take into consideration the particular circumstances of each dispute as they are relevant to the Commission's goals to determine whether a particular automatic roaming request, and the would-be host carrier's response, are reasonable.

21. Initially, we find that the home roaming exclusion, as adopted, failed to achieve its stated purposes in a number of respects. In adopting the home roaming exclusion, the Commission sought to promote facilities-based competition by preserving appropriate incentives for carriers to construct facilities in areas where they have spectrum holdings.<sup>54</sup> The record highlights, however, that in certain circumstances the exclusion can hinder the development of such competition and create disincentives to construct. In particular, the home roaming exclusion as adopted unintentionally created confusion as to roaming rights and led some to conclude that a carrier effectively has no right to request roaming in any market where it held spectrum, and the would-be host carrier has no obligation to negotiate roaming arrangements. This would be the case even when that spectrum is newly licensed and the carrier seeking roaming thus has never had any opportunity to build any facilities in any part of the licensed spectrum. We find that the home roaming exclusion as adopted can in effect require carriers entering new markets to build out their networks extensively throughout the newly obtained license area before they can provide a competitive service to consumers, all without the benefit of financing the construction of new networks over time with revenues from existing services and reliance on roaming to fill in gaps during build out.<sup>55</sup> With "home market" defined under the exclusion on the basis of an entire license area (*e.g.*, CMA, BTA, EA, REAG), this buildout burden can be significant, and potentially can even cover several states (*e.g.*, if licensed on an REAG basis).<sup>56</sup> In such circumstances, we find that the exclusion can delay or deter entry into a market because a carrier seeking to provide service in a new geographic area, without the ability to supplement its networks with roaming and whose initial facilities would necessarily be limited, would be required to compete with incumbents that had been developing and expanding their networks for many

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<sup>53</sup> See 2007 Report and Order, 22 FCC Rcd at 15834-35 ¶¶ 47-51.

<sup>54</sup> See 2007 Report and Order, 22 FCC Rcd at 15835 ¶ 49.

<sup>55</sup> RTG/OPASTCO Comments at 6-10. See also MetroPCS Petition for Reconsideration at 8 (noting small carriers and entrepreneurial carriers often do not have unlimited financial resources and must roll out service over time so that income generated in the initial service areas can be used to fund expansions). See also Leap Wireless Reply at 10 (providing an expert report from Dr. Simon Wilkie that concludes in part the home roaming exclusion will compound market failure in areas where competition is most at risk: rural, high cost, and hard-to-reach areas, as well as areas where other regulations limit entry).

<sup>56</sup> Indeed, instead of promoting the entry of new entrants in a market, the home roaming exclusion might deter new entry given that that entrant might lose its ability to provide roaming coverage to its customers throughout any part of a licensed area in which it would be obtaining spectrum rights.

years. The Commission has previously recognized that this “head-start” advantage can constitute a significant hurdle to new competition.<sup>57</sup>

22. In addition, although the exclusion was intended to incentivize carriers to use their spectrum holdings through additional buildout, it deprives them of roaming rights even in circumstances where their spectrum is not available or usable for reasons beyond their control. For example, a carrier’s AWS-1 spectrum holding might be unavailable because of the unfinished relocation of U.S. Government incumbent users from that band.<sup>58</sup> In other instances, an area may be subject to legal constraints that permit only one carrier to offer service (*e.g.*, in certain subway systems or government lands), notwithstanding the nominal coverage of the area by a license held by another carrier.

23. Another reason for eliminating the home roaming exclusion is that it does not adequately account for the fact that building another network may be economically infeasible or unrealistic in some geographic portions of licensed service areas. We find that, in some areas of the country with very low population densities, it is simply uneconomic for several carriers to build out. Further, we note that it may be significantly more costly to build out when the carrier only has access to higher spectrum frequencies where propagation characteristics are less advantageous.<sup>59</sup> Indeed, every carrier, including every nationwide carrier holding licenses that cover the entire country, relies on roaming to some extent to fill in gaps in its network coverage.<sup>60</sup> In particular, the record reflects that for many CMRS carriers, there are areas within their licensed service areas where there is insufficient demand to support construction in those areas by another carrier.<sup>61</sup>

24. To address these issues, some parties propose that the Commission retain some modified form of the home roaming exclusion.<sup>62</sup> These proposals vary significantly in terms of the timing and scope of implementation, and whether in particular instances there should be exceptions to the exclusion. For instance, many suggest that implementation of the home roaming exclusion be delayed for some period following the effective date of the order.<sup>63</sup> Some advocate that the exclusion take effect in a particular location only after a period of time following the availability of spectrum to a new licensee – which may occur with the initial issuance of a license by the Commission or only after the license is no

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<sup>57</sup> See, *e.g.*, *Resale First Report and Order*, 22 FCC Rcd 18455 18465-66 ¶¶ 17-18.

<sup>58</sup> See *e.g.*, Leap Wireless Petition for Reconsideration at 2; MetroPCS Petition for Reconsideration at 16; Spectrum Co. Petition for Reconsideration at 3-4, 10; and T-Mobile Petition for Reconsideration at 6.

<sup>59</sup> See T-Mobile Dec. 15, 2009 *Ex Parte* at 1; see also Sprint Nextel Dec. 17, 2009 *Ex Parte* at 1.

<sup>60</sup> See T-Mobile Petition for Reconsideration at 6; Letter from Maria L. Cattafesta, Senior Counsel, Government Affairs, Sprint Nextel, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 15, 2008 at 3.

<sup>61</sup> See, *e.g.*, Letter from Sprint Nextel, FCC, WT Docket No. 05-265 filed Aug. 15, 2008 at 2-4. See also T-Mobile Reply at 3; Leap Wireless Petition for Reconsideration at 12; Leap Wireless Reply at 7-10; Leap Wireless Opposition at 10.

<sup>62</sup> See, *e.g.*, Letter from M. Robert Sutherland, AT&T, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 8, 2008 at 1; Leap Wireless Petition for Reconsideration at 2; MetroPCS Petition for Reconsideration at 16; and Spectrum Co. Petition for Reconsideration at 3-4, 10.

<sup>63</sup> See, *e.g.*, Letter from Philip L. Verveer, Wilkie, Farr & Gallagher, on behalf of SpectrumCo. to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 8, 2008 at 1-2; Letter from Gigi Sohn, President, Public Knowledge on behalf of the Public Interest Spectrum Coalition to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 13, 2008; and Letter from James H. Barker, Leap Wireless International, Inc., to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 11, 2009, at 3-4.

longer encumbered for reasons beyond the requesting carrier's control.<sup>64</sup> The particular suggestions for the limited period of time range widely, between one year and seven years.<sup>65</sup> Other suggestions include the possibility that the exclusion not apply for an additional time period if a requesting carrier meets Commission-specified build-out benchmarks on a population or geographic coverage basis within specific time periods.<sup>66</sup> As another alternative, some suggest that, after an initial transition period during which home roaming would be provided, the home roaming exclusion would apply where the would-be host carrier affirmatively establishes that the requesting carrier has failed to make progress in building out.<sup>67</sup>

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<sup>64</sup> Letter from M. Robert Sutherland, AT&T, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 8, 2008 at 1 (proposing that home roaming rights should only apply in cases where the requesting carrier cannot build out because of encumbrances and should only extend for one year). *See also* Leap Wireless Petition for Reconsideration at 2; MetroPCS Petition for Reconsideration at 16; Spectrum Co. Petition for Reconsideration at 3-4, 10; T-Mobile Petition for Reconsideration at 6 n.11 (emphasizing the adverse impact that the Commission's decision to exclude home roaming may have on recent licensees of AWS-1 spectrum due to the need for AWS-1 spectrum clearing).

<sup>65</sup> *See, e.g.*, Letter from Philip L. Verveer, Wilkie, Farr & Gallagher, on behalf of SpectrumCo. to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 8, 2008 at 1-2 (requesting up to seven years from the effective date of the order); Letter from Gigi Sohn, President, Public Knowledge on behalf of the Public Interest Spectrum Coalition to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 13, 2008 (requesting a minimum number of years, such as five years); Letter from James H. Barker, Leap Wireless International, Inc., to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 11, 2009, at 3-4 (offering proposal with different time periods for different license areas). *See also* Letter from M. Robert Sutherland, AT&T, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 8, 2008 at 1 (proposing that home roaming rights should only apply in cases where the requesting carrier cannot build out because of encumbrances and should only extend for one year); Letter from Lowell C. McAdam on behalf of Verizon Wireless to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed July 23, 2009, attaching a letter dated July 22, 2009 from Lowell C. McAdam, President and Chief Executive Officer of Verizon Wireless, to the Honorable Henry A. Waxman, Chairman of the House Energy and Commerce Committee containing Verizon Wireless's proposal for modifying the Commission's existing rule governing automatic roaming (stating that it would support a statute or FCC rule that required a would-be host carrier to offer automatic roaming to a requesting carrier's subscribers in any area where the requesting carrier holds spectrum but does not offer service: (a) for a period of 2 years from the date the statute or rule takes effect; (b) after that period, if all of the spectrum usage rights held by the requesting carrier in the area is encumbered by U.S. Government users; or (c) after that period, if all of the spectrum usage rights held by the requesting carrier in the area was originally licensed by the FCC for CMRS purposes less than 2 years earlier; and (d) after that period, for an additional one year if the requesting carrier has met build-out benchmarks to be established by statute or the FCC).

<sup>66</sup> *See* Letter from James H. Barker, Latham & Watkins, LLP, on behalf of Leap Wireless, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed December 11, 2009 at 3 (Leap December 11, 2009 *Ex Parte*) (proposing a host carrier be obligated to continue to provide home roaming within a requesting carrier's home market only if the requesting carrier demonstrated signal coverage of at least forty (40) percent of the population of its licensed service area). Verizon Wireless states it would support a statute or FCC rule that required a would-be host carrier to offer automatic roaming to a requesting carrier's subscribers in any area where the requesting carrier holds spectrum but does not offer service for, among other things, a period of two years from the date the statute or rule takes effect and for an additional one year if the requesting carrier has met certain build-out benchmarks to be established by statute or the FCC. *See* Verizon Wireless July 23, 2009 *Ex Parte*, Attachment at 2.

<sup>67</sup> Letter from Carl W. Northrop, Paul, Hastings, Janofsky & Walker, LLP, on behalf of MetroPCS, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 8, 2009 at 1 (MetroPCS Dec. 8, 2009 *Ex Parte*). *See also* Letter from Gigi Sohn, President, Public Knowledge on behalf of the Public Interest Spectrum Coalition to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 13, 2008 (proposing that, after expiration of (continued....))

25. We conclude that the better, simpler approach is to eliminate the home roaming exclusion. We find the reasonableness of a roaming request in many instances will likely depend on the individual circumstances of a particular request. For instance, we recognize the difficulties in determining accurately whether a carrier has avoided facilities-based entry in a high cost area because it is prohibitively difficult or merely less profitable than urban areas. This difficulty, however, and the intensively fact-based nature of the issue, weighs in favor of a case-by-case, fact-driven approach that we are adopting for resolving disputes over roaming arrangements. We discuss below the various factors that will guide the resolution of any disputes brought before us.

26. We also note that, in the *2007 Report and Order*, the Commission continued to encourage all CMRS carriers to negotiate reasonable roaming agreements. It specifically contemplated that, even with the home roaming exclusion, CMRS carriers would continue voluntarily to negotiate automatic roaming agreements that included home roaming.<sup>68</sup> The record supports the conclusion that the Commission's home roaming exclusion is hampering CMRS carriers' abilities to negotiate automatic roaming agreements for home roaming or obtain renewal of existing automatic roaming agreements that included home roaming, and will likely have a growing impact in the future.<sup>69</sup> We find that the home roaming exclusion unintentionally changed the status quo with regard to carriers' previously existing practices in negotiating roaming agreements and may have disrupted settled expectations of competitive carriers on which they formed long-term business models.<sup>70</sup>

27. In particular, we reject the arguments of AT&T and Verizon Wireless that carriers cannot claim any harm in the home roaming exclusion because it merely maintains a status quo under which they have never had any rights to home roaming.<sup>71</sup> Although, prior to the *2007 Report and Order*, the (Continued from previous page) \_\_\_\_\_  
the time period, the presumption should remain in favor of home roaming unless the would-be host carrier satisfies the burden of proving that withdrawing home roaming will not harm wireless consumers).

<sup>68</sup> Letter from Kathleen O'Brien Ham, Vice President Federal Regulatory Affairs, T-Mobile to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 7, 2008 at 2, 4; Sprint Nextel Petition for Reconsideration at 7-10.

<sup>69</sup> For example, although certain pre-*2007 Report and Order* agreements that grant home roaming rights remain in effect today, MetroPCS states that, in pursuing several roaming initiatives since the adoption of the home roaming exclusion, it has found it extremely difficult to negotiate acceptable new roaming arrangements for either voice or data roaming beyond those mandated by merger conditions, and that such difficulties have been "particularly acute" for home roaming and data roaming requests, with Nationwide carriers proposing exorbitantly high rates to the extent such roaming rights are offered at all. See Letter from Carl W. Northrop, Paul, Hastings, Janofsky & Walker, LLP, on behalf of MetroPCS, to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Jan. 6, 2010 (MetroPCS Jan. 6, 2010 *Ex Parte*) at 9, 11; see also Cricket *Ex Parte* letter from Robert J. Irving, Jr., Vice President and General Counsel, Leap Wireless and Cricket to Marlene Dortch, Secretary, FCC dated July 29, 2009 at 4 (noting that even before Verizon acquired its roaming partner ALLTEL, Verizon had begun to exert its market power by imposing in-market restrictions on roaming agreements). See MetroPCS Jan. 6, 2010 *Ex Parte* at 9, 11 (asserting that instances of refusal to provide home roaming will likely grow once existing roaming agreements and transaction-related obligations expire.).

<sup>70</sup> Letter from Kathleen O'Brien Ham, Vice President Federal Regulatory Affairs, T-Mobile to Marlene Dortch, Secretary, FCC, WT Docket No. 05-265, filed Aug. 7, 2008 at 2, 4; Sprint Nextel Petition for Reconsideration at 7-10.

<sup>71</sup> See AT&T Opposition at 6-7 (arguing that home roaming exemption will deter new entrants is unavailing because "[n]either automatic roaming nor home roaming has ever been required."); Verizon Aug. 1, 2008 *Ex Parte*, at 4-5 ("the home roaming exception merely retains the status quo – wireless carriers have not been entitled to home roaming service since the inception of the cellular industry 25 years ago.").

Commission had not expressly provided that there was a home roaming obligation under Sections 201 and 202, nor adopted any rules requiring the provision of such services, it had stated on several occasions that carriers that were unreasonably denied automatic roaming could seek relief under Section 201. For example, when addressing in its 2000 Notice of Proposed Rulemaking whether to adopt an automatic roaming requirement, the Commission began by affirming that “roaming is a common carrier service . . . and thus . . . the provision of roaming is subject to the requirements of Section 201(b), 202(a), and 332(c)(1)(B) of the Communications Act.”<sup>72</sup> It then sought comment on, among other things, whether “the avenues of complaint and redress afforded by Section 208 provide sufficient and appropriate means of ensuring the development of automatic roaming services in a competitive CMRS market.”<sup>73</sup> Similarly, in the *2005 Roaming Reexamination NPRM*, the Commission began a further consideration of whether to adopt an explicit automatic roaming requirement by stating that “complaints and enforcement actions involving unjust and unreasonable charges, practices, or discriminatory conduct by CMRS carriers in the provision of roaming services are covered by the complaint process set forth in Title II of the Act.”<sup>74</sup> During this period, the Commission also indicated in transactions-related orders that automatic roaming was subject to the statutory obligations under Section 208.<sup>75</sup>

28. In referring to existing carrier obligations under Section 201 and 202, the Commission generally did not distinguish between home roaming and automatic roaming.<sup>76</sup> Further, during this period, automatic roaming arrangements were being negotiated among carriers, with no specific indication that home roaming agreements were particularly problematic.<sup>77</sup> Thus, we find that the clarifications in the *2007 Report and Order* did alter the legal status quo against which automatic roaming arrangements were being negotiated, and that the adoption of an automatic roaming obligation with a home roaming exclusion appears to have significantly reduced the incentive to make home roaming available, and will lead to a reduction in the availability of home roaming arrangements over time. Indeed, as discussed earlier, the record supports the conclusion that the Commission’s home roaming exclusion is hampering CMRS carriers’ abilities to negotiate automatic roaming agreements that include home roaming.<sup>78</sup>

29. Other factors may be contributing to a declining availability of roaming arrangements in home markets, which further supports our action here. For one, since the Commission’s adoption of the home roaming exclusion, there have been a number of significant mergers consummated in the last two

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<sup>72</sup> Automatic and Manual Roaming Obligations Pertaining to Commercial Mobile Radio Services, WT Docket No. 00-193, 15 FCC Rcd 21628, 21634 ¶ 15 (*2000 Roaming NPRM*).

<sup>73</sup> *Id.* at 21638 ¶ 26.

<sup>74</sup> Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, 20 FCC Rcd 15047, 15048 ¶ 2 (2005) (*2005 Roaming Reexamination NPRM*).

<sup>75</sup> See, e.g., Cingular-AT&T Merger Order, 19 FCC Rcd 21522, 21592 ¶ 182 (“if a roaming partner believes that Cingular is charging unreasonable roaming rates, it can always file a complaint with the Commission under Section 208 of the Communications Act.”).

<sup>76</sup> The Commission did seek comment in its *2005 Roaming Reexamination NPRM* on whether an automatic roaming rule should include a requirement that a carrier enter into an automatic roaming arrangement with a facilities-based competitor in the same market (“in-market” roaming). 20 FCC Rcd at 15060 ¶ 35.

<sup>77</sup> See *2007 Report and Order*, 22 FCC Rcd at 15827 ¶ 24. The Commission did note evidence of problems in the roaming market generally in the *2007 Report and Order*. See *2007 Report and Order*, 22 FCC Rcd at 15828 ¶ 28.

<sup>78</sup> See *supra*, n. 69.

and a half years. MetroPCS states that, with the consolidation in the industry, the number of roaming partners is diminishing, making it less likely that leaving negotiations involving home roaming strictly to the market without any underlying regulatory obligations, will result in fewer such roaming agreements.<sup>79</sup> Additionally, T-Mobile provides an expert report with an economic analysis of roaming that recommends the elimination of the home roaming exclusion in light of the significant changes in the wireless industry since the *2007 Report and Order* was released.<sup>80</sup> AT&T points out that, with respect to each wireless transaction approved since 2007, the Commission has concluded that the transaction, with or without conditions, served the public interest and argues that the transactions have yielded significant consumer benefits in that AT&T brings to the customers of the acquired carrier access to the same wireless services and products, such as next-generation networks and innovative voice and data plans, that are available to customers in the most densely populated areas.<sup>81</sup> While the Commission has approved these transactions, with conditions, as not resulting in any transaction-specific competitive harm, those orders have recognized the legitimacy of addressing roaming issues in a rulemaking context<sup>82</sup> and we find that broad industry trends should be considered in evaluating the availability of reasonable home roaming arrangements. We find that, in some areas, the consolidation in the wireless industry may have reduced the number of available roaming partners for some of the smaller, regional and rural carriers.<sup>83</sup> This trend thus may have contributed to reductions in the availability of voluntary and reasonable roaming arrangements, including arrangements for home roaming. Regardless of the factors behind the apparent decline in the availability of such roaming arrangements, we find further grounds to reconsider an upfront, categorical home roaming exclusion that can serve as a bar to negotiation of reasonable arrangements.

30. We reject contentions by AT&T and Verizon Wireless that the Commission needs to retain the home roaming exclusion so as not to undermine facilities-based service or discourage competition

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<sup>79</sup> See MetroPCS Reply at 4 n. 10.

<sup>80</sup> *T-Mobile Nov. 30, 2009 Ex Parte* at 3. See also White Paper entitled Economic Analysis of the Provision of Roaming Service in the Wireless Service Industry attached to the *Ex Parte* at 9-11 (stating that, in the last eight years, there have been important changes in the ownership structure in the wireless service markets, particularly with respect to several important regional network operators that have been acquired by other firms such as, for example, ALLTEL, Dobson, Edge and RCC in more recent years, and noting that the firms that own large shares of these previously-independent networks are now more in direct competition in the consumer market with providers looking to extend their coverage via roaming).

<sup>81</sup> Letter from Michael Goggin, AT&T Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 05-265, filed Dec. 22, 2009 at 4.

<sup>82</sup> Applications of Cellco Partnership d/b/a Verizon Wireless and Atlantis Holdings LLC For Consent to Transfer Control of Licenses, Authorizations, and Spectrum Manager and *De Facto* Transfer Leasing Arrangements and Petition for Declaratory Ruling that the Transaction is Consistent with Section 310(b)(4) of the Communications Act, WT Docket No. 08-95, *Memorandum Opinion and Order and Declaratory Ruling*, 23 FCC Rcd 17444, 17525 ¶ 180 (2008); Sprint Nextel Corporation and Clearwire Corporation Applications for Consent to Transfer Control of Licenses, Leases, and Authorizations, WT Docket No. 08-94, *Memorandum Opinion and Order*, 23 FCC Rcd 17570, 17606 ¶ 92 (2008); and Applications of AT&T Inc. and Centennial Communications Corp. For Consent to Transfer Control of Licenses, Authorizations, and Spectrum Leasing Arrangements, WT Docket No. 08-246, *Memorandum Opinion and Order*, 24 FCC Rcd 13915, 13969 ¶ 133 (2009).

<sup>83</sup> See, e.g., Applications of AT&T Inc. and Centennial Communications Corp. For Consent to Transfer Control of Licenses, Authorizations, and Spectrum Leasing Arrangements, WT Docket No. 08-246, *Memorandum Opinion and Order*, 24 FCC Rcd 13915, ¶ 130 (2009).

based on coverage and service quality,<sup>84</sup> According to AT&T, the home roaming exclusion has positive effects on competition and there is no justification for allowing a company to take advantage of its competitor's investment in network infrastructure and superior in-market coverage.<sup>85</sup> Verizon Wireless similarly argues the home roaming exclusion should be retained because it encourages build-out in high cost areas and serves the public interest by allowing carriers that have made the investment to construct facilities in high cost areas to differentiate themselves on the basis of superior coverage.<sup>86</sup> Verizon Wireless also states that repealing the home roaming exclusion would undermine the pro-competitive benefits that flow from carriers differentiating themselves on the basis of superior coverage in the home market, and would also undermine the requesting carriers' incentive to build network facilities to improve coverage in their licensed areas.<sup>87</sup>

31. We agree that there are pro-competitive benefits that flow from carriers differentiating themselves on the basis of coverage in their licensed service areas, including in rural and remote areas.<sup>88</sup> However, we are not persuaded that replacing the current categorical home roaming exclusion with a case-by-case assessment of reasonableness, based on the reasonableness of a particular roaming request, will undermine these pro-competitive benefits. We seek here to balance various factors, which, in addition to fostering investment, include promoting competition, encouraging new entrants, and protecting the interests of consumers. We also consider that outcomes can have both positive and negative effects on the build-out incentives of both requesting and host carriers, and these considerations must also be weighed. In balancing these effects and factors, we find that adopting an approach that includes a general presumption of reasonableness with respect to automatic roaming, combined with a case-by-case determination of reasonableness in the event of a dispute, better preserves incentives to enter and incentives to invest overall, and at the same time protects consumers by facilitating their access to ubiquitous service.

32. AT&T argues that, if the first carrier providing coverage in a given area were required to provide automatic home roaming service to its competitors' customers, there would be no reason for competitors to build out their own networks in that area.<sup>89</sup> We disagree. Carriers deploying next generation networks will still have incentives to build out to ensure that their subscribers receive all of the benefits of the carriers' own advanced networks.<sup>90</sup> We find that, as a practical matter, the relatively high

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<sup>84</sup> AT&T Opposition at 3-7, Verizon Wireless Opposition at 4-6.

<sup>85</sup> AT&T Opposition at 4.

<sup>86</sup> Verizon Wireless Opposition at 4.

<sup>87</sup> *Id.*, at 4-5.

<sup>88</sup> We note that incentives to construct in remote areas may not be exclusively based on revenues generated by traffic in those areas. Another potential incentive is the additional subscribership a carrier may obtain in areas of high population density as a result of being able to offer such subscribers coverage in the event they travel into remote areas of the country and require connectivity. To the extent that a carrier is obligated to make its coverage available to its competitors, however, that benefit of construction would be reduced.

<sup>89</sup> AT&T Opposition at 5.

<sup>90</sup> SpectrumCo Petition for Reconsideration at 12-13 and Reply at 4. (also noting that with roaming rates being much higher than retail rates, a smaller carrier cannot expect to compete when its subscribers are roaming all the time or even a large percentage of the time). *See also* MetroPCS Petition for Reconsideration at 12 noting it is simply not economically feasible or sound business practice for any carrier to pursue a strategy based on roaming at the expense of building its own network.

price of roaming compared to providing facilities-based service will often be sufficient to counterbalance the incentive to “piggy back” on another carrier’s network.<sup>91</sup> Further, we emphasize that host carriers have flexibility, subject to a standard of reasonableness, to establish the structure and the level of roaming rates, and that, as described below, the fact that a requesting carrier holds spectrum, or is offering service on its own facilities, in an area are among the factors we may consider in addressing disputes.<sup>92</sup> Accordingly, the impact of a roaming obligation on buildout incentives does not warrant a general exclusion, but should be considered as a factor on a case-by-case basis in the event of a dispute.<sup>93</sup>

33. We reject as well AT&T’s argument that there is no evidence to suggest that home roaming is necessary to eliminate the “head start” advantage of larger carriers.<sup>94</sup> As discussed above, we find that the record amply supports a finding that in the absence of roaming arrangements, such an advantage will deter investment and constitute a significant hurdle to competition.<sup>95</sup>

34. AT&T also argues that no regulatory intervention is necessary because there is competition in the retail market and no harm to consumers.<sup>96</sup> We note that in the *2007 Report and Order*, the Commission already rejected this argument when it found that automatic roaming is a common carrier service and adopted the automatic roaming rule, concluding that “[g]iven the current CMRS market situation and wireless customer expectations, [i]t is in the public interest to facilitate reasonable roaming requests by carriers on behalf of wireless customers.”<sup>97</sup> As noted in the *2007 Report and Order*,

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<sup>91</sup> Spectrum Co Petition for Reconsideration at 12 (stating that there are significant incentives for carriers to choose to deploy their own network rather than piggyback on other networks, including investment incentives in achieving one’s own superior network and ensuring subscribers receive the benefits of a more advanced network).

<sup>92</sup> See ¶ 39 *infra*. See also *2007 Report and Order*, 22 FCC Rcd at 15831-33 ¶¶ 36-40.

<sup>93</sup> See T-Mobile Petition for Reconsideration at 1-2, 8-9; *T-Mobile Nov. 30, 2009 Ex Parte* at 4 n.15.

<sup>94</sup> AT&T Opposition at 7. Moreover, AT&T states that a home roaming requirement would interfere with market forces by altering the way inter-carrier business arrangements are established, allowing a carrier that has made fewer investments and has a smaller coverage area to be entitled to have its customers roam on the network of a competitor that has made greater investments to produce superior coverage. AT&T Opposition at 9.

<sup>95</sup> See Spectrum Co Petition for Reconsideration at 3-10 (arguing not imposing home roaming obligations harms consumer interests by deterring new competitive entry); RTG/OPASTCO Comments at 9; MetroPCS Petition for Reconsideration at 8 (stating that building a competitive system as a new entrant can be time consuming due to the increasing difficulty of finding suitable sites and obtaining all of the local, state, and federal regulatory approvals necessary to put the sites to use); U.S. Cellular Comments at 4 (noting that it is generally far more difficult than it was decades ago to construct wireless base stations, owing to increased regulatory scrutiny from all levels of government and increased opposition to wireless towers by some members of the public); SpectrumCo Petition for Reconsideration at 1-3; T-Mobile Petition for Reconsideration at 5-6 (cautioning that the exclusion will discourage new entry into the wireless market and hamper rather than promote facilities-based competition). See also Leap Wireless Petition for Reconsideration at 12-14, 16-18; MetroPCS Petition for Reconsideration at 23; T-Mobile Petition for Reconsideration at 7-8 (stating that the home market exclusion benefits larger carriers because they are more likely to be incumbents in those markets and the larger incumbent carriers will deny access to their networks in an effort to hamper new entrants’ ability to compete in the same markets).

<sup>96</sup> AT&T Dec. 22, 2009 *Ex Parte* at 8.

<sup>97</sup> See *2007 Report and Order*, 22 FCC Rcd at 15828 ¶ 28. See also *2007 Report and Order*, 22 FCC Rcd at 15826 ¶ 23 (finding that the automatic roaming is a common carrier service, and carriers must provide automatic roaming service upon receiving a reasonable request). Although the Commission adopted automatic roaming rules, it declined to regulate automatic roaming rates, finding that consumers would be protected from being harmed by the level and structure of roaming rates negotiated between carriers given that the rates individual carriers pay for (continued....)

consumers increasingly rely on mobile services, they reasonably expect to continue their wireless communications wherever they are, and automatic roaming benefits them by promoting seamless CMRS service around the country.<sup>98</sup> In this order, we merely place requests for the home roaming under the same framework as other requests for roaming services. As discussed above, our decision here will protect consumers, promote competition, ensure that consumers have access to seamless coverage nationwide, and provide incentives for all carriers to invest and innovate by using available spectrum and constructing wireless network facilities on a widespread basis.

35. We also disagree with AT&T's contention that elimination of the home roaming exclusion would create *de facto* mandatory resale obligations.<sup>99</sup> The automatic roaming obligation imposed in the *2007 Roaming Order* under Sections 201 and 202, and that we expand here with the elimination of the home roaming exclusion, is not intended to resurrect CMRS resale obligations. The Commission's mandatory resale rule was sunset in 2002,<sup>100</sup> and, as the Commission previously stated, the automatic roaming obligations cannot be used as a backdoor way to create *de facto* mandatory resale or virtual reseller networks.<sup>101</sup> We find that our actions herein in eliminating the home roaming exclusion will not effectively change the Commission's policy on CMRS resale obligations. While resale obligations are intended to offer carriers the opportunity to market a competitive retail service without facilities development, such a resale product would not serve our goals of promoting facilities-based competition, the development of spectrum resources, and the availability of ubiquitous coverage.<sup>102</sup>

36. *Addressing disputes.* To the extent there is a disagreement between CMRS carriers regarding automatic roaming requests, including requests for home roaming rights, carriers may seek a determination from the Commission as to whether the parties have met their obligations with regard to automatic roaming. We reaffirm here our intent to address such roaming disputes expeditiously.<sup>103</sup> Whether or not the appropriate procedural vehicle is a complaint under Section 208 of the Act or a petition for declaratory ruling under Section 1.2 of the Commission's rules may vary depending on the circumstances of each case.<sup>104</sup> If a dispute arises regarding automatic roaming obligations, parties are encouraged to contact Commission staff for procedural guidance and for negotiations using the Commission's informal dispute resolution processes. Below, we provide some clarification as to how such disputes will be addressed.

37. We first emphasize that CMRS carriers' statutory obligations regarding automatic roaming are not framed in absolute terms. Under Sections 332(c)(1)(B), 201 and 202, the request to obtain

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automatic roaming services will be determined in the marketplace through negotiations between the carriers, subject to the statutory requirement that any rates charged be reasonable. *See 2007 Report and Order*, 22 FCC Rcd at 15832-33 ¶¶ 37-40.

<sup>98</sup> *See 2007 Report and Order*, 22 FCC Rcd at 15828 ¶ 28.

<sup>99</sup> AT&T Opposition at 7.

<sup>100</sup> The CMRS Resale Rule expired at the close of November 24, 2002 pursuant to the sunset provision of the rule. 47 C.F.R. § 20.12(b) (1998).

<sup>101</sup> *See 2007 Report and Order*, 22 FCC Rcd at 15836 ¶ 51; *see also* 47 C.F.R. § 20.12.

<sup>102</sup> *See* US Cellular Comments at 6 (stating that "resellers and carriers pursuing a roaming model have generally not succeeded in the wireless marketplace").

<sup>103</sup> *See 2007 Report and Order*, 22 FCC Rcd at 15830 ¶ 30.

<sup>104</sup> *See* 47 U.S.C. § 208; 47 C.F.R. § 1.2.

automatic roaming must be “reasonable.”<sup>105</sup> Furthermore, Section 201(b) requires carriers’ practices relating to their provision of automatic roaming to be “reasonable” and Section 202(a) prohibits “unjust and unreasonable” discrimination.<sup>106</sup> Thus, in each instance, the statutory obligation is qualified by a “reasonableness” standard. The Commission has broad discretion in interpreting these statutory obligations and the application of the “reasonableness” standard to a particular context.<sup>107</sup> As discussed below, in resolving roaming disputes, we will assess whether a request is reasonable and whether the host carrier’s response to the request is reasonable and not unreasonably discriminatory based on the totality of the circumstances of a particular case.<sup>108</sup>

38. In resolving disputes, we will presume, in the first instance, that a request for automatic roaming of covered services by a technologically compatible carrier is reasonable under Sections 332(c), 201 and 202, regardless of whether the request includes areas where the requesting carrier holds spectrum rights.<sup>109</sup> When a presumptively reasonable automatic roaming request is made, a would-be host CMRS carrier has a duty to respond promptly to the request and avoid actions that unduly delay or stonewall the course of negotiations regarding that request.<sup>110</sup> For example, following receipt of a presumptively reasonable automatic roaming request, evidence of a would-be host carrier’s refusal to respond at all or a persistent pattern of stonewalling behavior will likely support a finding of a breach of the would-be host carrier’s automatic roaming obligations.<sup>111</sup>

39. As discussed above, we seek to encourage parties to negotiate roaming agreements based on reasonable terms and conditions. In case of a dispute, our consideration begins with the presumption that a request by a technologically compatible carrier for automatic roaming is reasonable. This presumption of reasonableness, however, is rebuttable, and host carriers may seek to demonstrate, under their particular circumstances, that the general presumption of reasonableness with respect to the provision of automatic roaming requests meeting the conditions specified above should not apply. Below, we provide additional guidance on factors the Commission may consider when resolving such roaming disputes that are brought before it -- specifically in determining whether a request is reasonable and whether the host carrier’s response to the request is reasonable and not unreasonably discriminatory. Each case will be decided based on the totality of the circumstances, such that no particular factor will be dispositive. With that in mind, we clarify that the Commission may consider the following factors, as well as others, when considering whether requiring roaming in the circumstances at issue would best further our public interest goals:

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<sup>105</sup> 47 U.S.C. § 332(c)(1)(B); 47 U.S.C. §§ 201 and 202. *See also 2007 Report and Order*, 22 FCC Rcd at 15831 ¶¶ 33-35 (describing reasonable requests for purposes of the automatic roaming obligation).

<sup>106</sup> 47 U.S.C. §§ 201(b), 202(a); *see* AT&T Opposition at 10.

<sup>107</sup> *See Orloff v. FCC*, 352 F.3d 415, 420 (D.C. Cir. 2003) (“With respect to the Commission’s interpretation of [Section] 202 as applied to CMRS, the ‘generality of these terms’ -- unjust, unreasonable – ‘opens a rather large area for the free play of agency discretion, limited of course by the familiar ‘arbitrary’ and ‘capricious’ standard in the Administrative Procedure Act.’”) (*citations omitted*).

<sup>108</sup> *See 2007 Report and Order*, 22 FCC Rcd at 15829-30 ¶ 30.

<sup>109</sup> *2007 Report and Order*, 22 FCC Rcd at 15831 ¶ 33.

<sup>110</sup> *2007 Report and Order*, 22 FCC Rcd at 15831 ¶ 33.

<sup>111</sup> *Id.* We note that nothing in this order is intended to be construed by a host carrier as a basis to disrupt existing roaming arrangements based on any change-of-law provision in those arrangements.

- the terms and conditions of the proposed roaming agreement;
- the level of competitive harm in a given market and the benefits to consumers;
- the extent and nature of the requesting carrier's build-out in the areas where it holds spectrum rights and has requested automatic roaming, the length of time the requesting carrier has held such spectrum rights, whether such spectrum is encumbered, and if not, how long it has been unencumbered;
- significant economic factors, such as whether building another network in the geographic area may be economically infeasible or unrealistic,<sup>112</sup> and the impact of any "head-start" advantages<sup>113</sup>;
- whether the requesting carrier is seeking roaming for an area where it is already providing facilities-based service;
- the impact of granting the request on the incentives for either carrier to invest in facilities and coverage, services, and service quality;
- whether the carriers involved have had previous roaming arrangements with similar terms;
- whether alternative roaming partners are available;
- events or circumstances beyond either carrier's control that impact either the provision of automatic roaming or the need for roaming in the proposed area(s) of coverage;
- the propagation characteristics of the spectrum licensed to the requesting and would-be host carriers, including circumstances where the requesting carrier's spectrum rights in an area are limited to higher spectrum frequencies where propagation characteristics are less advantageous than a host carrier's licensed spectrum;
- other special or extenuating circumstances.

40. We note again that these factors are not exclusive or exhaustive. Carriers may argue that the Commission should consider other relevant factors in determining whether a request is reasonable or a host carrier's position is unreasonable or unreasonably discriminatory under Sections 201 and 202 of the Act. In addition, to better promote reasonable negotiations on both sides of a request, we clarify that, in determining whether a carrier will be found liable for a violation of its obligations under Sections 201 and 202, we will also consider whether its position had a reasonable basis, taking into account all relevant precedents and decisions by the Commission.<sup>114</sup>

#### **B. Push-to-Talk**

41. Based on the record, we find Sprint Nextel has failed to demonstrate sufficient grounds for revisiting the determination that carriers must provide roaming for push-to-talk services upon reasonable request. Accordingly, we deny Sprint Nextel's Petition for Reconsideration.

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<sup>112</sup> See *supra* ¶ 23

<sup>113</sup> See *supra* ¶¶ 21, 33.

<sup>114</sup> See 47 U.S.C. §§ 207, 208.

## 1. Background

42. In the *2007 Report and Order*, the Commission found the services covered by the automatic roaming obligation under sections 201 and 202 are primarily limited to services offered by CMRS carriers that are real-time, two-way switched voice or data services, are interconnected with the public switched network, and utilize an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls.<sup>115</sup> The Commission found, however, based on several factors, that it would serve the public interest to extend the scope of the automatic roaming obligation to push-to-talk service and SMS.<sup>116</sup> First, the Commission noted such offerings were typically bundled as a feature on the handset with other CMRS services, including real-time, two-way switched mobile voice or data, that are interconnected with the public switched network.<sup>117</sup> The Commission also observed push-to-talk and SMS, although sometimes implemented as non-interconnected features, were also implemented by some carriers as interconnected features.<sup>118</sup> Finally, the Commission found consumers considered push-to-talk and SMS as features that are typically offered as adjuncts to basic voice services, and consumers expected the same seamless connectivity with respect to those features when traveling outside their home network service area.<sup>119</sup>

43. In its Petition for Reconsideration, Sprint Nextel argues the Commission's decision to impose roaming obligations on push-to-talk service is arbitrary and capricious, and unsupported by the record evidence.<sup>120</sup> Sprint Nextel further contends the decision is not generally applicable to the industry, but rather addresses a specific dispute between two parties, Sprint Nextel and SouthernLINC Wireless (SouthernLINC) and therefore "is effectively a bill of attainder requiring Sprint Nextel to assist its principal push-to-talk competitor."<sup>121</sup> Sprint Nextel asserts the Commission erred in concluding that push-to-talk is sometimes an interconnected service.<sup>122</sup> Sprint Nextel concedes push-to-talk is typically bundled as a feature on the handset with other CMRS services that are interconnected to the public switched network, but states that "the *Order* never explains the relevance of this bundling point to intercarrier roaming."<sup>123</sup> Further, Sprint Nextel disputes the push-to-talk feature on the handset is an "adjunct to basic voice services" because, as it argues, push-to-talk does not meet the legal criteria for a service "adjunct" to basic voice service.<sup>124</sup>

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<sup>115</sup> *2007 Report and Order*, 22 FCC Rcd at 15837 ¶ 54; 47 C.F.R. § 20.12(a)(2).

<sup>116</sup> *2007 Report and Order*, 22 FCC Rcd at 15837 ¶ 54.

<sup>117</sup> *Id.* at 15837 ¶ 55.

<sup>118</sup> *Id.* at 15837 ¶ 55.

<sup>119</sup> *Id.*

<sup>120</sup> Sprint Nextel Petition for Reconsideration at 1-8.

<sup>121</sup> *Id.* (arguing that no other push-to-talk system is a close substitute for its iDEN push-to-talk system; therefore, the roaming order is not generally applicable to the industry).

<sup>122</sup> *Id.*

<sup>123</sup> *Id.* at 2.

<sup>124</sup> *Id.* at 4. Sprint Nextel also argues SouthernLINC's ability to "succeed in the marketplace" belies the Commission's conclusion that "consumers . . . expect the same seamless [roaming] connectivity . . . as they travel outside their home network service areas." *Id.* at 4-5, citing *2007 Report and Order*, 22 FCC Rcd at 15837 ¶ 55. (continued....)

44. SouthernLINC opposes Sprint Nextel's petition, stating that substantial record evidence and the agency's cumulative experience and expertise support the Commission's conclusion that it is in the public interest to extend an automatic roaming obligation to push-to-talk.<sup>125</sup> SouthernLINC notes the Commission had already developed an extensive record on push-to-talk in many prior proceedings which also supports the Commission's conclusions with respect to push-to-talk in the *2007 Report and Order*, including previous Commission proceedings on CMRS roaming and resale, the Commission's analysis of several significant mergers between CMRS carriers (including two involving Petitioner Sprint Nextel), and the Commission's own reports.<sup>126</sup> Further, SouthernLINC disputes Sprint Nextel's claim that no push-to-talk service is interconnected on the basis of both record evidence in the roaming proceeding and publicly available information. First, SouthernLINC points to the *Sprint Nextel Order* (cited in the *2007 Report and Order*) where the Commission noted several times that push-to-talk is offered both as an interconnected and non-interconnected service.<sup>127</sup> SouthernLINC also notes the Kodiak Network push-to-talk system<sup>128</sup> uses a voice circuit and has functionalities capable of providing interconnected telephony services such as conference calling and call waiting.<sup>129</sup> SouthernLINC asserts the Kodiak system has been adopted by both AT&T and Alltel and, therefore, "two of the nation's five largest carriers are interconnected PTT services."<sup>130</sup> Thus, in SouthernLINC's view, the Commission's conclusion that push-to-talk is an interconnected as well as a non-interconnected service was not erroneous and was supported

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Further, Sprint Nextel argues there has been no market failure or harm to consumers that would justify imposing a push-to-talk roaming obligation. *Id.* at 6-7.

<sup>125</sup> SouthernLINC Opposition at 1, 3.

<sup>126</sup> SouthernLINC Opposition at 3-4 & n. 6-8, *citing*, among other things, Applications of Nextel Communications, Inc. and Sprint Corporation, WT Docket No. 05-63, *Memorandum Opinion and Order*, 20 FCC Rcd 13967, 14012-13 ¶ 127 (2005) (*Sprint Nextel Order*); Applications of Nextel Partners, Inc., Transferor, and Nextel WIP Corp. and Sprint Nextel Corporation, Transferees, for Consent to Transfer Control of Licenses and Authorizations, File Nos. 0002444650, 0002444656, 0002456809, *Memorandum Opinion and Order*, 21 FCC Rcd 7358 (2006) (*Sprint Nextel Nextel Partners Order*); Applications of Western Wireless Corporation and ALLTEL Corporation, WT Docket No. 05-50, *Memorandum Opinion and Order*, 20 FCC Rcd 13053, 13093 ¶ 109 (2005) (*ALLTEL-WWC Order*); and Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation, WT Docket No. 04-70, *Memorandum Opinion and Order*, 19 FCC Rcd 21522, 21588 ¶ 172 (2004) (*Cingular-AT&T Wireless Order*). These proceedings are among the sources cited in the *2007 Report and Order* at n. 30-32.

<sup>127</sup> SouthernLINC Opposition at 8-9 & n. 8, *citing* the *Sprint Nextel Order*, 20 FCC Rcd at 13987-89 ¶¶ 46-50, *cited* in the *2007 Report and Order*, 22 FCC Rcd at 15837 ¶ 54, n. 133. Specifically, SouthernLINC noted that, the *2007 Report and Order's* discussion of PTT cites to, among other things, the *2005 Sprint/Nextel Merger Order*, in which the Commission stated that "PTT generally is bundled as a feature with other services such as mobile voice and mobile data on the handset and is usually available through the public switched network." Southern LINC Opposition at 8-9, *citing* *Sprint/Nextel Merger Order*, 20 FCC Rcd at 13987-88. Southern LINC further states that, in the same paragraph from the *2005 Sprint/Nextel Merger Order*, the Commission then noted, "[d]ispatch [as opposed to PTT] differs from mobile voice communications because it is generally not interconnected with the public switched telephone network (PSTN)". *Id.* Southern LINC notes that in its Petition, Sprint Nextel misquotes this passage, giving the impression that the Commission was describing all PIT services, rather than dispatch services. *Id.* at 9 n. 23.

<sup>128</sup> See < [http://www.telecommagazine.com/newsglobe/article.asp?HH\\_ID=AR\\_4115](http://www.telecommagazine.com/newsglobe/article.asp?HH_ID=AR_4115)> (last visited July 24, 2008) (for a discussion of Kodiak Network clientless push-to-talk system and the roll-out by MetroPCS).

<sup>129</sup> SouthernLINC Opposition at 10.

<sup>130</sup> *Id.*

by the factual record. Similarly, SouthernLINC agrees with the Commission that push-to-talk is a feature generally bundled on the handset with voice telephony and that this is important to the analysis of consumer expectations.<sup>131</sup> Leap Wireless also opposes Sprint Nextel's petition, arguing that push-to-talk services are often sold together with voice services. As a result, Leap states, consumers now expect that these services will be packaged together and that they will all work seamlessly.<sup>132</sup>

## 2. Discussion

45. Having reviewed the arguments of all parties and the relevant record evidence, we find Sprint Nextel has failed to demonstrate sufficient grounds for revisiting the determination that carriers must provide push-to-talk roaming upon reasonable request.

46. First, we disagree with Sprint-Nextel that the Commission's findings on push-to-talk service were unsupported by record evidence.<sup>133</sup> Contrary to Sprint-Nextel's assertion, the record provides substantial evidence for the Commission's finding that push-to-talk is provided both as an interconnected service or feature and as a non-interconnected service or feature, depending on the technology and network configuration that is chosen by the carrier.<sup>134</sup> Consumers do not generally differentiate between push-to-talk that is interconnected and push-to-talk that is not interconnected, but form their expectations of seamless connectivity based on the way that push-to-talk service is provided on their cell phones and in their calling plans. As we noted in the *2007 Report and Order*, we find it in the public interest to protect and promote consumer expectations of seamless connectivity by extending automatic roaming obligations to push-to-talk. In that regard, the conclusion that consumers generally regard push-to-talk services as a feature on their handset, provided along with other CMRS services, is supported by the *Eleventh Competition Report*,<sup>135</sup> as well as by other publicly available information about the state of the push-to-

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<sup>131</sup> SouthernLINC Opposition at 6. Indeed, Southern LINC notes that the fact that a service or feature is typically bundled on the same handset with an interconnected service (such as voice telephony) means that consumers will generally expect to receive the same seamless mobility for that service or feature as they do for voice - a fact explicitly recognized by the Commission in the 2007 Roaming Order. *Id.*

<sup>132</sup> Leap Wireless Comments at 2-3.

<sup>133</sup> See, e.g., *2007 Report and Order*, 22 FCC Rcd at 15836 ¶ 52-53 (summarizing background and comments on push-to-talk roaming and citing *Roaming NPRM*, 20 FCC Rcd at 15060-61). In the *Roaming NPRM*, the Commission sought industry-wide comment on push-to-talk, including further information on how widespread in the industry were the practices and problems complained of by SouthernLINC, 20 FCC Rcd at 15060-61.

<sup>134</sup> See *2007 Report and Order*, 22 FCC Rcd at 15837 ¶ 54 n. 133, citing Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, WT Docket No. 06-17, *Eleventh Report*, 21 FCC Rcd 10947, 10973 (2006) (*Eleventh Competition Report*); *Sprint Nextel Order*, 20 FCC Rcd at 13987-89 ¶ 46 (“[Push-to-talk] . . . is usually available through the public switched telephone network.”), ¶¶ 47-50. See also SouthernLINC Opposition at 10 (discussing Kodiak Networks' interconnected push-to-talk application and AT&T's use of Kodiak Network's application). For further information on Kodiak Networks' push-to-talk and related applications, see <<http://www.kodiaknetworks.com/portfolio/applications.html>> (last visited November 5, 2009).

<sup>135</sup> See *Eleventh Competition Report* at 10973-74 ¶ 64 (“[m]any cellular and broadband PCS carriers have begun to offer push-to-talk functionality on their networks, including Verizon Wireless, Cingular, Sprint Nextel (on its CDMA network), and Alltel”). See also Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, WT Docket No. 08-27, *Thirteenth Report*, DA 09-54 (rel. Jan. 16, 2009) (*Thirteenth CMRS Competition Report*), at ¶ 72.

talk market<sup>136</sup> and by commenters.<sup>137</sup> We likewise find substantial evidence that push-to-talk is typically not offered as a stand-alone voice service, but is offered solely in conjunction with the activation of basic voice service that is an interconnected service.<sup>138</sup> We find it likely consumers consider push-to-talk as a feature on their handsets that provides a different type of voice functionality that complements their basic voice service.<sup>139</sup> Sprint Nextel has not provided any factual evidence to demonstrate that this analysis is incorrect.

47. We also are not persuaded by Sprint Nextel's other arguments. Sprint Nextel disputes whether push-to-talk is in fact an "adjunct" to basic voice service as that term is used in the Commission's regulatory scheme.<sup>140</sup> The analysis in the *2007 Report and Order*, however, did not reference the particular regulatory construct cited by Sprint Nextel. Rather, as discussed above, the Commission used the term in a more general sense to describe the expectations of consumers based on their perception of push-to-talk services as provided in the marketplace.<sup>141</sup> As the Commission stated: "[w]e are also aware that consumers consider push-to-talk and SMS as features that are typically offered as adjuncts to basic voice services, and expect the same seamless connectivity with respect to these features and capabilities as they travel outside their home network service areas (emphasis added)."<sup>142</sup> We note that "safeguard[ing] wireless consumers' reasonable expectations of receiving seamless nationwide commercial mobile telephony services through roaming" is one of the goals that the Commission considered in establishing the parameters of the automatic roaming obligation.<sup>143</sup> Further, considering

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<sup>136</sup> Push-to-talk is marketed to carriers as a feature that will be highly attractive to consumers when bundled with other features. See, e.g., Motorola Push to Talk over Cellular (PoC): Market Growth at the Push of a Button, (February, 2006) accessed at <<http://www.motorola.com/networkoperators/pdfs/PoC-WhitePaper.pdf>> (last visited August 1, 2008).

<sup>137</sup> A survey of major carriers' web sites demonstrates that handsets for consumers overwhelmingly provide push-to-talk as a feature on a mobile handset, not as a stand-alone radio service on a dedicated device. See also *Sprint Nextel Order*, 20 FCC Rcd at 13987 ¶ 46.

<sup>138</sup> For example, push-to-talk is generally not advertised as a stand-alone service. Sprint Nextel provides push-to-talk as a free service along with any Sprint Nextel voice activation. The Sprint Nextel web site lists a number of direct connect plans, but none of them appears on its face to be a stand alone plan. <<http://www.nextel.com/en/services/walkietalkie/overview.shtml>> (last visited Nov. 23, 2009). AT&T does not offer push-to-talk as a stand-alone service, but as a \$ 5 add-on to AT&T's mobile service. <<http://www.wireless.att.com/learn/ptt/>> (last visited Nov. 23, 2009). ALLTEL offers its push-to-talk service (Touch2Talk) only as an add-on to its wireless planes. <<http://www.alltel.com/>> (last visited Nov. 23, 2009). Verizon Wireless markets its push-to-talk service as a \$5 add-on feature. <<http://solutions.vzwshop.com/ptt/>> (last visited Nov. 23, 2009). In contrast, while non-interconnected data services are also offered bundled with voice services, we find that carriers also frequently offer such services on a stand-alone basis, particularly with regard to broadband data. See, e.g., <<http://nextelonline.nextel.com/NASApp/onlinestore/en/Action/DisplayPlans>> (describing Sprint Nextel's mobile broadband data service plans) (last visited Nov. 23, 2009).

<sup>139</sup> *2007 Report and Order*, 22 FCC Rcd at 15837 ¶ 55.

<sup>140</sup> See Sprint Petition for Reconsideration at 4.

<sup>141</sup> The thesaurus provides "addition" and "accessory" as synonyms for "adjunct" which captures the usual market practice of providing push-to-talk as an add-on feature to a basic voice plan. See <<http://thesaurus.reference.com/browse/adjunct>> (last visited October 8, 2009).

<sup>142</sup> *2007 Report and Order*, 22 FCC Rcd at 15837 ¶ 55 (emphasis added).

<sup>143</sup> See *2007 Report and Order*, 22 FCC Rcd at 15819 ¶ 3.

these factors taken together with the significant market presence of interconnected push-to-talk, which provides the same service functionality and will indisputably be subject to automatic roaming requirements, we again find it in the public interest that CMRS providers of push-to-talk voice services should be subject to the same automatic roaming obligations regardless of the technology or network configuration through which such services are provided.<sup>144</sup>

48. Sprint Nextel's argument that this decision improperly adjudicates its dispute with SouthernLINC is also without merit. Specifically, the Commission declared its intention to proceed through rulemaking in two prior merger proceedings in which Sprint Nextel was a party.<sup>145</sup> Moreover, push-to-talk is not a service unique to Sprint Nextel. Other nationwide carriers are providing push-to-talk, and all push-to-talk features and capabilities are covered in the *2007 Report and Order* regardless of whether the underlying network is iDEN, CDMA, or GSM.<sup>146</sup> In determining whether extending roaming obligations to push-to-talk would serve the public interest, the Commission examined, among other things, the record evidence concerning Sprint Nextel's actions regarding push-to-talk roaming. SouthernLINC and other small iDEN carriers presented evidence that certain customers were unable to obtain seamless push-to-talk connectivity when outside their home market areas in the absence of a roaming agreement with Sprint Nextel.<sup>147</sup> That evidence is a relevant part of the overall record respecting "current market conditions" and "developments in technology" the Commission considered in making its determination whether push-to-talk services should be included in the roaming obligations imposed by the order.

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<sup>144</sup> Cf. *2007 Report and Order*, 22 FCC Rcd at 15829 ¶ 29 (scope of automatic roaming obligation will "ensure[] that all CMRS providers competing in the mass market for real-time, two-way voice and data services are similarly obligated to provide automatic roaming services thereby equally benefiting all subscribers of mobile telephony services who seek to roam seamlessly over CMRS networks.").

<sup>145</sup> See Applications of Nextel Communications, Inc. and Sprint Corporation, WT Docket No. 05-63, *Memorandum Opinion and Order*, 20 FCC Rcd 13967, 14012-13 ¶ 127 (2005) (*Sprint Nextel Order*) (denying SouthernLINC's request that approval of the transaction be conditioned on the requirement that Sprint Nextel provide automatic roaming for iDEN voice, digital dispatch and data services at reasonable/non-discriminatory rates and terms; stating that the matters raised would be considered in a general rulemaking). See also Applications of Nextel Partners, Inc., Transferor, and Nextel WIP Corp. and Sprint Nextel Corporation, Transferees, for Consent to Transfer Control of Licenses and Authorizations, File Nos. 0002444650, 0002444656, 0002456809, *Memorandum Opinion and Order*, 21 FCC Rcd 7358 (2006) (*Nextel Partners Order*) (same). While Sprint Nextel now disputes the propriety of resolving this issue in a rulemaking, we note that, in the context of a merger application proceeding, it argued that SouthernLINC's requests for roaming rights *should be* "addressed in a rulemaking proceeding." *Sprint Nextel Order*, 20 FCC Rcd at 14012 ¶ 125, a position with which the Commission agreed. *Id.* at 14013 ¶ 128. See also Applications of Nextel Communications, Inc., Transferor, and Sprint Corporation, Transferee, for Consent to the Transfer of Control of Entities Holding Commission Licenses and Authorizations Pursuant to Sections 214 and 310(d) of the Communications Act, WT Docket No. 05-63, Joint Opposition to Petitions to Deny and Reply to Comments (filed Apr. 11, 2005), at 8-9.

<sup>146</sup> *Eleventh Competition Report*, 21 FCC Rcd 10947, ¶ 64. See <[http://www.thefreelibrary.com/The+push-to-talk+\(r\)evolution%3a+carriers+are+rushing+to+implement+this...-a0113418002](http://www.thefreelibrary.com/The+push-to-talk+(r)evolution%3a+carriers+are+rushing+to+implement+this...-a0113418002)> (last visited Sept. 22, 2009) for a brief discussion of some of the available push-to-talk systems. Contrary to Sprint Nextel's assertion that other push-to-talk systems are not close substitutes for its push-to-talk, other commercially available systems are competing with the Sprint Nextel iDEN system. See, e.g., <[http://www.allbusiness.com/business\\_planning/business\\_structures/3603343-1.html](http://www.allbusiness.com/business_planning/business_structures/3603343-1.html)> (last visited Sept. 22, 2009).

<sup>147</sup> See, e.g., SouthernLINC Opposition at 15. See also *2007 Report and Order*, 22 FCC Rcd at 15828 ¶ 28 & n. 32.

49. Finally, we disagree that extending automatic roaming obligations to push-to-talk will eliminate push-to-talk geographic coverage as a market differentiator.<sup>148</sup> As discussed above, the scope of a requesting carrier's buildout is one factor we will consider in adjudicating disputes regarding the provision of automatic roaming.<sup>149</sup> In summary, Sprint Nextel has presented no persuasive legal argument or factual evidence to demonstrate that we erred in concluding that the imposition of a push-to-talk roaming obligation serves the public interest. We therefore deny Sprint Nextel's petition for reconsideration with respect to push-to-talk roaming.

#### IV. SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

50. In this Second Further Notice of Proposed Rulemaking, we seek additional comment on whether to extend automatic roaming obligations to certain mobile data services -- specifically, mobile services, including mobile broadband Internet access, that are provided without interconnection to the public switched telephone network. We are seeking comment as well on whether any such obligations should apply only to service providers that are also CMRS carriers or more broadly to facility-based mobile data service providers whether or not they also provide CMRS.<sup>150</sup> Our underlying policy goals remain the same as for mobile voice service roaming -- to facilitate the provision of services in a manner that provides the greatest benefit to consumers. In particular, we seek to have service provided by new entrants in competition with established incumbents; to ensure that consumers have access to seamless coverage nationwide; and to provide incentives for both new entrants and incumbent service providers to invest and innovate by using available spectrum and constructing wireless network facilities on a widespread basis. We invite parties to include any new information that may be relevant to the Commission's consideration of what action, if any, may be appropriate in this proceeding.

51. In 2007, the Commission sought comment in a *Further Notice* on whether to impose data roaming obligations on CMRS carriers. We recognize the need to resolve this issue in an expeditious manner. Broadband deployment is a key priority for the Commission, and the deployment of mobile data networks will be essential to achieve the goal of making broadband connectivity available everywhere in the United States. We also seek to foster competition and the development of mobile data services with wide, seamless coverage. Wide coverage will enhance the unique social and economic benefits that a mobile service provides by enabling consumers to access information wherever they are, while competition will help to promote investment and innovation and protect consumer interests.

52. Many providers have argued that ensuring the availability of roaming arrangements for mobile broadband will be critical to achieving these goals. We also note that roaming services have helped to promote competition and seamless nationwide coverage in the mobile telephony market. We note mobile broadband networks, particularly "fourth-generation" networks, are still at an early stage of deployment, similar to the early years of the mobile telephony market. We therefore expect that the availability of data roaming services will likely play a major role in the future development of the broadband data market. Further, resolving the issue will provide regulatory certainty, which will itself help to establish an environment conducive to network deployment and investment.

53. Nevertheless, we conclude that it is important to refresh and further develop the record before

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<sup>148</sup> See Sprint Nextel Petition for Reconsideration at 7.

<sup>149</sup> See Section III.A, *supra*.

<sup>150</sup> We use the term "provider" in this Second Further Notice to denote any facilities-based provider that make non-interconnected data services available for a fee to the public, whether or not they also provide CMRS, and including wholesalers, but not including non-facility-based service providers such as resellers.

moving to adopt specific rules governing the availability of data roaming services. Mobile broadband is at a critical stage in its development. The mobile broadband ecosystem is rapidly evolving and providers are seeing a rapid increase in mobile broadband data use, but the advanced mobile broadband services market is still nascent. We therefore seek additional information in order to determine how best to ensure the rapid, ubiquitous and competitive development and deployment of broadband services. Given the impact our policies can have at this formative stage, we need to choose the right policies to further our goals for mobile broadband, which like our mobile services goals generally, include fostering innovation, investment and network deployment, promoting competition and the availability of seamless nationwide access, and empowering and protecting consumers.

54. Since the *2007 Further Notice*, there have been numerous developments in the industry and advancements in technology that are likely to be relevant to our analysis, and which have affected at least one nationwide provider's positions in this proceeding. To help us determine the best policies for mobile broadband, we want to ensure that such information is fully incorporated into our decision making on this important issue. In addition, in light of the limited extent of the *Further Notice*, we find that asking a number of specific questions will ensure that our resolution of this issue is based on a more fully developed record. Although the mobile broadband market is similar to the voice market in key respects, it appears to be different in others, and it is important that we understand whether any of those differences would justify a different regulatory approach to achieve our underlying policy goals than we are taking today with regard to interconnected voice. In addition, as the *Further Notice* was limited to seeking comment on the obligations of CMRS carriers that also provide non-CMRS data services, we take this opportunity to seek comment on whether to impose similar obligations on other mobile data service providers, whether they offer CMRS or not. For these reasons, we seek further comment on whether it would be in the public interest to extend roaming obligations to non-interconnected services including broadband data.

#### A. Background

55. *2007 Report and Order and Further Notice*. In the *2007 Report and Order*, the Commission declined to impose data roaming obligations at that time, but adopted a *Further Notice* to further examine whether it should do so.<sup>151</sup> In a five-paragraph *Further Notice*, the Commission sought comment on whether the Commission should extend the automatic roaming obligation to non-interconnected services or features -- including information services (such as wireless broadband Internet access service) or other non-CMRS services offered by CMRS carriers.<sup>152</sup> Addressing the issues generally, the Commission sought comment on whether a data roaming obligation would undermine incentives to innovate or invest,<sup>153</sup> and whether there were any special technical, economic, or other issues associated with roaming among data networks,<sup>154</sup> such as issues regarding network integrity, network security, or network capacity.<sup>155</sup> The Commission also asked whether, if it extended automatic roaming obligations to non-interconnected services and features, all such services and features should be included, and whether it should treat narrowband and broadband data services differently.<sup>156</sup> The Commission also noted that, in

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<sup>151</sup> *2007 Report and Order*, 22 FCC Rcd at 15839 ¶ 60.

<sup>152</sup> *Further Notice*, 22 FCC Rcd at 15845 ¶ 77.

<sup>153</sup> *Id.* at 15845-46 ¶ 79.

<sup>154</sup> *Id.* at 15846 ¶ 80.

<sup>155</sup> *Id.*

<sup>156</sup> *Id.* at 15846 ¶ 81.

the Wireless Broadband Classification Order, it had determined that mobile wireless broadband Internet access service is an information service, and that it is not CMRS.<sup>157</sup> The Commission sought comment as well on the possible legal bases for potentially imposing an automatic roaming obligation on mobile wireless broadband Internet access services, given the determinations in the *Wireless Broadband Classification Order*.<sup>158</sup>

56. *Comments.* In response to the *Further Notice*, the Commission received thirteen comments and twelve reply comments.<sup>159</sup> Small CMRS carriers and their associations filed comments supporting extending the automatic roaming requirement to non-interconnected services.<sup>160</sup> They contended that extending the automatic roaming requirement to data services would serve the public interest by meeting consumers' expectations of seamless coverage and ensuring that consumers will be able to use the data features on their handsets as they travel.<sup>161</sup> They also argued that the current absence of available roaming agreements and the bargaining disadvantage of wireless providers with small geographic footprints have discouraged those providers from investing in mobile wireless facilities and from being innovative in their service offerings.<sup>162</sup> They further argued that the Commission has legal authority to establish roaming obligation on non-interconnected services under Titles I, II, and III of the Act.<sup>163</sup>

57. By contrast, other commenters opposed extension of the roaming requirement to non-interconnected services -- including three of the four nationwide CMRS providers (AT&T, Sprint Nextel, and Verizon Wireless), as well as WCAI, a trade association that represents, among others, mobile data service providers that do not offer CMRS.<sup>164</sup> These commenters argued that extending roaming obligations to non-interconnected services would create disincentives for investment in and deployment

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<sup>157</sup> *Id.*

<sup>158</sup> *Id.*

<sup>159</sup> Comments were received from carriers including AT&T, Cellular South, Corr Wireless, Leap Wireless, MetroPCS, MTA Wireless, SouthernLINC, SpectrumCo., Sprint Nextel, T-Mobile, U.S. Cellular, and Verizon Wireless, and from organizations including the National Telecommunications Cooperative Association (NTCA), the Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO), the Rural Cellular Association (RCA), the Rural Telecommunications Group (RTG), and the Wireless Communications Association International, Inc. (WCAI). See Appendix B for list of comments and reply comments.

<sup>160</sup> See Corr Comments at 1-2; Leap Wireless Comments at 1-4; MetroPCS Comments at 1-6; MTA Comments at 1-3; RCA Comments at 1-3; RTG/OPASTCO Comments at 2; SouthernLINC Comments at 2; U.S. Cellular Comments at 7; Cellular South Reply Comments at 1-2; NTCA Reply Comments at 1-2.

<sup>161</sup> See, e.g., Corr Comments at 2; Leap Wireless Comments at 1; MetroPCS Comments at 7-8; RTG/OPASTCO Comments at 3; Cellular South Reply Comments at 2-3.

<sup>162</sup> See, e.g., Leap Comments at 7; RCA Comments at 4; RTG/OPASTCO Comments at 3-4; SouthernLINC Comments at 11; SouthernLINC Reply Comments at 5-6.

<sup>163</sup> See, e.g., Leap Comments at 2-4; MetroPCS Comments at 13-14; SouthernLINC Comments at 22-47; SouthernLINC Reply Comments at 7-16.

<sup>164</sup> Specifically, WCAI describes itself as a "trade association of the wireless broadband industry" but states that its views represent "the perspective of a new breed of facilities-based wireless broadband service providers that are deploying data-centric networks (rather than voice networks augmented to include data services), which do not provide CMRS . . . , and whose customers do not expect to access networks other than those operated by their particular service provider." WCAI Comments at 1-2.

of wireless broadband services.<sup>165</sup> Verizon Wireless and AT&T argued that the public interest would be best served by allowing competitive forces to govern the market and that there is no evidence of market failure that would justify imposing an automatic roaming requirement on data services and features.<sup>166</sup> They also asserted that there are difficult technical issues associated with extending an automatic roaming requirement to wireless broadband services, such as different authentication methods and interoperability issues regarding methods for assigning IP addresses.<sup>167</sup> AT&T and WCAI contended that the potential demand for bandwidth resulting from mandated roaming could force carriers to either incur substantial upgrade costs to support roaming traffic that may not occur or else risk degrading the quality of service provided to their own customers.<sup>168</sup> Finally, the three nationwide providers argued that, under the Act and the Commission's precedents, the Commission lacks authority to impose common carrier-like obligations on non-interconnected services.<sup>169</sup>

58. T-Mobile initially opposed a roaming obligation for non-interconnected services, arguing in its reply comments that “imposing an automatic data roaming rule when mobile data services are still developing would be premature and could have numerous unintended consequences.”<sup>170</sup> Recently, however, T-Mobile submitted filings in this and other proceedings taking the position that “[a]lthough, in 2007, T-Mobile stated that such a rule was premature, the time for a general roaming rule [covering both voice and data services] is now.”<sup>171</sup> In these more recent filings, T-Mobile argues that automatic roaming obligations should be extended to data services because “[i]t has become clear in recent years that, absent Commission oversight, roaming will not be provided at reasonable rates, terms, and conditions, or may be withheld altogether, diminishing competition at the retail level and harming consumers.”<sup>172</sup>

59. *Recent Developments.* On March 16, 2010, the National Broadband Plan was released. The Broadband Plan discussed the importance of data roaming to broadband competition and innovation policy.<sup>173</sup> On April 6, 2010, after the close of the comment period in this proceeding, the United States Court of Appeals for the District of Columbia Circuit issued a decision in *Comcast Corporation v.*

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<sup>165</sup> See AT&T Comments at 2, 4-6, 10-11; Sprint Nextel Comments at 1; Verizon Wireless Comments at 1-2, 8-9; WCAI Comments at 4.

<sup>166</sup> See AT&T Comments at 3-5; Verizon Wireless Comments at 9-12; AT&T Reply Comments at 4.

<sup>167</sup> See AT&T Comments at 9-10; Verizon Wireless Comments at 12-14.

<sup>168</sup> See AT&T Comments at 2, 7-8; WCAI Comments at 4-5; AT&T Reply Comments at 15-17.

<sup>169</sup> See AT&T Comments at 13-16; Sprint Nextel Comments, *generally*; Verizon Wireless Comments at 2-7; Verizon Wireless Reply Comments, *generally*.

<sup>170</sup> T-Mobile Reply Comments at 2.

<sup>171</sup> See *T-Mobile Nov. 30, 2009 Ex Parte*; T-Mobile Comments, WT Docket No. 09-66, filed Sept. 30, 2009, at 4-5.

<sup>172</sup> See T-Mobile Comments, WT Docket No. 09-66, filed Sept. 30, 2009, at 4-5 (“the Commission should extend the automatic roaming rule to data to allow consumers access to the same broadband services (2G and 3G) while traveling as they have at home.”); Letter from Sara F. Leibman, Director of Regulatory Affairs, T-Mobile USA, Inc., to Marlene Dortsch, Secretary, FCC, filed Sept. 24, 2009, Attach. at 14 (supporting a data roaming obligation “so that a requesting carrier’s customer has access to the same services while traveling as she has at home.”); see also *T-Mobile Nov. 30, 2009 Ex Parte* at 5 (“T-Mobile’s experience since 2007 strongly suggests that, without the changes it seeks, roaming not covered by the existing automatic roaming rule will not be provided at reasonable rates, terms, and conditions, or may be withheld altogether, diminishing competition at the retail level and harming consumers.”).

<sup>173</sup> See National Broadband Plan, Recommendation 4.11, at 49.

FCC.<sup>174</sup> That decision addressed at length the Commission's powers under the doctrine of ancillary authority. Below, we seek comment on the significance of that decision to this matter.

## B. Discussion

60. The goals that informed our determinations regarding the scope of roaming obligations for interconnected voice also guide our consideration of obligations on non-interconnected data services. We seek to foster investment and innovation in the use of spectrum and the development and deployment of data network facilities and services, competition for mobile broadband business by multiple providers, and consumer benefit from the availability of advanced and innovative mobile services with seamless nationwide coverage. We note that the growth of the mobile broadband data market is at a critical early stage. Many nationwide and non-nationwide providers have obtained licenses, including AWS and 700 MHz spectrum licenses among others, that we anticipate will be used to provide new and advanced data services to American consumers. Numerous commenters in this proceeding argue that the viability of data network deployments and the ability of consumers to access such services seamlessly will depend on the ability of providers to obtain data roaming arrangements.

61. The importance of the issue underscores the need for a more fully developed record to provide the foundation for fact-based, data-driven decision making, especially in light of the brevity of the *2007 Further Notice*. In the two years since the *2007 Further Notice*, the wireless broadband industry has experienced a rapid evolution, with significant economic, technological, and regulatory developments, including developments in network and device technologies, spectrum use and availability, market participants, network deployments, and consumer demand and usage patterns. Such developments include market transactions involving significant existing CMRS providers,<sup>175</sup> the Commission's auction of significant additional spectrum in the 700 MHz Band for commercial broadband use, announcements from numerous providers of new mobile broadband network deployments,<sup>176</sup> increasing consumer use of

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<sup>174</sup> *Comcast Corporation v. FCC*, \_\_\_ F.3d \_\_\_, 2010 WL 1286658, No. 08-1291 (D.C. Cir. Apr. 6, 2010).

<sup>175</sup> See, e.g., Applications of AT&T Inc. and Centennial Communications Corp. For Consent to Transfer Control of Licenses, Authorizations, and Spectrum Leasing Arrangements, WT Docket No. 08-246, *Memorandum Opinion and Order*, 24 FCC Rcd 13915 (2009); Sprint Nextel Corporation and Clearwire Corporation Applications for Consent to Transfer Control of Licenses, Leases, and Authorizations, WT Docket No. 08-94, *Memorandum Opinion and Order*, 23 FCC Rcd 17570 (2008); Applications of Cellco Partnership d/b/a Verizon Wireless and Atlantis Holdings LLC For Consent to Transfer Control of Licenses, Authorizations, and Spectrum Manager and *De Facto* Transfer Leasing Arrangements and Petition for Declaratory Ruling that the Transaction is Consistent with Section 310(b)(4) of the Communications Act, WT Docket No. 08-95, *Memorandum Opinion and Order and Declaratory Ruling*, 23 FCC Rcd 17444 (2008); Applications of AT&T Inc. and Dobson Communications Corporation For Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 07-153, *Memorandum Opinion and Order*, 22 FCC Rcd 20295 (2007).

<sup>176</sup> For example, Verizon Wireless has announced plans to deploy LTE in 22 megahertz of 700 MHz Band spectrum (the Upper 700 MHz C Block) and launch service in 25-30 markets during 2010. See Presentation by Tom Sawanobori, VP of Network Technology and Strategy, Verizon Wireless, FCC Workshop: Deployment Wireless – General, Aug. 12, 2009; *Verizon Uses New Network for First Time*, AP, Aug. 14, 2009. AT&T announced plans to begin LTE trials in 2010 and LTE deployment in 2011 using 700 MHz Band and possibly AWS-1 spectrum. *Id.*; see AT&T Doubling 3G Capacity, Telephony Online (Apr. 20, 2009), <http://telephonyonline.com/wireless/news/att-3g-network-capacity-increase-0420/> (referring to statement by AT&T executive on use of 700 MHz and AWS spectrum). MetroPCS has announced plans to deploy LTE in the 2<sup>nd</sup> half of 2010 using AWS-1 spectrum, using equipment from Ericsson and Samsung. See *Unlimited Wireless Carrier MetroPCS Announces Vendors for 2010 4G LTE Launch*, Press Release, MetroPCS, Sept. 15, 2009.

smartphones,<sup>177</sup> and, partly as a result, a dramatic increase in consumers' use of wireless data services.<sup>178</sup> Given all these changes and developments, we desire an up-to-date understanding of, among other things, the shape of the business segment, the network services and technologies that will be deployed, the importance of roaming to entry and commercial viability, the availability of roaming arrangements absent any regulatory requirement, the technical arrangements needed to support data roaming, and the capacity demands to be expected from data roaming traffic, including variability.

62. In addition, we note that the *2007 Further Notice* was limited in scope to whether we should impose data roaming obligations on CMRS carriers that also provide non-CMRS data services.<sup>179</sup> As the market for mobile broadband services has developed, however, we now anticipate that mobile broadband services will increasingly be provided by entities that do not offer CMRS but that may nevertheless compete for mobile data service subscribers with companies that offer both mobile broadband and CMRS carriers.<sup>180</sup> Therefore, we are taking this opportunity to seek comment on whether automatic roaming obligations for mobile data services should apply to all providers of such services.

63. Parties should include any new information that may be relevant to determining what action the Commission should take in this proceeding. Further, parties should comment on how a roaming rule for data services, if any, should compare to our rule for voice services and explain with specificity what justifies similar or different treatment. We note that parties submitted several proposals in response to the *2007 Further Notice*.

- Some proposed that the Commission should not impose any rule.

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<sup>177</sup> The iPhone was first released for sale on June 29, 2007. According to one report, 13.7 million were sold in 2008. See <http://www.theiphoneblog.com/2009/01/21/apple-q1-conference-call-highlights/>. See also *High-Speed Services for Internet Access: Status as of June 30, 2008* (WCB rel. July 23, 2009), [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-292191A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-292191A1.doc), at Table 1 (number of mobile broadband-capable devices in use increased 69% between June 2007 and June 2008, from 35.3 million to 59.7 million).

<sup>178</sup> See, e.g., *comScore: Mobile Internet Becoming a Daily Activity for Many*, Press Release, comScore, Mar. 16, 2009, at [http://www.comscore.com/Press\\_Events/Press\\_Releases/2009/3/Daily\\_Mobile\\_Internet\\_Usage\\_Grows](http://www.comscore.com/Press_Events/Press_Releases/2009/3/Daily_Mobile_Internet_Usage_Grows) (estimating that the number of people using a mobile device to access news and information on Internet, at least once a month, increased 71% from 36.9 million in January 2008 to 63.2 million in January 2009); Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, WT Docket No. 08-27, *Thirteenth Report*, DA 09-54 (rel. Jan. 16, 2009) (*Thirteenth CMRS Competition Report*), at 100 (noting estimate that mobile web browsing has increased 89 percent year over year among “smartphone” users, based on on-device metering of actual user behavior in March, 2008).

<sup>179</sup> See *Further Notice*, 22 FCC Rcd at 15845 ¶ 77 (“In this Further Notice of Proposed Rulemaking, we seek comment on whether we should extend the automatic roaming obligation to non-interconnected services or features . . . or other non-CMRS services offered by CMRS carriers.”).

<sup>180</sup> See, e.g., WCAI Comments at 1-2 (“WCA’s membership includes a wide array of companies that are well along in designing network architectures, acquiring equipment and launching new wireless broadband networks that will enable consumers to access wireless broadband service via an array of fixed, portable and mobile devices. . . . WCA’s comments therefore reflect the perspective of a new breed of facilities based wireless broadband service providers that are deploying data-centric networks (rather than voice networks augmented to include data services), who do not provide CMRS.”). See also *Thirteenth CMRS Competition Report* at ¶ 20 (“In addition to the voice and data services offered by mobile telephone providers, other providers offer mobile or portable wireless broadband services using Broadband Radio Service/Educational Broadband Service . . . in the 2.5 GHz band or Wireless Communications Systems . . . spectrum in the 2.3 GHz band.”).

- Others argued for a rule for data roaming that largely mirrors the voice roaming rule adopted in the *2007 Report and Order*, subject only to restrictions in cases of technical or economic infeasibility.<sup>181</sup>
- Others proposed requiring data roaming but including special conditions on data roaming comparable to those that the Commission imposed on requests for roaming for push-to-talk and SMS, including a requirement that the requesting provider offer the services on its own network for which it is requesting a roaming arrangement.<sup>182</sup>
- Some suggested that data roaming obligations should only require a host carrier to provide roaming subscribers with conduit access to the requesting carrier's network, not access to the host's own proprietary information services.<sup>183</sup>
- In addition, some commenters proposed specific measures to address concerns regarding the potential for data roaming to cause network capacity exhaustion.<sup>184</sup>

We seek comment on these specific proposals or any other proposals for addressing data roaming obligations, and we ask all parties to be specific regarding the rule that the Commission should adopt, if any, regarding data roaming. Commenters desiring confidential treatment of their submissions should request that their submission, or specific parts thereof, be withheld from public inspection pursuant to the Commission's rules.<sup>185</sup>

64. *Legal Authority.* The Commission has exercised its discretion to classify some non-interconnected data services, e.g., mobile wireless broadband Internet access, as information services, thus removing them from the category of common carrier services under Title II.<sup>186</sup> In the *2007 Report and Order*, the Commission found that automatic roaming is a common carrier obligation and does not extend to information services or to other wireless services that are not CMRS.<sup>187</sup> Accordingly, in the *2007 Further Notice*, the Commission sought comment on whether automatic roaming obligations could be imposed on such services pursuant to our authority under Title I and/or Title III.<sup>188</sup> We further address the extent of our authority below, and we seek comment on our analysis.

65. Although the Commission determined three years ago that wireless broadband Internet access is an information service and not a CMRS service, it has not made any classification determinations

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<sup>181</sup> Compare, e.g., MetroPCS Comments at 3, 5, 6, 11-13 with WCAI Comments at 1 (Commission should not impose any roaming obligations).

<sup>182</sup> See Leap Comments at 7-9.

<sup>183</sup> See SouthernLINC Reply Comments at 4-5.

<sup>184</sup> See, e.g., Leap Comments at 9 (proposing that if the host lacks capacity, the host carrier should be permitted to refuse a data roaming request).

<sup>185</sup> 47 C.F.R. § 0.459. See also Examination of Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission, *Report and Order*, 13 FCC Rcd 24816 (1998), *Order on Reconsideration*, 14 FCC Rcd 20128 (1999).

<sup>186</sup> See Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, WT Docket No. 07-53, 22 FCC Rcd 5901 (2007) (*Wireless Broadband Internet Access Order*).

<sup>187</sup> See *2007 Report and Order*, 22 FCC Rcd at 15839 ¶ 60.

<sup>188</sup> See *Further Notice*, 22 FCC Rcd at 15846 ¶ 81.

regarding any service or application provided over these Internet access connections.<sup>189</sup> Further, the Commission has not determined whether the provision of automatic roaming should be considered a telecommunications service, and thus subject to Title II, even if the subscriber is using the roaming arrangement to access an information service. We believe that, regardless of whether the services a subscriber would access through roaming arrangements are telecommunications services or information services, the Commission has statutory authority to require automatic roaming for them. If these services are telecommunications services, they are subject to roaming obligations pursuant to our authority under Title II and Title III. If they are information services, we have the authority to promulgate roaming requirements under Title III and other provisions. We seek comment on this analysis, including the significance, if any, of the recent decision of the United States Court of Appeals for the District of Columbia Circuit in *Comcast Corporation. v. FCC*.<sup>190</sup>

66. We turn first to our authority under Title III. Several provisions of that title provide the Commission authority to establish license conditions in the public interest. For example, Section 301 provides the Commission with authority to regulate “radio communications” and “transmission of energy by radio.”<sup>191</sup> Under Section 303, the Commission has the authority to establish operational obligations for licensees that further the goals and requirements of the Act if the obligations are in the “public convenience, interest, or necessity” and not inconsistent with other provisions of law.<sup>192</sup> Section 303 also authorizes the Commission, subject to what the “public interest, convenience, or necessity requires,” to “[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class.”<sup>193</sup> Section 307(a) likewise authorizes the issuance of licenses “if public convenience, interest, or necessity will be served thereby.”<sup>194</sup> Section 316 provides a similar test for new conditions on existing licenses, authorizing such modifications if “in the judgment of the Commission such action will

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<sup>189</sup> *Wireless Broadband Internet Access Order*, 22 FCC Rcd at 5918 ¶ 46 (.

<sup>190</sup> *Comcast Corporation. v. FCC*, \_\_\_ F.3d \_\_\_, 2010 WL 1286658, No. 08-1291 (D.C. Cir. Apr. 6, 2010).

<sup>191</sup> *See* 47 U.S.C. § 301. *See also IP-Enabled Services NPRM*, 19 FCC Rcd at 4918.

<sup>192</sup> *See* 47 U.S.C. § 303 (stating that if the “public convenience, interest, or necessity requires” the Commission shall “(r) . . . 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, 1048 (7th Cir. 1992) (Communications Act invests Commission with “enormous discretion” in promulgating licensee obligations that the agency determines will serve the public interest). *See also* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, 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 Telephones, 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 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, 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, 15365 ¶ 207 (2007) (*700 MHz Second Report and Order*).

<sup>193</sup> 47 U.S.C. § 303(b).

<sup>194</sup> 47 U.S.C. § 307(a).

promote the public interest, convenience, and necessity.”<sup>195</sup> Application of these provisions is not affected by whether the service using the spectrum is a telecommunications service or information service under the Act.<sup>196</sup> Thus, in the *Wireless Broadband Internet Access Classification Order*, the Commission found that wireless broadband Internet access, although an information service, continues to be subject to obligations promulgated pursuant to Title III.<sup>197</sup> The Commission also relied on authority under Section 303(r) to impose “open platform” obligations on Upper 700 MHz C Block licensees, without regard to whether such licensees were providing telecommunications or information services.<sup>198</sup> Accordingly, we believe that the provisions discussed above provide authority to establish roaming obligations over both telecommunications and information services, if such obligations are found to be in the public interest and, in the case of Section 303(r), the obligations would also further the goals and requirements of the Act.

67. As discussed above, reasonable roaming obligations can serve the public interest by promoting competition, investment, and new entry while facilitating consumer access to ubiquitous service.<sup>199</sup> We also anticipate that promoting competition, investment, and new entry in the broadband services market and protecting consumer access to nationwide ubiquitous service, would serve several specific goals and requirements of the Act consistent with section 303(r), which gives the Commission authority to impose requirements “as may be necessary to carry out the provisions of this Act.”<sup>200</sup> These obligations may help to meet the requirement under Section 309(j)(3) that, “in specifying eligibility and other characteristics of . . . licenses [to be issued by competitive bidding] . . . , and in designing the methodologies for use under this subsection, the Commission shall include safeguards to protect the public interest in the use of the spectrum and shall seek to promote the purposes specified in section 1 of this Act” and certain enumerated objectives.<sup>201</sup> Regarding the purposes in section 1 of the Act, to the extent that they would promote competition and the availability of seamless nationwide services, automatic roaming obligations for data may further the statutory goal of making available “to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges . . . for the purpose of promoting

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<sup>195</sup> See 47 U.S.C. § 316(a); see also *WBEN, Inc. v. United States*, 396 F.2d 601 (2d Cir. 1968) (providing that Commission may modify conditions of a license class under Section 316 through a rulemaking process); Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54, *First Report and Order*, 11 FCC Rcd 18455, 18459 ¶ 7 (“we condition existing and future cellular, broadband PCS and covered SMR licenses upon compliance with our resale rule pursuant to our authority under Title III of the Act.”) (citing 47 U.S.C. §§ 303(r), 309).

<sup>196</sup> See, e.g., *Wireless Broadband Internet Access Classification Order*, 22 FCC Rcd at 5915 ¶ 36.

<sup>197</sup> *Id.*

<sup>198</sup> *700 MHz Second Report and Order*, 22 FCC Rcd at 15365 ¶ 207. See also Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54, *Report and Order*, 11 FCC Rcd 18455, 18459 ¶ 7, 188471-72 ¶ 31 (relying on Title III authority to impose resale obligations on non-Title II services); Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54, *Memorandum Opinion and Order on Reconsideration*, FCC 99-250, ¶ 27 (1999) (expressly rejecting “[a]rguments that the scope of the resale rule is overbroad because it extends to non-Title II services,” reaffirming that Title III provided a basis for imposing the rule).

<sup>199</sup> See *supra*, ¶ 31.

<sup>200</sup> 47 U.S.C. § 303(r); *700 MHz Second Report and Order*, 22 FCC Rcd 15289, 15365 n.471. See also *infra*, ¶ 1.

<sup>201</sup> 47 U.S.C. § 309(j)(3).

safety of life and property through the use of wire and radio communications.”<sup>202</sup> Automatic data roaming additionally may advance enumerated objectives within Section 309(j)(3), including “the development and rapid deployment of new technologies, products, and services for the benefit of the public . . . without administrative or judicial delays; . . . [and] (D) efficient and intensive use of the electromagnetic spectrum . . . .” To the extent that roaming requirements are found to encourage more efficient and intensive use of spectrum in rural areas, they would also support the direction of Section 303(g) to “[s]tudy new uses for radio, provide for experimental uses of frequencies, and generally encourage the larger and more effective use of radio in the public interest . . . .”<sup>203</sup> These obligations may also further the goal under Section 1302 of encouraging new deployment of advanced services to all Americans by promoting competition and by removing barriers to infrastructure investment, including the barriers to new entrants resulting from incumbents’ “head start” advantages.<sup>204</sup> Accordingly, we think that, if roaming obligations on non-interconnected services are ultimately found to be in the public interest, we have authority under the provisions of Title III discussed above, among other provisions, to establish such obligations.<sup>205</sup> We seek comment on this analysis.

68. Next, we seek comment on arguments in the record that automatic roaming for non-interconnected services is itself a telecommunications service, and therefore is also subject to our authority under Title II. “Telecommunications” is defined in the Act as “the transmission, between or among points specified by the user, of information of the user’s choosing without change in the form or content of the information as sent and received.”<sup>206</sup> “Telecommunications service” is defined as “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.”<sup>207</sup> SouthernLINC argues that automatic roaming is simply a transmission service.<sup>208</sup> It describes the function of the host provider as ensuring that data are transmitted without change between the subscriber and the subscriber’s home

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<sup>202</sup> 47 U.S.C. § 151.

<sup>203</sup> 47 U.S.C. § 303(g).

<sup>204</sup> Section 1302(a) provides in full:

The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.

47 U.S.C. § 1302(a).

<sup>205</sup> The Commission previously found that Title III supported the imposition of resale requirements on both voice and data services. *See* Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, CC Docket No. 94-54, *Memorandum Opinion & Order and Order on Reconsideration*, 14 FCC Rcd 16340, 16352-53 ¶ 27 (1999) (“Arguments that the scope of the [CMRS] resale rule is overbroad because it extends to non-Title II services are inapt. In the *First Report and Order*, the Commission rejected this argument and specifically cited its licensing authority as part of its jurisdictional authority for the resale rule.”).

<sup>206</sup> 47 U.S.C. § 153(43).

<sup>207</sup> *Id.* § 153(46).

<sup>208</sup> *See* SouthernLINC Reply Comments, WT Docket No. 09-66, filed Oct. 22, 2009, at 13-14.

network. Opponents argue that the provision of roaming access to information services can involve direct support of the information service by the host provider rather than simply transmission of the packets to the roaming subscriber's native network. They also argue that, even where the data are simply transmitted back to the native network, this will often require DNS lookup, which, they say, the Commission has found to be a "capability" that goes beyond mere transmission.<sup>209</sup> Proponents respond that such addressing and routing functions are not sufficient to render automatic roaming an information service, as they do not cause a "change in the form or content of the information as sent and received."<sup>210</sup> We seek comment on these arguments.

69. We also seek comment on the extent to which host providers that have implemented data roaming arrangements provide data services or applications, such as web browsing or push-to-device electronic mail, and how these applications are provided. Is a host provider's network being used only as a conduit between the roaming subscriber and the subscriber's home network? To the extent that a host provider performs functions other than data transmission, to what extent are these functions limited to addressing and routing functions, or other functions ancillary to achieving the transmission of the data to its destination? Do any of these functions fall within the management exception in the definition of "information service"?<sup>211</sup> Do the answers to any of these questions vary depending on the specific data service (e.g., email) requested by subscribers of home providers, or on the specific network technology involved (e.g., 2G, 3G, or 4G)?

70. Finally, we turn to our authority under Title I of the Act. Under Title I, the Commission may exercise ancillary authority over a matter when it falls within the agency's general statutory grant of jurisdiction under Title I and the regulation is reasonably ancillary to the effective performance of the Commission's statutorily mandated responsibilities.<sup>212</sup> We seek comment on our ancillary authority to address roaming obligations for providers of non-interconnected wireless services. We think it clear that the Commission has subject matter jurisdiction over non-interconnected wireless services and features, including wireless broadband Internet access services. As the Commission has previously found with regard to wireless broadband Internet access services,<sup>213</sup> wireless non-interconnected services are covered by the Commission's general jurisdictional grant under sections 1 and 2(a) of the Act, coupled with the definition set forth in section 3(33) ("radio communication").<sup>214</sup> Second, because the availability of automatic roaming at reasonable rates and terms can help to promote facilities-based competition and the availability of seamless nationwide services, automatic roaming obligations may be reasonably ancillary

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<sup>209</sup> See, e.g., AT&T Reply Comments at 7-8.

<sup>210</sup> 47 U.S.C. § 153(43).

<sup>211</sup> 47 U.S.C. § 153(20) (defining "information service" as the offering of a capability to do various things but not "any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service").

<sup>212</sup> *United States v. Southwestern Cable Co.*, 392 U.S. 157, 172-73 (1968); accord *United States v. Midwest Video Corp.*, 406 U.S. 649, 662 (1972). See also *American Library Ass'n. v. F.C.C.*, 406 F.3d 689, 700 (D.C. Cir. 2005); *Comcast Corp. v. FCC*, No. 08-1291, at 7 (D.C. Cir. Apr. 6, 2010).

<sup>213</sup> See *Wireless Broadband Internet Access Classification Order*, 22 FCC Rcd 5901, 5901 ¶ 1.

<sup>214</sup> Section 3(33) of the Act defines "radio communication" as "the transmission by radio of writing, signs, signals, pictures, and sounds of all kinds, including all instrumentalities, facilities, apparatus, and services (among other things, the receipt, forwarding, and delivery of communications) incidental to such transmission." 47 U.S.C. § 153(33).

to several provisions under the Act.<sup>215</sup> We seek comment on whether these or other provisions of the Act support the exercise of ancillary authority.

71. Some commenters argue that relying on our Title I authority to impose roaming obligations on services that the Commission has classified as information services would be inconsistent with Congress's intent that information services not be treated as common carrier services, pointing to section 153(44) of the Act.<sup>216</sup> This provision provides that "a telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services."<sup>217</sup> They also argue that requiring automatic roaming obligations for information services would be inconsistent with the Commission's prior determination that providers of information services "are exempt from mandatory Title II common carrier regulation."<sup>218</sup> We seek comment on these arguments.

72. *Importance of Data Roaming.* We next seek further comment on the importance of roaming for non-interconnected data services. In what ways will data roaming arrangements affect competitive entry and network deployment in the nascent data services market? For example, what is the effect on consumers in the absence of data roaming requirements in terms of the coverage and service they will receive?<sup>219</sup> Will rural consumers, who may only have access to small, local providers, have no coverage beyond their local area?

73. We also seek comment on what impacts the establishment of data roaming arrangements may have on the terms of retail service provided to consumers, how such impacts differ from those resulting from voice roaming arrangements, and how service terms might be affected by data roaming developments in the future and a data roaming mandate in particular.

74. For those providers that have roaming arrangements with other providers for non-interconnected data services, to what extent do their data subscribers make use of such roaming arrangements, and how does the amount of their subscribers' roaming use compare to their home network use? For host providers, how does the data roaming traffic they support compare to their own subscribers' use, in terms of amount and revenues generated? We also seek comment on how deployment, competition, and consumer access to services will be affected in the mobile broadband market in the absence of data roaming obligations.

75. *Investment Incentives.* We seek further comment on the impact that extending roaming requirements to wireless data services would have on the incentives of providers to invest in advanced data networks and fully use available spectrum. The record currently encompasses competing claims with regard to the impact that extending an automatic roaming obligation to non-interconnected services

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<sup>215</sup> See discussion of Title III authority, *supra*.

<sup>216</sup> See Sprint Nextel Comments at 6-8; Verizon Wireless Comments at 5.

<sup>217</sup> See 47 U.S.C. § 153(44). They similarly point to section 332(c)(1)(B), which provides that a CMRS provider, "shall, insofar as such person is so engaged, be treated as a common carrier." See 47 U.S.C. § 332(c)(1)(B).

<sup>218</sup> See Sprint Nextel Reply Comments at 12-13; Verizon Wireless Reply Comments at 7-8. See also *Federal Communications Commission v. Midwest Video Corporation*, 440 US 689, 701-09, 59 L. Ed. 2d 692, 99 S Ct 1435, 1445-46 (1979) (holding the Commission could not adopt regulations pursuant to ancillary jurisdiction under Title I imposing common carrier obligations on cable operators).

<sup>219</sup> See, e.g., Verizon Wireless Comments at 9 ("As a carrier's customers use the new services and features made possible by the investment . . . , those customers begin to expect those services and features to be available to them as they travel outside of their home markets.").

would have on investment. Proponents of a data roaming obligation argue that, because the availability of roaming will facilitate competitive entry, the amount of network investment will be increased.<sup>220</sup> Opponents of such an obligation argue that a data roaming mandate will create disincentives for both smaller and larger providers to build out advanced networks in new areas, particularly in high cost areas.<sup>221</sup>

76. We first note that these arguments are similar to the arguments presented to the Commission with regard to automatic roaming for voice services, which, as discussed above, we have addressed through adoption of an automatic roaming requirement.<sup>222</sup> We therefore ask commenters to address specifically whether and how the investment incentives would differ for non-interconnected data services. We also note that, while many commenters made assertions regarding the impact of roaming obligations on buildout incentives, no commenters provided a methodology or hard data that would help us to judge the overall impact of a roaming obligation on investment, the use of spectrum, and buildout. Such methodology or data would be helpful. In addition, we seek comment on whether we should adopt any measures or restrictions to help preserve investment incentives. For example, should the Commission clarify that a carrier that obtains automatic roaming from another carrier does not have a right to advertise that it offers its subscribers roaming on a particular host carrier's network absent a voluntary agreement of the host carrier? Would this help to prevent freeriding on the value of the host carrier's brand name recognition and service quality reputation?

77. *The Provision of Roaming for Non-Interconnected Data Services.* We also ask commenters to provide specific data that will help us assess the availability of roaming arrangements for various non-interconnected data services and the current ability of providers that desire such arrangements to obtain them. We seek comment on the impact of consolidation in the CMRS market or other trends affecting market concentration on the current and future availability of roaming arrangements for non-interconnected services. For example, we ask commenters to provide specific information regarding instances in which providers that have been willing to enter into roaming arrangements, whether for voice or data, are now refusing to do so. In such cases, we ask commenters to specify whether the would-be host provider has refused ongoing roaming for any service, or has agreed to continue providing roaming for services previously supported but refused to extend the arrangement to new (*e.g.*, non-interconnected data) services.

78. We seek specific information from providers that have received requests for data roaming regarding their policies and practices regarding such roaming arrangements. How many requests for data roaming they have received, how many of these requesting providers have been granted or refused roaming arrangements, and for what reasons or considerations were arrangements granted or refused? Will these policies change in the future?

79. We seek comment on the impact of developing network technology on the availability of data roaming. Are providers seeking data roaming arrangements limited to networks using the same basic air interface technology as their own, and, if so, how do the markets for roaming services compare between the different network technologies? How are roaming opportunities being affected by the handsets being developed for broadband data? For example, to what extent are multi-mode or multi-band handsets being

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<sup>220</sup> See, *e.g.*, Leap Comments at 5-9; MetroPCS Comments at 10; SouthernLINC Comments at 17-18; NTCA Reply Comments at 2; U.S. Cellular Reply Comments at 2.

<sup>221</sup> See, *e.g.*, AT&T Comments at 2-11; WCAI Comments at 6.

<sup>222</sup> See Section III.B, *supra*. See also, *e.g.*, 2007 Report and Order, 22 FCC Rcd at 15826 ¶ 22 & n.60.

developed that might expand a provider's potential pool of roaming partners?<sup>223</sup>

80. *Capacity and Other Technical Issues.* In the *Further Notice*, the Commission sought comment on whether roaming obligations presented any issues regarding network capacity, integrity, or security, and on the effect that automatic roaming would have on the capacity of data networks and the ability of providers to offer full access to their own customers.<sup>224</sup> The Commission asked whether a provider should have the right to limit access to its network by roamers and what parameters should be considered as justification for such limits.<sup>225</sup> Numerous commenters addressed these issues in general terms, but provided few specifics.<sup>226</sup>

81. We invite commenters to refresh the record on these issues and provide specific information. We seek comment on how concerns regarding capacity or traffic management issues from data roaming traffic could be addressed. Would clarifying that a host provider's provision of data roaming service is subject to reasonable network operational needs address this issue?<sup>227</sup> We ask commenters to be specific regarding the clarifications, if any, that the Commissions should adopt. If a commenter asserts that addressing this problem through traffic management is not feasible, we ask that the commenter provide a detailed explanation regarding the problem. Some commenters have argued, for example, that it is not possible to identify the particular roaming individuals causing a traffic congestion problem.<sup>228</sup> We seek comment on the specifics of this argument, and on, assuming the argument is true, alternative traffic management approaches that are available to address network congestion issues. For instance, as suggested by some proponents of a data roaming obligation, should such a roaming obligation allow network operators to identify roaming users as a group and apply suitable network management protocols to such a group to address congestion issues?<sup>229</sup> We also note that we are seeking comment below on

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<sup>223</sup> See, e.g.,

<http://www.verizonwireless.com/b2c/store/controller?item=phoneFirst&action=viewPhoneDetail&selectedPhoneId=4866> (specification of BlackBerry® Tour™ 9630 smartphone, providing that network support includes 800/1900 MHz CDMA/EV-DO Rev. A networks; 850/900/1800/1900 MHz GSM/GPRS/EDGE networks, and 2100 MHz UMTS/HSPA networks).

<sup>224</sup> See *Further Notice*, 22 FCC Rcd at 15846 ¶ 80.

<sup>225</sup> *Id.*

<sup>226</sup> Compare AT&T Comments at 2, WCAI Comments at 4-5, and AT&T Reply Comments at 15-17 (arguing that roaming traffic will create congestion problems and undermine the quality of service for users) with Leap Comments at 9, RCA Comments at 5-6, and SouthernLINC Comments at 21 (arguing that additional capacity needed to accommodate roamers will be “negligible” and that capacity concerns therefore do not justify denying automatic roaming).

<sup>227</sup> Compare *Open Internet NPRM*, FCC 09-93, at ¶¶ 154-74 (seeking comment on how the proposed open Internet principles should apply to different platforms, such as mobile wireless).

<sup>228</sup> See AT&T Reply Comments at 16 (“It is simply not feasible to suggest that individualized denial of service is an adequate protection against [the effects of network overload on account of unanticipated roaming demand.] [C]arriers would be left in the untenable position of trying to determine the identity of the roaming user who tipped the network over capacity as all the other users experienced busy signals or transmission rates that had slowed to a crawl.”); see also WCAI Comments at 4-5.

<sup>229</sup> Some proponents of data roaming obligations support permitting a host carrier to prefer its own subscribers over roaming subscribers to address problems of traffic congestion. See, e.g., Leap Comments at 9 (“To the extent that . . . a host lacks capacity, the host carrier should be permitted to refuse a data roaming request so that the roaming obligations will not adversely impact provision of services to the host's own customers.”); RCA Comments at 5-6 (continued....)

terms and conditions established for the provision of PTT and SMS roaming that may well serve to limit technical issues.

82. We also seek specific information on the extent to which solutions have been developed to address these issues. We note, for example, that some international data roaming services have implemented models to provide traffic forecasting.<sup>230</sup> Can these models help providers address the problem of uncertainty in the broadband capacity demands of roaming traffic? Have such models for data roaming been implemented domestically? Data roaming arrangements are already established in the United States that provide roaming on 2.5G data networks. We seek comment on how the capacity demands of roaming parties and the other technical issues referenced above have been addressed to achieve roaming on these networks. For example, how have providers addressed the concerns regarding traffic management and capacity exhaustion?

83. We also seek comment on what other actions might be appropriate to address spectrum capacity needs that may arise out of data roaming or to help ensure that spectrum is utilized to the extent possible. For example, would a rule facilitating spectrum sharing arrangements between a host provider and a requesting provider be helpful or appropriate if the host provider provides data roaming services to the requesting provider? In other words, would it be helpful to obligate the requesting provider to allow the host provider to use the requesting provider's spectrum in the market in which the host provider makes data roaming available to the requesting provider?

84. To what extent have solutions been developed for anticipating and managing the broadband capacity demands of roaming traffic on networks using any 3G technology and on networks using any 4G technology?<sup>231</sup> If solutions have been developed for any technology, we seek comment on the status of efforts to develop such solutions. Are there different technical, legal, commercial or policy considerations that we should consider with respect to data roaming traffic on 3G and 4G networks? For instance, how do 4G technologies such as LTE impact the technical challenges to developing such roaming arrangements or otherwise affect carriers' ability to establish such arrangements? If there are differences, should we treat roaming on 4G networks differently than other generations of mobile networks, including 3G networks? If so, for what period of time should the different treatment remain in place? Is facilitating automatic roaming traffic between different generations of networks, including 3G and 4G networks important and, if so, are there technical, legal, commercial or policy considerations of which we should be aware? We understand that a number of 3G roaming arrangements have been made between domestic and foreign carriers to support international roaming at home and abroad. We seek comment on the extent to which carriers have established data roaming arrangements with foreign carriers, whether international roaming solutions could be applied to domestic roaming.

85. *Scope of Covered Entities.* Assuming that we were to impose a data roaming obligation, we seek comment on the appropriate scope and terms of the obligation (including those entities entitled to (Continued from previous page) \_\_\_\_\_ (possible remedy to congestion from a roamer is suspension or denial of service to that particular roamer). Other proponents, however, call for any such management practices to be "non-discriminatory." SouthernLINC Reply Comments at 10. Opponents of data roaming obligations suggested that implementing such traffic management approaches would be technically impractical or impose significant costs.

<sup>230</sup> See, e.g., Letter from David Robinson, Syniverse Technologies, to Marlene Dortch, FCC, filed Nov. 2, 2009.

<sup>231</sup> Cf. Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, WT Docket No. 07-71, *Twelfth Report*, 23 FCC Rcd 2241, 2308 ¶ 158 (2008) (noting that "certain CDMA carriers have already reached roaming deals on a voluntary basis for wireless broadband Internet access service provided over EV-DO networks.").

request data roaming), whether either the scope or the terms of the obligation should vary from what we have established for interconnected services, and in particular, whether the scope of entities that covered by the obligations should include providers of mobile data services that do not also offer CMRS. The obligation to provide roaming for interconnected services applies only to providers that also offer CMRS, and only those that meet certain characteristics.<sup>232</sup> Although mobile broadband data services may be provided by companies that are also CMRS carriers, such services may also be provided by entities that do not offer any CMRS. Therefore, we seek comment on whether the scope of covered entities should be broader than the existing scope of the automatic roaming rule. If so, how specifically should we define the class of covered entities? For example, should we impose the same obligations on all entities offering facility-based commercial mobile data services? Should it encompass only entities operating over licensed spectrum or include providers that rely on the use of unlicensed devices as well? Should the class of covered entities be limited to terrestrial networks or also encompass satellite providers of mobile data services (either by satellite or ancillary terrestrial component)? We seek comment how, specifically, we should define entities covered by any automatic data roaming rule.

86. We seek comment on whether there are any subsets of non-interconnected data services to which roaming requirements should not apply. For example, should we propose that any automatic roaming obligation on data service providers exclude non-facilities-based entities such as resellers? We also note that the automatic roaming obligation for interconnected services is restricted to such providers as are in actual competition for the provision of such services.<sup>233</sup> Given that promoting competition would likewise be a key reason to establish roaming obligations on non-interconnected services, is there a comparable restriction we should impose on the scope of such obligation to achieve the same purpose?

87. *Other Terms and Conditions.* We also seek comment on what specific terms, conditions, or restrictions the Commission should include in any rule requiring the provision of data roaming. For example, what conditions could the Commission adopt to help ensure that providers' incentives to innovate and invest are not undermined? The Commission previously sought comment on whether the potential adverse effect on incentives might be mitigated by conditioning roaming access to non-interconnected services in the same manner as we have with push-to-talk and SMS: requiring that (1) the requesting provider to provide the underlying service for which roaming is requested, (2) roaming be technically feasible, and (3) any changes to the host network necessary to accommodate roaming access to the requested service be economically reasonable.<sup>234</sup> We again seek comment on whether these conditions, or some variation, should be adopted.

88. Leap supports imposing the first condition above on data roaming, arguing that this would "remove any question of free-riding on the innovation of others" and "would leave ample room for product differentiation" because a provider that developed proprietary enhanced services or applications would not have to provide them to roaming subscribers.<sup>235</sup> Verizon Wireless and MetroPCS raise

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<sup>232</sup> Specifically, the obligations apply only to CMRS carriers that "offer real-time, two-way switched voice or data service that is interconnected with the public switched network and utilizes an in-network switching facilities that enables the carrier to re-use frequencies and accomplish seamless hand-offs of subscriber calls." 47 C.F.R. § 20.12(a)(2).

<sup>233</sup> See 47 C.F.R. § 20.12(a)(2). See also *Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services*, CC Docket No. 94-54, *First Report and Order*, 11 FCC Rcd 18455, 18464 ¶ 16 (1996) (explaining the basis for similar scope limitation in resale rule).

<sup>234</sup> See *Further Notice*, 22 FCC Rcd at 15845-46 ¶ 79.

<sup>235</sup> Leap Comments at 7-8.

concerns, however. Verizon Wireless argues that the proposal requires too little: under this proposal, it asserts, a provider that makes a minimal investment to support a data service on a “handful of EVDO antennas” in its home market would be able to obtain data services on a competitor’s nationwide network.<sup>236</sup> MetroPCS argues, however, that it requires too much: requiring the requesting provider to offer the requested data service on its own home network would be “impracticable and would foster unnecessary litigation.”<sup>237</sup> It further argues that there were many legitimate reasons why a provider might not offer a particular service in one or more of its home markets, including variations in the spectrum resources available to the provider.<sup>238</sup>

89. We continue to believe that these conditions lay a solid foundation for any roaming requirement. On the one hand, as with our automatic voice roaming requirement, a data roaming requirement is not intended to constitute a resale requirement. We would decide in the case of a specific dispute whether data roaming should be provided in a particular instance, and on what terms, or whether the request is essentially a request for resale. On the other hand, requiring a provider to offer a data service on its home network would appear to be an essential element of a request for roaming coverage as opposed to resale. To the extent that the lack of a roaming arrangement may make competitive entry in the mobile services market difficult for small providers, would it be useful to clarify that providers that do not offer data services may obtain roaming arrangements that become effective when they offer their own data services?

90. With regard to the second and third conditions, and the extent to which they require changes to the network, we seek further comment on whether these conditions will address concerns regarding the potential technical issues that may arise when implementing data roaming arrangements. We seek comment on whether the Commission should clarify that to the extent requesting providers can resolve issues of accommodation through changes to their own network, a reasonable request must include an offer to make such changes.<sup>239</sup>

91. *Dispute Resolution.* We seek comment on the appropriate process for dispute resolution, and whether we should provide the same process for data roaming requests as for other roaming requests. We also seek comment on whether we should adopt measures to require or encourage disputes over the reasonableness of requests for data roaming to be resolved through alternative dispute resolution procedures such as arbitration. Are there any legal considerations, limitations or concerns for the Commission to consider with respect to adoption of alternative disputes resolution procedures?<sup>240</sup> If such measures are appropriate for data roaming disputes, should they be applicable to roaming disputes more

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<sup>236</sup> See Verizon Wireless Comments at 12.

<sup>237</sup> See MetroPCS Comments at 16.

<sup>238</sup> *Id.*

<sup>239</sup> See, e.g., MetroPCS Reply Comments at 9 n.28 (advocating that “if the requesting carrier wants roaming, it will have to design *its* network and customer services to be compatible with the providing carrier, which will not raise any of the harms claimed by Verizon, AT&T, or Sprint.”) (emphasis in original).

<sup>240</sup> For example, under the Alternative Dispute Resolution Act, an agency “may not require any person to consent to arbitration as a condition of entering into a contract or obtaining a benefit.” 47 U.S.C. § 575(a)(3). We note, however, that this restriction does not prevent the Commission from requiring parties to submit to third-party arbitration so long as the arbitration is subject to *de novo* review by the Commission. See, e.g., Comcast Corp., Petition for Declaratory Ruling that The America Channel is not a Regional Sports Network, *Order*, 22 FCC Rcd 17938, 17948, n.13 (2007).

generally?

## V. PROCEDURAL MATTERS

### A. Final Regulatory Flexibility Analysis

92. As required by the Regulatory Flexibility Act of 1980 (“RFA”),<sup>241</sup> the Commission has prepared a Final Regulatory Flexibility Analysis (“FRFA”) relating to the Order on Reconsideration. The FRFA is set forth in Appendix D.

### B. Initial Regulatory Flexibility Analysis

93. As required by the Regulatory Flexibility Act of 1980 (“RFA”),<sup>242</sup> the Commission has prepared an Initial Regulatory Flexibility Analysis (“IRFA”) relating to the Second Further Notice of Proposed Rulemaking. The IRFA is set forth in Appendix C.

### C. Comment Filing Procedures

94. Pursuant to sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, 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. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/> or the Federal eRulemaking Portal: <http://www.regulations.gov>.
- Paper Filers: Parties who choose to file by paper must file an original and four copies 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-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- 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.

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<sup>241</sup> *Id*

<sup>242</sup> *See* 5 U.S.C. § 604. 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. 847 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 (“CWAAA”).

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12<sup>th</sup> Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

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

95. Concerning the Order on Reconsideration, this document does not contain an information collection subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. 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.<sup>243</sup>

96. Concerning the Second Further Notice of Proposed Rulemaking, this document does not contain an information collection subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. 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.<sup>244</sup>

#### **E. Congressional Review Act**

97. The Commission will send a copy of this *Order* on Reconsideration and Second Further Notice of Proposed Rulemaking in a report to be sent to Congress and the Government Accountability Office, pursuant to the Congressional Review Act.<sup>245</sup>

#### **F. Contact Persons**

98. For further information concerning this proceeding, please contact Peter Trachtenberg, Spectrum and Competition Policy Division at 202-418-7369, Christina Clearwater, Spectrum and Competition Policy Division at 202-418-1893 or Nese Guendelsberger, Spectrum and Competition Policy Division at 202-418-0634.

### **VI. ORDERING CLAUSES**

99. Accordingly, IT IS ORDERED, pursuant to the authority contained in Sections 1, 4(i), 201, 202, 251(a), 253, 303(r), and 332(c)(1)(B) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201, 202, 251(a), 253, 303(r), and 332(c)(1)(B), and Section 1.429 of the Commission’s rules, 47 C.F.R. § 1.429, this Order on Reconsideration and Second Further Notice of Proposed Rulemaking IS HEREBY ADOPTED.

100. IT IS FURTHER ORDERED Section 20.12 of the Commission’s rules IS AMENDED as specified in Appendix A, and such rule amendments shall be effective 30 days after the date of publication of the text thereof in the Federal Register.

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<sup>243</sup> See 44 U.S.C. 3506(c)(4).

<sup>244</sup> See 44 U.S.C. 3506(c)(4).

<sup>245</sup> 5 U.S.C. § 801(a)(1)(A).

101. IT IS FURTHER ORDERED the Petitions for Reconsiderations filed by Leap Wireless International, Inc., MetroPCS Communications, Inc., Spectrum Co., LLC, Sprint Nextel, and T-Mobile USA, Inc. ARE HEREBY GRANTED IN PART AND DENIED IN PART to the extent expressed herein.

102. IT IS FURTHER ORDERED the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Order on Reconsideration and Second Further Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis and Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

## APPENDIX A

## Final Rules

## PART 20 – Commercial Mobile Radio Services

## PART 20 – COMMERCIAL MOBILE RADIO SERVICES

**Authority:** 47 U.S.C. 154, 160, 201, 251-254, 303, and 332 unless otherwise noted.

In § 20.3 remove the definitions “Home Carrier” and “Home Market” and revise the definition of “Host Carrier” to read as follows:

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*Host Carrier.* For automatic roaming, the host carrier is a facilities-based CMRS carrier on whose system another carrier’s subscriber roams. A facilities-based CMRS carrier may, on behalf of its subscribers, request automatic roaming service from a host carrier.

\*\*\*\*\*

In § 20.12 revise paragraph (d) to read as follows:

\*\*\*\*\*

- (d) *Automatic Roaming.* Upon a reasonable request, it shall be the duty of each host carrier subject to paragraph (a)(2) of this section to provide automatic roaming to any technologically compatible, facilities-based CMRS carrier on reasonable and not unreasonably discriminatory terms and conditions, pursuant to Sections 201 and 202 of the Communications Act, 47 U.S.C. Sections 201 and 202. The Commission shall presume that a request by a technologically compatible CMRS carrier for automatic roaming is reasonable pursuant to Sections 201 and 202 of the Communications Act, 47 U.S.C. Sections 201 and 202. This presumption may be rebutted on a case by case basis. The Commission will resolve automatic roaming disputes on a case-by-case basis, taking into consideration the totality of the circumstances presented in each case.

\* \* \* \* \*

**APPENDIX B****List of Petitioners and Commenters****Petitions for Reconsideration**

Leap Wireless International, Inc. (Leap)  
MetroPCS Communications, Inc. (MetroPCS)  
Sprint Nextel Corporation (Sprint Nextel)  
SpectrumCo, LLC (SpectrumCo)  
T-Mobile USA, Inc. (T-Mobile)

**Opposition to Petition**

AT&T, Inc. (AT&T)  
Blooston Rural Carriers (Blooston)  
Leap  
Rural Telecommunications Group & OPASTCO (RTG)  
SouthernLINC Wireless (SouthernLINC)  
United States Cellular Corporation (U.S. Cellular)  
Verizon Wireless

**Reply to Opposition**

Leap  
MetroPCS  
SpectrumCo  
Sprint Nextel  
T-Mobile

**Comments to Further Notice of Proposed Rulemaking**

AT&T, Inc.  
Corr Wireless (Corr)  
Leap  
MetroPCS  
MTA Wireless, Inc. (MTA Wireless)  
Rural Cellular Association (RCA)  
RTG  
SouthernLINC Wireless (SouthernLINC)  
SpectrumCo, LLC. (SpectrumCo)  
Sprint Nextel  
U.S. Cellular  
Verizon Wireless  
Wireless Communications Association, International (WCAI)

**Reply Comments to Further Notice of Proposed Rulemaking**

AT&amp;T

Cellular South

Leap

MetroPCS

MTA Wireless

National Telecommunications Cooperative Association (NCTA)

RCA

SouthernLINC

Sprint Nextel

T-Mobile

U.S. Cellular

Verizon Wireless

## APPENDIX C

## Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>1</sup> an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Memorandum Opinion & Order and Notice of Proposed Rulemaking* in WT Docket No. 05-265.<sup>2</sup> The Commission sought written public comment on the proposals in that Order and Notice, including comment on the IRFA. A Final Regulatory Flexibility Analysis was adopted in conjunction with the Commission's *Report and Order and Further Notice of Proposed Rulemaking* in WT Docket No. 05-265.<sup>3</sup> The present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.<sup>4</sup>

**A. Need for, and Objectives of, the Order on Reconsideration**

2. In the *2007 Report and Order*, the Commission clarified that automatic roaming<sup>5</sup> is a common carrier obligation for commercial mobile radio service (CMRS carriers), subject to Sections 201 and 202 of the Communications Act, and required CMRS carriers to provide automatic roaming services to other carriers upon reasonable request on a just, reasonable, and non-discriminatory basis. In particular, the Commission determined that, when a reasonable request<sup>6</sup> for automatic roaming is made by a technologically compatible CMRS carrier (requesting carrier), a host CMRS carrier has the obligation under Sections 332(c)(1)(B) and 201(a) to provide automatic roaming on a just, reasonable, and non-discriminatory basis to the requesting carrier outside of the requesting carrier's home market. The Commission defined the home market as any geographic location where the requesting carrier has a wireless license or spectrum usage rights that could be used to provide CMRS.<sup>7</sup> In excluding home roaming, the Commission found that imposing an automatic roaming obligation in home markets where the requesting carrier already has the spectrum to compete directly with the would-be host carrier would not serve the public interest.<sup>8</sup> In reaching this decision, the Commission found "requiring home roaming

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<sup>1</sup> See 5 U.S.C. § 603. 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> Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, *Memorandum Opinion & Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 15047 (2005) ("Roaming MO&O and NPRM").

<sup>3</sup> Reexamination of Roaming Obligations of Commercial Radio Mobile Service Providers, WT Docket No. 05-265, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 15817 (2007) ("2007 Report and Order" and "2007 Further Notice" respectively). See Report and Order, 22 FCC Rcd at 15854-864, Appendix C. This FRFA does not address the *2007 Further Notice* and comments, see the accompanying, present IRFA for that.

<sup>4</sup> See 5 U.S.C. § 604.

<sup>5</sup> See 47 C.F.R. § 20.12(d).

<sup>6</sup> For a discussion of the reasonableness of automatic roaming requests, see *2007 Report and Order*, 22 FCC Rcd at 15831 ¶¶ 33-34.

<sup>7</sup> See 47 C.F.R. § 20.3 (stating that a home carrier is the facilities-based CMRS carrier which requests automatic roaming service from a host carrier on behalf of its customers).

<sup>8</sup> *2007 Report and Order*, 22 FCC Rcd at 15835 ¶ 49.

could harm facilities-based competition and negatively affect build-out in these markets, thus adversely impacting network quality, reliability and coverage.”<sup>9</sup> The Commission also, however, recognized the importance of home roaming and encouraged all CMRS carriers to negotiate automatic roaming in home markets, stating that its decision should not be construed as prohibiting a requesting carrier from seeking to negotiate home roaming agreements.<sup>10</sup> In addition, the Commission found that the scope of the automatic roaming obligation under sections 201 and 202 includes only services offered by CMRS carriers that are real-time, two-way switched voice or data services that are interconnected with the public switched network and utilize an in-network switching facility that enables providers to reuse frequencies and accomplish seamless hand-offs of subscriber calls. The Commission also found, based on several factors, that it would serve the public interest to extend the scope of the automatic roaming obligation to push-to-talk and SMS, but declined to adopt a rule extending the automatic roaming obligation to include non-interconnected services, such as wireless broadband Internet access services.

3. In response to the *2007 Report and Order*, we received five petitions for reconsideration, four oppositions to the petitions for reconsideration, five replies to the oppositions, and three comments in support of the petitions for reconsideration. In the petitions for reconsideration, the petitioners request that we reconsider the determination relating to the home roaming exclusion. Specifically, petitioners ask us to reconsider our ruling that host carriers are not required to provide automatic roaming in any areas where the requesting carrier holds a wireless license or leases spectrum, and to eliminate the home roaming exclusion. All five petitioners challenge our policy rationale for adopting the home roaming exclusion. The petitioners are primarily concerned with obtaining automatic roaming services for their home markets from a would-be host CMRS carrier, and are also concerned that newly acquired AWS-1 and 700 MHz spectrum may be encumbered, and therefore not capable of being used. With regard to AWS-1 and 700 MHz spectrum, petitioners argue that it should not be considered part of their “home market” for purposes of application of the home roaming exclusion. Sprint Nextel also requests that we reconsider the decision to extend automatic roaming obligations to push-to-talk (PTT). In addition, SpectrumCo asks us to reconsider our decision to limit the automatic roaming obligation only to services that use the public switched network.

4. In the Order on Reconsideration, we eliminate the home roaming exclusion adopted in 2007. Instead, we will treat requests for automatic roaming in home markets under the same framework as other requests for automatic roaming. Thus, we will generally presume that such a request is reasonable in the first instance if the requesting CMRS carrier’s network is technologically compatible with the would-be host carrier’s network, and we will require that a CMRS carrier receiving a reasonable request to provide automatic roaming to the requesting carrier on reasonable and not unreasonably discriminatory terms and conditions. This presumption of reasonableness is rebuttable, and parties may choose to bring roaming disputes to the Commission for resolution. With respect to Sprint Nextel’s request that the Commission reconsider its decision to extend automatic roaming obligations to push-to-talk, we deny the request and find that Sprint Nextel has failed to demonstrate sufficient grounds for revisiting the determination. We address the issues raised in SpectrumCo’s petition for reconsideration in the Second Further Notice.

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<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

**B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA or FRFA**

5. We received no filings directly in response to the previous IRFA or FRFA.

**C. Description and Estimate of the Number of Small Entities to Which the Order on Reconsideration Will Apply**

6. The RFA directs the Commission to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the rules adopted herein.<sup>11</sup> 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>12</sup> In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.<sup>13</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>14</sup>

7. We have included small incumbent local exchange carriers in this present RFA analysis. As noted above, a “small business” under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and “is not dominant in its field of operation.”<sup>15</sup> The SBA’s Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not “national” in scope.<sup>16</sup> We have therefore included small incumbent local exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

8. Nationwide, there are a total of approximately 29.6 million small businesses, according to the SBA.<sup>17</sup> A “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”<sup>18</sup> Nationwide, as of 2002, there were approximately 1.6

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<sup>11</sup> 5 U.S.C. § 604(a)(3).

<sup>12</sup> 5 U.S.C. § 601(6).

<sup>13</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>14</sup> 15 U.S.C. § 632.

<sup>15</sup> 15 U.S.C. § 632.

<sup>16</sup> Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of “small-business concern,” which the RFA incorporates into its own definition of “small business.” See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret “small business concern” to include the concept of dominance on a national basis. 13 C.F.R. § 121.102(b).

<sup>17</sup> See SBA, Office of Advocacy, “Frequently Asked Questions,” <http://web.sba.gov/faqs/faqindex.cfm?areaID=24> (revised Sept. 2009).

<sup>18</sup> 5 U.S.C. § 601(4).

million small organizations.<sup>19</sup> The term “small governmental jurisdiction” is defined generally as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”<sup>20</sup> Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.<sup>21</sup> We estimate that, of this total, 84,377 entities were “small governmental jurisdictions.”<sup>22</sup> Thus, we estimate that most governmental jurisdictions are small. Nationwide, there are a total of approximately 29.6 million small businesses, according to the SBA.<sup>23</sup>

9. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the new economic census category of “Wireless Telecommunications Carriers (except satellite).”<sup>24</sup> Under this new category, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. The data we present on the number of small entities is based on the information gathered in conjunction with the prior two broad economic census categories of “Paging”<sup>25</sup> and “Cellular and Other Wireless Telecommunications”<sup>26</sup> -- both of the small business size standards in effect prior to the adoption of the new size standard by the SBA in 2008. Since no new data has been acquired since the adoption of the new size standard, we provide the only data we have which is based on data collected before the new size standard went into effect. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.<sup>27</sup> Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.<sup>28</sup> Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.<sup>29</sup> Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.<sup>30</sup> Thus, under this second category and size

<sup>19</sup> Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

<sup>20</sup> 5 U.S.C. § 601(5).

<sup>21</sup> U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, Section 8, page 272, Table 415.

<sup>22</sup> We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

<sup>23</sup> See SBA, Office of Advocacy, “Frequently Asked Questions,” <http://web.sba.gov/faqs> (accessed Jan. 2009).

<sup>24</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>25</sup> 13 C.F.R. § 121.201, NAICS code 517211.

<sup>26</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>27</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

<sup>28</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

<sup>29</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

<sup>30</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

standard, the majority of firms can, again, be considered small.

10. *Wireless Communications Services*. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses in the 2305-2320 MHz and 2345-2360 MHz bands. The Commission defined “small business” for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a “very small business” as an entity with average gross revenues of \$15 million for each of the three preceding years.<sup>31</sup> The SBA has approved these definitions.<sup>32</sup> The Commission auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity.

11. *700 MHz Guard Bands Licenses*. In the *700 MHz Guard Bands Order*, the Commission adopted size standards for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>33</sup> A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.<sup>34</sup> Additionally, a “very small business” is 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>35</sup> SBA approval of these definitions is not required.<sup>36</sup> In 2000, the Commission conducted an auction of 52 Major Economic Area (“MEA”) licenses.<sup>37</sup> Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced and closed in 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.<sup>38</sup>

12. *700 MHz Band Commercial Licenses*. There is 80 megahertz of non-Guard Band spectrum in the 700 MHz Band that is designated for commercial use: 698-757, 758-763, 776-787, and 788-793 MHz Bands. With one exception, the Commission adopted criteria for defining two groups of small businesses for purposes of determining their eligibility for bidding credits at auction. These two categories are: (1)

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<sup>31</sup> Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service (WCS), *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

<sup>32</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>33</sup> See Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, *Second Report and Order*, 15 FCC Rcd 5299 (2000). (“*746-764 MHz Band Second Report and Order*”).

<sup>34</sup> See *746-764 MHz Band Second Report and Order*, 15 FCC Rcd at 5343, para. 108.

<sup>35</sup> *Id.*

<sup>36</sup> *Id.*, 15 FCC Rcd 5299, 5343 ¶ 108 n.246 (for the 746-764 MHz and 776-704 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain Small Business Administration approval before adopting small business size standards).

<sup>37</sup> See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 18026 (2000).

<sup>38</sup> See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 4590 (WTB 2001).

“small business,” which is defined as an entity that has attributed average annual gross revenues that do not exceed \$40 million during the preceding three years; and (2) “very small business,” which is defined as an entity with attributed average annual gross revenues that do not exceed \$15 million for the preceding three years.<sup>39</sup> In Block C of the Lower 700 MHz Band (710-716 MHz and 740-746 MHz), which was licensed on the basis of 734 Cellular Market Areas, the Commission adopted a third criterion for determining eligibility for bidding credits: an “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>40</sup> The SBA has approved these small size standards.<sup>41</sup>

13. An auction of 740 licenses for Blocks C (710-716 MHz and 740-746 MHz) and D (716-722 MHz) of the Lower 700 MHz Band commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business, or entrepreneur status and won a total of 329 licenses.<sup>42</sup> A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: five EAG licenses and 251 CMA licenses.<sup>43</sup> Seventeen winning bidders claimed small or very small business status and won 60 licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.<sup>44</sup>

14. The auction for the remaining 62 megahertz of commercial spectrum began on January 24, 2008. A total of 214 applicants were found to be qualified bidders, of which 38 applicants claimed status as small businesses and 81 applicants claimed status as very small businesses. The auction concluded on March 18, 2008 with 101 bidders winning 1090 licenses.<sup>45</sup> The provisionally winning bids for the A, B, C, and E Block licenses exceeded the aggregate reserve prices for those blocks. The provisionally winning bid for the D Block license, however, did not meet the applicable reserve price and, thus, did not become a winning bid.

15. *Government Transfer Bands.* The Commission adopted small business size standards for the unpaired 1390-1392 MHz, 1670-1675 MHz, and the paired 1392-1395 MHz and 1432-1435 MHz bands.<sup>46</sup> Specifically, with respect to these bands, the Commission defined an entity with average annual

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<sup>39</sup> See Auction of 700 MHz Band Licenses Scheduled for January 24, 2008, AU Docket No. 07-157, *Notice and Filing Requirements, Minimum Opening Bids, Reserve Prices, Upfront Payments, and Other Procedures for Auctions 73 and 76*, DA 07-4171 at ¶ 70 (WTB rel. Oct. 5, 2007); Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022, 1087-88 (2002).

<sup>40</sup> *Id.* at 1088.

<sup>41</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

<sup>42</sup> See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

<sup>43</sup> See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

<sup>44</sup> *Id.*

<sup>45</sup> Auction of 700 MHz Band Licenses Closes, *Public Notice*, DA 08-595 (rel. Mar. 20, 2008), amended by *Erratum* (rel. Mar. 26, 2008).

<sup>46</sup> See Amendments to Parts 1, 2, 27 and 90 of the Commission’s Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, AND 2385-2390 MHz Government Transfer Bands, 17 FCC Rcd 9980 (2002) (*Government Transfer Bands Service Rules Report and Order*).

gross revenues for the three preceding years not exceeding \$40 million as a “small business,” and an entity with average annual gross revenues for the three preceding years not exceeding \$15 million as a “very small business.”<sup>47</sup> SBA has approved these small business size standards for the aforementioned bands.<sup>48</sup> Correspondingly, the Commission adopted a bidding credit of 15 percent for “small businesses” and a bidding credit of 25 percent for “very small businesses.”<sup>49</sup> This bidding credit structure was found to have been consistent with the Commission’s schedule of bidding credits, which may be found at Section 1.2110(f)(2) of the Commission’s rules.<sup>50</sup> The Commission found that these two definitions will provide a variety of businesses seeking to provide a variety of services with opportunities to participate in the auction of licenses for this spectrum and will afford such licensees, who may have varying capital costs, substantial flexibility for the provision of services.<sup>51</sup> The Commission noted that it had long recognized that bidding preferences for qualifying bidders provide such bidders with an opportunity to compete successfully against large, well-financed entities.<sup>52</sup> The Commission also noted that it had found that the use of tiered or graduated small business definitions is useful in furthering its mandate under Section 309(j) to promote opportunities for and disseminate licenses to a wide variety of applicants.<sup>53</sup> An auction for one license in the 1670-1674 MHz band commenced on April 30, 2003 and closed the same day. One license was awarded.

16. *Advanced Wireless Services.* In 2008, the Commission conducted the auction of Advanced

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<sup>47</sup> See *Service Rules Notice*, 17 FCC Rcd at 2550-51 ¶¶ 144-146. To be consistent with the size standard of “very small business” proposed for the 1427-1432 MHz band for those entities with average gross revenues for the three preceding years not exceeding \$3 million, the *Service Rules Notice* proposed to use the terms “entrepreneur” and “small business” to define entities with average gross revenues for the three preceding years not exceeding \$40 million and \$15 million, respectively. Because the Commission is not adopting small business size standards for the 1427-1432 MHz band, it instead uses the terms “small business” and “very small business” to define entities with average gross revenues for the three preceding years not exceeding \$40 million and \$15 million, respectively.

<sup>48</sup> See Letter from Hector V. Barreto, Administrator, Small Business Administration, to Margaret W. Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, dated January 18, 2002.

<sup>49</sup> Such bidding credits are codified for the unpaired 1390-1392 MHz, paired 1392-1395 MHz, and the paired 1432-1435 MHz bands in 47 C.F.R. § 27.807. Such bidding credits are codified for the unpaired 1670-1675 MHz band in 47 C.F.R. § 27.906.

<sup>50</sup> In the *Part 1 Third Report and Order*, the Commission adopted a standard schedule of bidding credits, the levels of which were developed based on its auction experience. *Part 1 Third Report and Order*, 13 FCC Rcd at 403-04 ¶ 47. See also 47 C.F.R. § 1.2110(f)(2).

<sup>51</sup> See *Service Rules Notice*, 17 FCC Rcd at 2550-51 ¶ 145.

<sup>52</sup> See, e.g., Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems; Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, WT Docket No. 96-18, PR Docket No. 93-253, *Memorandum Opinion and Order on Reconsideration and Third Report and Order*, 14 FCC Rcd 10030, 10091 ¶ 112 (1999).

<sup>53</sup> 47 U.S.C. § 309(j)(3)(B), (4)(C)-(D). The Commission will also not adopt special preferences for entities owned by minorities or women, and rural telephone companies. The Commission did not receive any comments on this issue, and it does not have an adequate record to support such special provisions under the current standards of judicial review. See *Adarand Constructors v. Peña*, 515 U.S. 200 (1995) (requiring a strict scrutiny standard of review for government mandated race-conscious measures); *United States v. Virginia*, 518 U.S. 515 (1996) (applying an intermediate standard of review to a state program based on gender classification).

Wireless Services (“AWS”) licenses.<sup>54</sup> This auction, which as designated as Auction 78, offered 35 licenses in the AWS 1710-1755 MHz and 2110-2155 MHz bands (“AWS-1”). The AWS-1 licenses were licenses for which there were no winning bids in Auction 66. That same year, the Commission completed Auction 78. A bidder with attributed average annual gross revenues that exceeded \$15 million and did not exceed \$40 million for the preceding three years (“small business”) received a 15 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$15 million for the preceding three years (“very small business”) received a 25 percent discount on its winning bid. A bidder that had combined total assets of less than \$500 million and combined gross revenues of less than \$125 million in each of the last two years qualified for entrepreneur status.<sup>55</sup> Four winning bidders that identified themselves as very small businesses won 17 licenses.<sup>56</sup> Three of the winning bidders that identified themselves as a small business won five licenses. Additionally, one other winning bidder that qualified for entrepreneur status won 2 licenses.

17. *Cellular Licenses.* The SBA has developed a small business size standard for wireless firms within the new economic census category of “Wireless Telecommunications Carriers (except satellite).”<sup>57</sup> Under this new category, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. The data we present on the number of small entities is based on the information gathered in conjunction with the prior economic census category of “Cellular and Other Wireless Telecommunications”<sup>58</sup> -- the small business size standard in effect prior to the adoption of the new size standard by the SBA in 2008. Since no new data has been acquired after the adoption of the new size standard, we provide the only data we have available which is based on data collected before the new size standard went into effect. For the census category of “Cellular and Other Wireless Telecommunications,” Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.<sup>59</sup> Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.<sup>60</sup> Thus, under this category and size standard, the majority of firms can be considered small.

18. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous

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<sup>54</sup> See AWS-1 and Broadband PCS Procedures Public Notice, 23 FCC Rcd 7496. Auction 78 also included an auction of Broadband PCS licenses.

<sup>55</sup> *Id.* at 23 FCC Rcd at 7521-22.

<sup>56</sup> See “Auction of AWS-1 and Broadband PCS Licenses Closes, Winning Bidders Announced for Auction 78, Down Payments Due September 9, 2008, FCC Forms 601 and 602 Due September 9, 2008, Final Payments Due September 23, 2008, Ten-Day Petition to Deny Period”, *Public Notice*, 23 FCC Rcd 12749-65 (2008).

<sup>57</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>58</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>59</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

<sup>60</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

calendar years.<sup>61</sup> For Block F, an additional small business size standard for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>62</sup> These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.<sup>63</sup> No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 “small” and “very small” business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.<sup>64</sup> On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.<sup>65</sup> On January 26, 2001, the Commission completed the auction of 422 C and F PCS licenses in Auction 35.<sup>66</sup> Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available

19. *Narrowband Personal Communications Service.* In 1994, the Commission conducted an auction for Narrowband PCS licenses. A second auction was also conducted later in 1994. For purposes of the first two Narrowband PCS auctions, “small businesses” were entities with average gross revenues for the prior three calendar years of \$40 million or less.<sup>67</sup> Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.<sup>68</sup> To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order.<sup>69</sup> A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for

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<sup>61</sup> See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

<sup>62</sup> See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶ 60.

<sup>63</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>64</sup> FCC News, “Broadband PCS, D, E and F Block Auction Closes,” No. 71744 (rel. January 14, 1997).

<sup>65</sup> See “C, D, E, and F Block Broadband PCS Auction Closes,” *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

<sup>66</sup> See “C and F Block Broadband PCS Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 2339 (2001).

<sup>67</sup> *Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS*, Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd 175, 196, para. 46 (1994).

<sup>68</sup> See “Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674,” *Public Notice*, PNWL 94-004 (rel. Aug. 2, 1994); “Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787,” *Public Notice*, PNWL 94-27 (rel. Nov. 9, 1994).

<sup>69</sup> *Amendment of the Commission’s Rules to Establish New Personal Communications Services, Narrowband PCS*, Second Report and Order and Second Further Notice of Proposed Rule Making, 15 FCC Rcd 10456, 10476, para. 40 (2000) (“*Narrowband PCS Second Report and Order*”).

the three preceding years of not more than \$40 million.<sup>70</sup> A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.<sup>71</sup> The SBA has approved these small business size standards.<sup>72</sup> A third auction was conducted in 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.<sup>73</sup> Three of these claimed status as a small or very small entity and won 311 licenses.

20. *Specialized Mobile Radio.* The Commission awards “small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.<sup>74</sup> The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.<sup>75</sup> The SBA has approved these small business size standards for the 900 MHz Service.<sup>76</sup> The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction was completed in 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels was conducted in 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.<sup>77</sup> A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.<sup>78</sup>

21. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began was conducted in 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard.<sup>79</sup> In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded.<sup>80</sup> Of the 22 winning bidders, 19 claimed “small

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<sup>70</sup> *Narrowband PCS Second Report and Order*, 15 FCC Rcd at 10476, para. 40.

<sup>71</sup> *Id.*

<sup>72</sup> *See Alvarez Letter 1998.*

<sup>73</sup> *See* “Narrowband PCS Auction Closes,” *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

<sup>74</sup> 47 C.F.R. § 90.814(b)(1).

<sup>75</sup> *Id.*

<sup>76</sup> *See* Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999. We note that, although a request was also sent to the SBA requesting approval for the small business size standard for 800 MHz, approval is still pending.

<sup>77</sup> *See* “Correction to Public Notice DA 96-586 ‘FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,’” *Public Notice*, 18 FCC Rcd 18367 (WTB 1996).

<sup>78</sup> *See* “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

<sup>79</sup> *See* “800 MHz Specialized Mobile Radio (SMR) Service General Category (851-854 MHz) and Upper Band (861-865 MHz) Auction Closes; Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 17162 (2000).

<sup>80</sup> *See*, “800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 1736 (2000).

business” status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

22. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1500 or fewer employees.<sup>81</sup> We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is approved by the SBA.

23. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.<sup>82</sup> A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (“BETRS”).<sup>83</sup> In the present context, we will use the SBA’s small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons.<sup>84</sup> There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

24. *Mobile Satellite Service Carriers.* Neither the Commission nor the U.S. Small Business Administration has developed a small business size standard specifically for mobile satellite service licensees. The appropriate size standard is therefore the SBA standard for Satellite Telecommunications, which provides that such entities are small if they have \$13.5 million or less in annual revenues.<sup>85</sup> Currently, the Commission’s records show that there are 31 entities authorized to provide voice and data MSS in the United States. The Commission does not have sufficient information to determine which, if any, of these parties are small entities. The Commission notes that small businesses are not likely to have the financial ability to become MSS system operators because of high implementation costs, including construction of satellite space stations and rocket launch, associated with satellite systems and services.

25. *220 MHz Radio Service – Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz Band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to Wireless Telecommunications Carriers (except Satellite).<sup>86</sup> This category provides that a small business is a wireless company employing no more than 1,500 persons.<sup>87</sup> The Commission

<sup>81</sup> See generally 13 C.F.R. § 121.201, NAICS code 517210.

<sup>82</sup> The service is defined in § 22.99 of the Commission’s Rules, 47 C.F.R. § 22.99.

<sup>83</sup> BETRS is defined in §§ 22.757 and 22.759 of the Commission’s Rules, 47 C.F.R. §§ 22.757 and 22.759.

<sup>84</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>85</sup> 13 C.F.R. § 121.201, North American Industry Classification System (“NAICS”) code 517410.

<sup>86</sup> *Id.*

<sup>87</sup> *Id.*

estimates that most such licensees are small businesses under the SBA's small business standard.

26. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the *220 MHz Third Report and Order*, the Commission adopted a small business size standard for defining “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>88</sup> This small business standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>89</sup> A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.<sup>90</sup> The SBA has approved these small size standards.<sup>91</sup> Auctions of Phase II licenses commenced on and closed in 1998.<sup>92</sup> In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.<sup>93</sup> Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.<sup>94</sup> A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.<sup>95</sup> In 2007, the Commission conducted a fourth auction of the 220 MHz licenses.<sup>96</sup> Bidding credits were offered to small businesses. A bidder with attributed average annual gross revenues that exceeded \$3 million and did not exceed \$15 million for the preceding three years (“small business”) received a 25 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$3 million for the preceding three years received a 35 percent discount on its winning bid (“very small business”). Auction 72, which offered 94 Phase II 220 MHz Service licenses, concluded in 2007.<sup>97</sup> In this auction, five winning bidders won a total of 76 licenses. Two winning bidders identified themselves as very small businesses won 56 of the 76 licenses. One of the winning bidders that

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<sup>88</sup> Amendment of Part 90 of the Commission's Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶¶ 291-295 (1997).

<sup>89</sup> *Id.* at 11068 ¶ 291.

<sup>90</sup> *Id.*

<sup>91</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>92</sup> See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

<sup>93</sup> See “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” *Public Notice*, 14 FCC Rcd 1085 (WTB 1999).

<sup>94</sup> See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

<sup>95</sup> See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

<sup>96</sup> See “Auction of Phase II 220 MHz Service Spectrum Scheduled for June 20, 2007, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures for Auction 72,” *Public Notice*, 22 FCC Rcd 3404 (2007).

<sup>97</sup> See “Auction of Phase II 220 MHz Service Spectrum Licenses Closes, Winning Bidders Announced for Auction 72, Down Payments due July 18, 2007, FCC Forms 601 and 602 due July 18, 2007, Final Payments due August 1, 2007, Ten-Day Petition to Deny Period,” *Public Notice*, 22 FCC Rcd 11573 (2007).

identified themselves as a small business won 5 of the 76 licenses won.

27. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite).<sup>98</sup> Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.<sup>99</sup> According to *Trends in Telephone Service* data, 434 carriers reported that they were engaged in wireless telephony.<sup>100</sup> Of these, an estimated 222 have 1,500 or fewer employees and 212 have more than 1,500 employees.<sup>101</sup> We have estimated that 222 of these are small under the SBA small business size standard.

28. *Air-Ground Radiotelephone Service.* The Commission has previously used the SBA's small business definition applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons.<sup>102</sup> There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and under that definition, we estimate that almost all of them qualify as small entities under the SBA definition. For purposes of assigning Air-Ground Radiotelephone Service licenses through competitive bidding, the Commission has defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$40 million.<sup>103</sup> A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.<sup>104</sup> These definitions were approved by the SBA.<sup>105</sup> In 2006, the Commission completed an auction of nationwide commercial Air-Ground Radiotelephone Service licenses in the 800 MHz band (Auction 65). Later in 2006, the auction closed with two winning bidders winning two Air-Ground Radiotelephone Services licenses. Neither of the winning bidders claimed small business status.

29. *Aviation and Marine Radio Services.* There are approximately 26,162 aviation, 34,555 marine (ship), and 3,296 marine (coast) licensees.<sup>106</sup> The Commission has not developed a small business size standard specifically applicable to all licensees. For purposes of this analysis, we will use the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite),

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<sup>98</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>99</sup> *Id.*

<sup>100</sup> "Trends in Telephone Service" at Table 5.3.

<sup>101</sup> "Trends in Telephone Service" at Table 5.3.

<sup>102</sup> 13 C.F.R. § 121.201, NAICS codes 517210.

<sup>103</sup> Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review—Amendment of Parts 1, 22, and 90 of the Commission's Rules, Amendment of Parts 1 and 22 of the Commission's Rules to Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service, WT Docket Nos. 03-103, 05-42, *Order on Reconsideration and Report and Order*, 20 FCC Rcd 19663, paras. 28–42 (2005).

<sup>104</sup> *Id.*

<sup>105</sup> See Letter from Hector V. Barreto, Administrator, SBA, to Gary D. Michaels, Deputy Chief, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, FCC (filed Sept. 19, 2005).

<sup>106</sup> Vessels that are not required by law to carry a radio and do not make international voyages or communications are not required to obtain an individual license. See Amendment of Parts 80 and 87 of the Commission's Rules to Permit Operation of Certain Domestic Ship and Aircraft Radio Stations Without Individual Licenses, *Report and Order*, WT Docket No. 96-82, 11 FCC Rcd 14849 (1996).

which is 1,500 or fewer employees.<sup>107</sup> We are unable to determine how many of those licensed fall under this standard. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 62,969 licensees that are small businesses under the SBA standard.<sup>108</sup> In 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For this auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.<sup>109</sup> Further, the Commission made available Automated Maritime Telecommunications System (“AMTS”) licenses in Auctions 57 and 61.<sup>110</sup> Winning bidders could claim status as a very small business or a very small business. A very small business for this service is defined as an entity with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years, and a small business is defined as an entity with attributed average annual gross revenues of more than \$3 million but less than \$15 million for the preceding three years.<sup>111</sup> Three of the winning bidders in Auction 57 qualified as small or very small businesses, while three winning entities in Auction 61 qualified as very small businesses.

30. *Fixed Microwave Services.* Fixed microwave services include common carrier,<sup>112</sup> private operational-fixed,<sup>113</sup> and broadcast auxiliary radio services.<sup>114</sup> At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.<sup>115</sup> The Commission does not have data specifying the number of these licensees that have no more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of fixed microwave service licensees that would

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<sup>107</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>108</sup> A licensee may have a license in more than one category.

<sup>109</sup> Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853 (1998).

<sup>110</sup> See “Automated Maritime Telecommunications System Spectrum Auction Scheduled for September 15, 2004, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Auction Procedures,” *Public Notice*, 19 FCC Rcd 9518 (WTB 2004); “Auction of Automated Maritime Telecommunications System Licenses Scheduled for August 3, 2005, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Auction Procedures for Auction No. 61,” *Public Notice*, 20 FCC Rcd 7811 (WTB 2005).

<sup>111</sup> 47 C.F.R. § 80.1252.

<sup>112</sup> See 47 C.F.R. Part 101, Subparts C and I.

<sup>113</sup> See 47 C.F.R. Part 101, Subparts C and H.

<sup>114</sup> Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission’s Rules. See 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

<sup>115</sup> 13 C.F.R. § 121.201, NAICS code 517210.

qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer common carrier fixed licensees and 61,670 or fewer private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies proposed herein. We note, however, that the common carrier microwave fixed licensee category includes some large entities.

31. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.<sup>116</sup> The auction of the 986 LMDS licenses began and closed in 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>117</sup> An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>118</sup> The SBA has approved these small business size standards in the context of LMDS auctions.<sup>119</sup> There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. In 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small businesses winning that won 119 licenses.

32. *Offshore Radiotelephone Service.* This service operates on several ultra high frequencies ("UHF") television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.<sup>120</sup> There is presently 1 licensee in this service. We do not have information whether that licensee would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.<sup>121</sup> Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.<sup>122</sup>

33. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.<sup>123</sup> An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>124</sup> The SBA has approved these small business size standards.<sup>125</sup> The auction of the 2,173 39 GHz licenses,

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<sup>116</sup> See Local Multipoint Distribution Service, *Second Report and Order*, 12 FCC Rcd 12545 (1997).

<sup>117</sup> *Id.*

<sup>118</sup> See *id.*

<sup>119</sup> See Letter to Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998) (*Alvarez to Phythyon Letter 1998*).

<sup>120</sup> This service is governed by Subpart I of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-22.1037.

<sup>121</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>122</sup> *Id.*

<sup>123</sup> See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183, *Report and Order*, 63 Fed. Reg. 6079 (Feb. 6, 1998).

<sup>124</sup> *Id.*

<sup>125</sup> See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

began and closed in 2000. The 18 bidders who claimed small business status won 849 licenses.

34. *218-219 MHz Service.* The first auction of 218-219 MHz (previously referred to as the Interactive and Video Data Service or IVDS) spectrum resulted in 178 entities winning licenses for 594 Metropolitan Statistical Area (“MSAs”).<sup>126</sup> Of the 594 licenses, 567 were won by 167 entities qualifying as a small business. For that auction, the Commission defined a small business entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.<sup>127</sup> In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not exceeding \$15 million for the preceding three years.<sup>128</sup> A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not exceeding \$3 million for the preceding three years.<sup>129</sup> The SBA has approved of these definitions.<sup>130</sup> A subsequent auction is not yet scheduled. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this analysis that in future auctions, many, and perhaps most, of the licenses may be awarded to small businesses.

35. *Incumbent 24 GHz Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of Wireless Telecommunications Carriers (except Satellite). This category provides that such a company is small if it employs no more than 1,500 persons.<sup>131</sup> The broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent<sup>132</sup> and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. There are approximately 122 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 122 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies proposed herein.

36. *Future 24 GHz Licensees.* With respect to new applicants in the 24 GHz band, we have

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<sup>126</sup> See “Interactive Video and Data Service (IVDS) Applications Accepted for Filing,” *Public Notice*, 9 FCC Rcd 6227 (1994).

<sup>127</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding, PP Docket No. 93-253, *Fourth Report and Order*, 59 Fed. Reg. 24947 (May 13, 1994).

<sup>128</sup> Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, *Report and Order and Memorandum Opinion and Order*, 64 Fed. Reg. 59656 (Nov. 3, 1999).

<sup>129</sup> Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, *Report and Order and Memorandum Opinion and Order*, 64 Fed. Reg. 59656 (Nov. 3, 1999).

<sup>130</sup> See *Alvarez to Phythyon Letter 1998*.

<sup>131</sup> 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

<sup>132</sup> Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not exceeding of \$15 million.<sup>133</sup> “Very small business” in the 24 GHz band is defined as an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.<sup>134</sup> The SBA has approved these definitions.<sup>135</sup> The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held.

37. *1670–1675 MHz Services.* An auction for one license in the 1670–1675 MHz band was conducted in 2003. One license was awarded. The winning bidder was not a small entity.

38. *3650–3700 MHz band.* In March 2005, the Commission released a *Report and Order and Memorandum Opinion and Order* that provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (*i.e.*, 3650–3700 MHz). As of September 2009, more than 1,080 licenses have been granted and more than 4,870 sites have been registered. The Commission has not developed a definition of small entities applicable to 3650–3700 MHz band nationwide, non-exclusive licensees. However, we estimate that the majority of these licensees are Internet Access Service Providers (ISPs) and that most of those licensees are small businesses.

39. *Satellite Telecommunications and All Other Telecommunications.* These two economic census categories address the satellite industry. The first category has a small business size standard of \$15 million or less in average annual receipts, under SBA rules.<sup>136</sup> The second has a size standard of \$25 million or less in annual receipts.<sup>137</sup> The most current Census Bureau data in this context, however, are from the (last) economic census of 2002, and we will use those figures to gauge the prevalence of small businesses in these categories.<sup>138</sup>

40. The category of Satellite Telecommunications “comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”<sup>139</sup> For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.<sup>140</sup> Of this total, 307 firms had annual receipts

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<sup>133</sup> Amendments to Parts 1,2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16967 (2000); *see also* 47 C.F.R. § 101.538(a)(2).

<sup>134</sup> Amendments to Parts 1,2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16967 (2000); *see also* 47 C.F.R. § 101.538(a)(1).

<sup>135</sup> *See* Letter from Gary M. Jackson, Assistant Administrator, SBA, to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, WTB, FCC (July 28, 2000).

<sup>136</sup> 13 C.F.R. § 121.201, NAICS code 517410.

<sup>137</sup> 13 C.F.R. § 121.201, NAICS code 517919.

<sup>138</sup> 13 C.F.R. § 121.201, NAICS codes 517410 and 517910 (2002).

<sup>139</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517410 Satellite Telecommunications,” <http://www.census.gov/naics/2007/def/ND517410.HTM> (last visited Oct. 21, 2009).

<sup>140</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” tbl. 4, NAICS code 517410 (rel. Nov. 2005).

of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.<sup>141</sup> Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

41. The second category of All Other Telecommunications comprises, *inter alia*, “establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.”<sup>142</sup> For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.<sup>143</sup> Of this total, 303 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.<sup>144</sup> Consequently, we estimate that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

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

42. There are no proposed reporting or recordkeeping requirements for small entities. As noted, we are proposing to require a CMRS carrier receiving a reasonable request to provide automatic roaming on reasonable and not unreasonably discriminatory terms and conditions. The general presumption of reasonableness, however, is rebuttable, and parties may choose to bring roaming disputes to the Commission for resolution.

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

43. 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 and reporting requirements under the rule for such 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 such small entities.”<sup>145</sup>

44. In the previous *2007 Report and Order*, the Commission clarified that automatic roaming is a common carrier obligation for CMRS carriers, requiring them to provide roaming services to other carriers upon reasonable request and on a just, reasonable, and non-discriminatory basis pursuant to Sections 201 and 202 of the Communications Act. In adopting this requirement and promulgating the

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<sup>141</sup> *Id.* An additional 38 firms had annual receipts of \$25 million or more.

<sup>142</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517919 All Other Telecommunications,” <http://www.census.gov/naics/2007/def/ND517919.HTM#N517919> (last visited Oct. 21, 2009).

<sup>143</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” tbl. 4, NAICS code 517910 (issued Nov. 2005).

<sup>144</sup> *Id.* An additional 14 firms had annual receipts of \$25 million or more.

<sup>145</sup> 5 U.S.C. § 603(c)(1) – (c)(4).

related rule, the Commission determined that, when a reasonable request is made by a technologically compatible CMRS carrier, a host CMRS carrier is obligated under Sections 332(c)(1)(B) and 201(a) to provide automatic roaming on a just, reasonable, and non-discriminatory basis to the requesting carrier outside of the requesting carrier's home market.

45. As noted, in the Order on Reconsideration, we eliminate the home roaming exclusion adopted in 2007. Instead, we will treat requests for automatic roaming in home markets under the same framework as other requests for automatic roaming. Thus, we will generally presume that such a request is reasonable in the first instance if the requesting CMRS carrier's network is technologically compatible with the would-be host carrier's network, and we will require that a CMRS carrier receiving a reasonable request to provide automatic roaming to the requesting carrier on reasonable and not unreasonably discriminatory terms and conditions. Finally, this presumption of reasonableness is rebuttable, and parties may choose to bring roaming disputes to the Commission for resolution.

46. Every carrier, including small and nationwide carriers, relies on roaming to fill-in gaps in its network coverage. We find that the modifications above strike an appropriate balance between the interests of existing carriers with robust networks and those of other carriers, including new market entrants and smaller, regional or rural carriers by offering both groups the flexibility and sufficient time to plan their service roll out in their license areas. With this decision, we continue to strive to adopt policies that balance competing interests, including -- promoting competition among multiple carriers, ensuring that consumers have access to seamless coverage nationwide, and providing incentives for all carriers to invest and innovate by using available spectrum and constructing wireless network facilities on a widespread basis.

47. With respect to Sprint Nextel's petition for reconsideration, we reaffirm the decision to extend automatic roaming obligations to push-to-talk (PTT) services, and note the Commission has previously addressed the steps taken to minimize the impact on small businesses in this context in the FRFA adopted in conjunction with the *2007 Report and Order*.<sup>146</sup>

48. **Report to Congress:** The Commission will send a copy of the Order on Reconsideration, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.<sup>147</sup> In addition, the Commission will send a copy of the Order on Reconsideration, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Order on Reconsideration and this FRFA (or summaries thereof) will also be published in the Federal Register.

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<sup>146</sup> See *2007 Report and Order*, 22 FCC Rcd at 15854-864, Appendix C.

<sup>147</sup> See 5 U.S.C. 801(a)(1)(A).

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**APPENDIX D****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 Second Further Notice of Proposed Rulemaking (“Second Further Notice”) 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 Second Further Notice provided in the item. The Commission will send a copy of the Second Further Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (“SBA”).<sup>2</sup> In addition, the Second Further Notice 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. In the Second Further Notice, the Commission invites interested parties to refresh the record pertaining to the *2007 Roaming Further Notice*. Since the *2007 Roaming Further Notice*, there have been advancements in technology and developments in the industry that may have affected parties’ positions on the issues raised in the *2007 Roaming Further Notice*. Accordingly, the Commission requests that parties refresh the record in this proceeding to reflect the effects of these developments. The Commission asks parties to include any new information that may be relevant to the Commission’s consideration of what action, if any, may be appropriate in this proceeding. In addition, as the *2007 Roaming Further Notice* was limited to seeking comment on the obligations of CMRS carriers that also provide non-CMRS data services, the Commission takes this opportunity to seek comment on whether to impose similar obligations on other mobile data service providers, whether they offer CMRS or not. For these reasons, the Commission seeks further comment on whether it would be in the public interest to extend roaming obligations to non-interconnected services, including broadband data.

**B. Legal Basis**

3. The authority for the actions taken in this Second Further Notice is contained in Sections 1, 4(i), 201, 202, 251(a), 253, 303(r), and 332(c)(1)(B) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201, 202, 251(a), 253, 303(r), and 332(c)(1)(B).

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

4. 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

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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> *See* 5 U.S.C. § 603(a).

<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 (continued....)”

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>

5. In the following paragraphs, the Commission further describes and estimates the number of small entity licensees that may be affected by the rules the Commission proposes in this Second Further Notice. The Commission’s extension of the automatic roaming obligation to non-interconnected services and features, including those that constitute information services, affects any CMRS carrier offering such services.

6. 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.

7. *Wireless Telecommunications Carriers (except Satellite)*. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.<sup>7</sup> Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.”<sup>8</sup> Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.<sup>9</sup> Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year.<sup>10</sup> Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.<sup>11</sup> For the category of Cellular and Other Wireless Telecommunications, data for 2002 show that there were 1,397 firms that operated for the entire year.<sup>12</sup>

(Continued from previous page) \_\_\_\_\_  
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> U.S. Census Bureau, 2007 NAICS Definitions, “517210 Wireless Telecommunications Categories (Except Satellite)”;  
<http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

<sup>8</sup> U.S. Census Bureau, 2002 NAICS Definitions, “517211 Paging”;  
<http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”;  
<http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

<sup>9</sup> 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

<sup>10</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

<sup>11</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

<sup>12</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.<sup>13</sup> Thus, we estimate that the majority of wireless firms are small.

8. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of "Paging"<sup>14</sup> and "Cellular and Other Wireless Telecommunications."<sup>15</sup> Under both categories, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.<sup>16</sup> Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.<sup>17</sup> Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.<sup>18</sup> Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.<sup>19</sup> Thus, under this second category and size standard, the majority of firms can, again, be considered small.

9. *Cellular Licensees.* The SBA has developed a small business size standard for small businesses in the category "Cellular and Other Wireless Telecommunications."<sup>20</sup> Under that SBA category, a business is small if it has 1,500 or fewer employees.<sup>21</sup> For the census category of "Cellular and Other Wireless Telecommunications," Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.<sup>22</sup> Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.<sup>23</sup> Thus, under this category and size standard, the majority of firms can be considered small.

10. *Broadband Personal Communications Service.* The broadband Personal Communications

<sup>13</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

<sup>14</sup> 13 C.F.R. § 121.201, NAICS code 517211.

<sup>15</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>16</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517211 (issued Nov. 2005).

<sup>17</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

<sup>18</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

<sup>19</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

<sup>20</sup> 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517212.

<sup>21</sup> *Id.*

<sup>22</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

<sup>23</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>24</sup> For Block F, an additional small business size standard for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>25</sup> These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.<sup>26</sup> No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the C Block auctions. A total of 93 “small” and “very small” business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.<sup>27</sup> In 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.<sup>28</sup>

11. In 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction 35. Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In 2005, the Commission completed an auction of 188 C block licenses and 21 F block licenses in Auction 58. There were 24 winning bidders for 217 licenses.<sup>29</sup> Of the 24 winning bidders, 16 claimed small business status and won 156 licenses. In 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction 71.<sup>30</sup> Of the 14 winning bidders, six were designated entities.<sup>31</sup> In 2008, the Commission completed an auction of 20 Broadband PCS licenses in the C, D, E and F block licenses in Auction 78.<sup>32</sup>

12. *Narrowband Personal Communications Service.* In 1994, the Commission conducted an auction for Narrowband PCS licenses. A second auction was also conducted later in 1994. For purposes of the first two Narrowband PCS auctions, “small businesses” were entities with average gross revenues

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<sup>24</sup> See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

<sup>25</sup> See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶ 60.

<sup>26</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>27</sup> FCC News, “Broadband PCS, D, E and F Block Auction Closes,” No. 71744 (rel. January 14, 1997).

<sup>28</sup> See “C, D, E, and F Block Broadband PCS Auction Closes,” *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

<sup>29</sup> See “Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58,” *Public Notice*, 20 FCC Rcd 3703 (2005).

<sup>30</sup> See “Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71,” *Public Notice*, 22 FCC Rcd 9247 (2007).

<sup>31</sup> *Id.*

<sup>32</sup> See Auction of AWS-1 and Broadband PCS Licenses Rescheduled For August 13, 3008, Notice of Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures For Auction 78, *Public Notice*, 23 FCC Rcd 7496 (2008) (“AWS-1 and Broadband PCS Procedures Public Notice”).

for the prior three calendar years of \$40 million or less.<sup>33</sup> Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.<sup>34</sup> To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order.<sup>35</sup> A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.<sup>36</sup> A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.<sup>37</sup> The SBA has approved these small business size standards.<sup>38</sup> A third auction was conducted in 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.<sup>39</sup> Three of these claimed status as a small or very small entity and won 311 licenses.

13. *Specialized Mobile Radio.* The Commission awards “small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.<sup>40</sup> The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.<sup>41</sup> The SBA has approved these small business size standards for the 900 MHz Service.<sup>42</sup> The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR was completed in 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels was conducted in 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million

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<sup>33</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, *Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 175, 196 ¶ 46 (1994).

<sup>34</sup> See “Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674,” *Public Notice*, PNWL 94-004 (rel. Aug. 2, 1994); “Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787,” *Public Notice*, PNWL 94-27 (rel. Nov. 9, 1994).

<sup>35</sup> Amendment of the Commission’s Rules to Establish New Personal Communications Services, Narrowband PCS, *Second Report and Order and Second Further Notice of Proposed Rule Making*, 15 FCC Rcd 10456, 10476 ¶ 40 (2000).

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>39</sup> See “Narrowband PCS Auction Closes,” *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

<sup>40</sup> 47 C.F.R. § 90.814(b)(1).

<sup>41</sup> *Id.*

<sup>42</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.<sup>43</sup> A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.<sup>44</sup>

14. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels was conducted in 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard.<sup>45</sup> In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded<sup>46</sup>. Of the 22 winning bidders, 19 claimed “small business” status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

15. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1500 or fewer employees.<sup>47</sup> We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is approved by the SBA.

16. *AWS Services (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3))*. For the AWS-1 bands,<sup>48</sup> the Commission has defined a “small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a “very small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. For AWS-2 and AWS-3, although we do not know for certain which entities are likely to apply for these frequencies, we note that the AWS-1 bands are comparable to those used for cellular service and personal communications service. The Commission has not yet adopted size standards for the AWS-2 or AWS-3 bands but proposes to treat both AWS-2 and AWS-3 similarly to broadband PCS service and AWS-1 service due to the comparable capital requirements and other factors, such as issues involved in relocating incumbents and developing markets, technologies, and services.<sup>49</sup>

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<sup>43</sup> See “Correction to Public Notice DA 96-586 ‘FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,’” *Public Notice*, 18 FCC Rcd 18367 (WTB 1996).

<sup>44</sup> See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

<sup>45</sup> See “800 MHz Specialized Mobile Radio (SMR) Service General Category (851-854 MHz) and Upper Band (861-865 MHz) Auction Closes; Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 17162 (2000).

<sup>46</sup> See, “800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 1736 (2000).

<sup>47</sup> See generally 13 C.F.R. § 121.201, NAICS code 517210.

<sup>48</sup> The service is defined in section 90.1301 *et seq.* of the Commission’s Rules, 47 C.F.R. § 90.1301 *et seq.*

<sup>49</sup> See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Report and Order*, 18 FCC Rcd 25162, App. B (2003), modified by Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, Order on Reconsideration, 20 FCC Rcd 14058, App. C (2005); Service Rules for Advanced Wireless Services in the 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz (continued....)

17. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.<sup>50</sup> A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (“BETRS”).<sup>51</sup> In the present context, we will use the SBA’s small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons.<sup>52</sup> There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

18. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses in the 2305-2320 MHz and 2345-2360 MHz bands. The Commission defined “small business” for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a “very small business” as an entity with average gross revenues of \$15 million for each of the three preceding years.<sup>53</sup> The SBA has approved these definitions.<sup>54</sup> The Commission auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity.

19. *220 MHz Radio Service – Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz Band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to Wireless Telecommunications Carriers (except Satellite).<sup>55</sup> This category provides that a small business is a wireless company employing no more than 1,500 persons.<sup>56</sup> The Commission estimates that most such licensees are small businesses under the SBA’s small business standard.

20. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In

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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, 02-353, *Notice of Proposed Rulemaking*, 19 FCC Rcd 19263, App. B (2005); Service Rules for Advanced Wireless Services in the 2155–2175 MHz Band, WT Docket No. 07-195, *Notice of Proposed Rulemaking*, 22 FCC Rcd 17035, App. (2007).

<sup>50</sup> The service is defined in § 22.99 of the Commission’s Rules, 47 C.F.R. § 22.99.

<sup>51</sup> BETRS is defined in §§ 22.757 and 22.759 of the Commission’s Rules, 47 C.F.R. §§ 22.757 and 22.759.

<sup>52</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>53</sup> Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service (WCS), *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

<sup>54</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>55</sup> *Id.*

<sup>56</sup> 13 C.F.R. § 121.201, NAICS code 517212.

the *220 MHz Third Report and Order*, the Commission adopted a small business size standard for defining “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>57</sup> This small business standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>58</sup> A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.<sup>59</sup> The SBA has approved these small size standards.<sup>60</sup> Auctions of Phase II licenses commenced on and closed in 1998.<sup>61</sup> In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.<sup>62</sup> Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.<sup>63</sup> A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.<sup>64</sup> In 2007, the Commission conducted a fourth auction of the 220 MHz licenses.<sup>65</sup> Bidding credits were offered to small businesses. A bidder with attributed average annual gross revenues that exceeded \$3 million and did not exceed \$15 million for the preceding three years (“small business”) received a 25 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$3 million for the preceding three years received a 35 percent discount on its winning bid (“very small business”). Auction 72, which offered 94 Phase II 220 MHz Service licenses, concluded in 2007.<sup>66</sup> In this auction, five winning bidders won a total of 76 licenses. Two winning bidders identified themselves as very small businesses won 56 of the 76 licenses. One of the winning bidders that identified themselves as a small business won 5 of the 76 licenses won.

21. *700 MHz Guard Band Licenses.* In the *700 MHz Guard Band Order*, the Commission

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<sup>57</sup> Amendment of Part 90 of the Commission’s Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶¶ 291-295 (1997).

<sup>58</sup> *Id.* at 11068 ¶ 291.

<sup>59</sup> *Id.*

<sup>60</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998 (*Alvarez to Phythyon Letter 1998*).

<sup>61</sup> See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

<sup>62</sup> See “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” *Public Notice*, 14 FCC Rcd 1085 (WTB 1999).

<sup>63</sup> See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

<sup>64</sup> See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

<sup>65</sup> See “Auction of Phase II 220 MHz Service Spectrum Scheduled for June 20, 2007, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures for Auction 72,” *Public Notice*, 22 FCC Rcd 3404 (2007).

<sup>66</sup> See “Auction of Phase II 220 MHz Service Spectrum Licenses Closes, Winning Bidders Announced for Auction 72, Down Payments due July 18, 2007, FCC Forms 601 and 602 due July 18, 2007, Final Payments due August 1, 2007, Ten-Day Petition to Deny Period,” *Public Notice*, 22 FCC Rcd 11573 (2007).

adopted size standards for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>67</sup> A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.<sup>68</sup> Additionally, a “very small business” is 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>69</sup> SBA approval of these definitions is not required.<sup>70</sup> In 2000, the Commission conducted an auction of 52 Major Economic Area (“MEA”) licenses.<sup>71</sup> Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced and closed in 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.<sup>72</sup>

22. *Upper 700 MHz Band Licenses.* In the *700 MHz Second Report and Order*, the Commission revised its rules regarding Upper 700 MHz licenses.<sup>73</sup> On January 24, 2008, the Commission 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>74</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.

23. *Lower 700 MHz Band Licenses.* The Commission adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding

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<sup>67</sup> Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, *Second Report and Order*, 15 FCC Rcd 5299 (2000). Service rules were amended in 2007, but no changes were made to small business size categories. See Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, 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 Telephones, 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 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, 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, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 8064 (2007).

<sup>68</sup> *Id.* at 5343 ¶ 108.

<sup>69</sup> *Id.*

<sup>70</sup> *Id.* At 5343 ¶ 108 n.246 (for the 746-764 MHz and 776-704 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain Small Business Administration approval before adopting small business size standards).

<sup>71</sup> See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 18026 (2000).

<sup>72</sup> See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 4590 (WTB 2001).

<sup>73</sup> *700 MHz Second Report and Order*, 22 FCC Rcd 15289.

<sup>74</sup> See Auction of 700 MHz Band Licenses Closes, *Public Notice*, 23 FCC Rcd 4572 (WTB 2008).

credits.<sup>75</sup> The Commission has 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>76</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>77</sup> Additionally, the Lower 700 MHz Band has a third category of small business status that may be claimed for Metropolitan/Rural Service Area (MSA/RSA) licenses. The third category is 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>78</sup> The SBA has approved these small size standards.<sup>79</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)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.<sup>80</sup> A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 CMA licenses.<sup>81</sup> Seventeen winning bidders claimed small or very small business status and won sixty licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.<sup>82</sup>

24. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite).<sup>83</sup> Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.<sup>84</sup> According to *Trends in Telephone Service* data, 434 carriers reported that they were engaged in wireless telephony.<sup>85</sup> Of these, an estimated 222 have 1,500 or fewer employees and 212 have more than 1,500 employees.<sup>86</sup> We have estimated that 222 of these are small under the SBA small business size standard.

25. *Air-Ground Radiotelephone Service.* The Commission has previously used the SBA's small business definition applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity

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<sup>75</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>76</sup> *Id.* at 1087-88 ¶ 172.

<sup>77</sup> *Id.*

<sup>78</sup> *Id.* at 1088 ¶ 173.

<sup>79</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

<sup>80</sup> See "Lower 700 MHz Band Auction Closes," *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

<sup>81</sup> See "Lower 700 MHz Band Auction Closes," *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

<sup>82</sup> *Id.*

<sup>83</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>84</sup> *Id.*

<sup>85</sup> "Trends in Telephone Service" at Table 5.3.

<sup>86</sup> "Trends in Telephone Service" at Table 5.3.

employing no more than 1,500 persons.<sup>87</sup> There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and under that definition, we estimate that almost all of them qualify as small entities under the SBA definition. For purposes of assigning Air-Ground Radiotelephone Service licenses through competitive bidding, the Commission has defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$40 million.<sup>88</sup> A “very small business” is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.<sup>89</sup> These definitions were approved by the SBA.<sup>90</sup> In 2006, the Commission completed an auction of nationwide commercial Air-Ground Radiotelephone Service licenses in the 800 MHz band (Auction 65). Later in 2006, the auction closed with two winning bidders winning two Air-Ground Radiotelephone Services licenses. Neither of the winning bidders claimed small business status.

26. *Aviation and Marine Radio Services.* There are approximately 26,162 aviation, 34,555 marine (ship), and 3,296 marine (coast) licensees.<sup>91</sup> The Commission has not developed a small business size standard specifically applicable to all licensees. For purposes of this analysis, we will use the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.<sup>92</sup> We are unable to determine how many of those licensed fall under this standard. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 62,969 licensees that are small businesses under the SBA standard.<sup>93</sup> In 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For this auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.<sup>94</sup> Further, the Commission made available

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<sup>87</sup> 13 C.F.R. § 121.201, NAICS codes 517210.

<sup>88</sup> Amendment of Part 22 of the Commission’s Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review—Amendment of Parts 1, 22, and 90 of the Commission’s Rules, Amendment of Parts 1 and 22 of the Commission’s Rules to Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service, WT Docket Nos. 03-103, 05-42, *Order on Reconsideration and Report and Order*, 20 FCC Rcd 19663, paras. 28–42 (2005).

<sup>89</sup> *Id.*

<sup>90</sup> See Letter from Hector V. Barreto, Administrator, SBA, to Gary D. Michaels, Deputy Chief, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, FCC (filed Sept. 19, 2005).

<sup>91</sup> Vessels that are not required by law to carry a radio and do not make international voyages or communications are not required to obtain an individual license. See Amendment of Parts 80 and 87 of the Commission’s Rules to Permit Operation of Certain Domestic Ship and Aircraft Radio Stations Without Individual Licenses, *Report and Order*, WT Docket No. 96-82, 11 FCC Rcd 14849 (1996).

<sup>92</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>93</sup> A licensee may have a license in more than one category.

<sup>94</sup> Amendment of the Commission’s Rules Concerning Maritime Communications, PR Docket No. 92-257, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853 (1998).

Automated Maritime Telecommunications System (“AMTS”) licenses in Auctions 57 and 61.<sup>95</sup> Winning bidders could claim status as a very small business or a small business. A very small business for this service is defined as an entity with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years, and a small business is defined as an entity with attributed average annual gross revenues of more than \$3 million but less than \$15 million for the preceding three years.<sup>96</sup> Three of the winning bidders in Auction 57 qualified as small or very small businesses, while three winning entities in Auction 61 qualified as very small businesses.

27. *Fixed Microwave Services.* Fixed microwave services include common carrier,<sup>97</sup> private-operational fixed,<sup>98</sup> and broadcast auxiliary radio services.<sup>99</sup> At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.<sup>100</sup> The Commission does not have data specifying the number of these licensees that have no more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA’s small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer common carrier fixed licensees and 61,670 or fewer private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies proposed herein. We note, however, that the common carrier microwave fixed licensee category includes some large entities.

28. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.<sup>101</sup> The auction of the 986 LMDS- licenses began and closed in 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>102</sup> An additional small

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<sup>95</sup> See “Automated Maritime Telecommunications System Spectrum Auction Scheduled for September 15, 2004, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Auction Procedures,” *Public Notice*, 19 FCC Rcd 9518 (WTB 2004); “Auction of Automated Maritime Telecommunications System Licenses Scheduled for August 3, 2005, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Auction Procedures for Auction No. 61,” *Public Notice*, 20 FCC Rcd 7811 (WTB 2005).

<sup>96</sup> 47 C.F.R. § 80.1252.

<sup>97</sup> See 47 C.F.R. Part 101, Subparts C and I.

<sup>98</sup> See 47 C.F.R. Part 101, Subparts C and H.

<sup>99</sup> Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission’s Rules. See 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

<sup>100</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>101</sup> See Local Multipoint Distribution Service, *Second Report and Order*, 12 FCC Rcd 12545 (1997).

<sup>102</sup> *Id.*

business size standard for “very small business” was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>103</sup> The SBA has approved these small business size standards in the context of LMDS auctions.<sup>104</sup> There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. In 1999, the Commission re-auctioned 161 licenses; were 32 small and very small businesses winning that won 119 licenses.

29. *Offshore Radiotelephone Service.* This service operates on several ultra high frequencies (“UHF”) television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.<sup>105</sup> There is presently 1 licensee in this service. We do not have information whether that licensee would qualify as small under the SBA’s small business size standard for Wireless Telecommunications Carriers (except Satellite) services.<sup>106</sup> Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.<sup>107</sup>

30. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.<sup>108</sup> An additional size standard for “very small business” is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>109</sup> The SBA has approved these small business size standards.<sup>110</sup> The auction of the 2,173 39 GHz licenses began and closed in 2000. The 18 bidders who claimed small business status won 849 licenses. -

31. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 178 entities winning licenses for 594 Metropolitan Statistical Area (“MSAs”). Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.<sup>111</sup> In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not exceeding \$15 million for the

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<sup>103</sup> See *id.*

<sup>104</sup> See Letter to Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998).

<sup>105</sup> This service is governed by Subpart I of Part 22 of the Commission’s rules. See 47 C.F.R. §§ 22.1001-22.1037.

<sup>106</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>107</sup> *Id.*

<sup>108</sup> See Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183, *Report and Order*, 63 Fed. Reg. 6079 (Feb. 6, 1998).

<sup>109</sup> *Id.*

<sup>110</sup> See Letter to Kathleen O’Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

<sup>111</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding, PP Docket No. 93-253, *Fourth Report and Order*, 59 Fed. Reg. 24947 (May 13, 1994).

preceding three years.<sup>112</sup> A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not exceeding \$3 million for the preceding three years.<sup>113</sup> The SBA has approved of these definitions.<sup>114</sup> A subsequent auction is not yet scheduled. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this analysis that in future auctions, many, and perhaps most, of the licenses may be awarded to small businesses.

32. *Incumbent 24 GHz Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of Wireless Telecommunications Carriers (except Satellite). This category provides that such a company is small if it employs no more than 1,500 persons.<sup>115</sup> The broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent<sup>116</sup> and TRW, Inc. It is our understanding that Teligent and its related companies have fewer than 1,500 employees, though this may change in the future. TRW is not a small entity. There are approximately 122 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 122 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies proposed herein.

33. *Future 24 GHz Licensees.* With respect to new applicants in the 24 GHz band, we have defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.<sup>117</sup> “Very small business” in the 24 GHz band is defined as an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.<sup>118</sup> The SBA has approved these definitions.<sup>119</sup> The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held.

34. *1670–1675 MHz Services.* An auction for one license in the 1670–1675 MHz band was conducted in 2003. One license was awarded. The winning bidder was not a small entity.

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<sup>112</sup> Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, *Report and Order and Memorandum Opinion and Order*, 64 Fed. Reg. 59656 (Nov. 3, 1999).

<sup>113</sup> Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, *Report and Order and Memorandum Opinion and Order*, 64 Fed. Reg. 59656 (Nov. 3, 1999).

<sup>114</sup> See *Alvarez to Phythyon Letter 1998*.

<sup>115</sup> 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

<sup>116</sup> Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

<sup>117</sup> Amendments to Parts 1,2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(2).

<sup>118</sup> Amendments to Parts 1,2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(1).

<sup>119</sup> See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

35. *3650–3700 MHz band.* In March 2005, the Commission released a *Report and Order and Memorandum Opinion and Order* that provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (*i.e.*, 3650–3700 MHz). As of September 2009, more than 1,080 licenses have been granted and more than 4,870 sites have been registered. The Commission has not developed a definition of small entities applicable to 3650–3700 MHz band nationwide, non-exclusive licensees. However, we estimate that the majority of these licensees are Internet Access Service Providers (ISPs) and that most of those licensees are small businesses.

36. *Internet Service Providers.* The 2007 Economic Census places these firms, whose services might include voice over Internet protocol (VoIP), in either of two categories, depending on whether the service is provided over the provider’s own telecommunications facilities (*e.g.*, cable and DSL ISPs), or over client-supplied telecommunications connections (*e.g.*, dial-up ISPs). The former are within the category of Wired Telecommunications Carriers,<sup>120</sup> which has an SBA small business size standard of 1,500 or fewer employees.<sup>121</sup> The latter are within the category of All Other Telecommunications,<sup>122</sup> which has a size standard of annual receipts of \$25 million or less.<sup>123</sup> The most current Census Bureau data for all such firms, however, are the 2002 data for the previous census category called Internet Service Providers.<sup>124</sup> That category had a small business size standard of \$21 million or less in annual receipts, which was revised in late 2005 to \$23 million. The 2002 data show that there were 2,529 such firms that operated for the entire year.<sup>125</sup> Of those, 2,437 firms had annual receipts of under \$10 million, and an additional 47 firms had receipts of between \$10 million and \$24, 999,999.<sup>126</sup> Consequently, we estimate that the majority of ISP firms are small entities.

37. The ISP industry has changed dramatically since 2002. The 2002 data cited above may therefore include entities that no longer provide Internet access service and may exclude entities that now provide such service. To ensure that this IRFA describes the universe of small entities that our action might affect, we discuss in turn several different types of entities that might be providing Internet access service.

38. We note that, although we have no specific information on the number of small entities that provide Internet access service over unlicensed spectrum, we include these entities in our IRFA.

39. *Satellite Telecommunications and All Other Telecommunications.* These two economic census categories address the satellite industry. The first category has a small business size standard of

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<sup>120</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers”; <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

<sup>121</sup> 13 C.F.R. § 121.201, NAICS code 517110 (updated for inflation in 2008).

<sup>122</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517919 All Other Telecommunications”; <http://www.census.gov/naics/2007/def/ND517919.HTM#N517919>.

<sup>123</sup> 13 C.F.R. § 121.201, NAICS code 517919 (updated for inflation in 2008).

<sup>124</sup> U.S. Census Bureau, “2002 NAICS Definitions: 518111 Internet Service Providers”; <http://www.census.gov/epcd/naics02/def/NDEF518.HTM>.

<sup>125</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 518111 (issued Nov. 2005).

<sup>126</sup> An additional 45 firms had receipts of \$25 million or more.

\$15 million or less in average annual receipts, under SBA rules.<sup>127</sup> The second has a size standard of \$25 million or less in annual receipts.<sup>128</sup> The most current Census Bureau data in this context, however, are from the (last) economic census of 2002, and we will use those figures to gauge the prevalence of small businesses in these categories.<sup>129</sup>

40. The category of Satellite Telecommunications “comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”<sup>130</sup> For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.<sup>131</sup> Of this total, 307 firms had annual receipts of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.<sup>132</sup> Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

41. The second category of All Other Telecommunications comprises, *inter alia*, “establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.”<sup>133</sup> For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.<sup>134</sup> Of this total, 303 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.<sup>135</sup> Consequently, we estimate that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

42. *Unlicensed Devices.* In this category, regulatees use devices as permitted on an unlicensed basis under the provisions of Part 15 of the Commission's Rules. We do not have an accurate count of the number of regulatees utilizing this capability. Since 2007, the Census Bureau has placed wireless firms within the new, broad, economic census category Wireless Telecommunications Carriers (except Satellite). Prior to that time, such firms were within the now-superseded category of “Paging” and “Cellular and Other Wireless Telecommunications.” Under the present and prior categories, the SBA has

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<sup>127</sup> 13 C.F.R. § 121.201, NAICS code 517410.

<sup>128</sup> 13 C.F.R. § 121.201, NAICS code 517919.

<sup>129</sup> 13 C.F.R. § 121.201, NAICS codes 517410 and 517910 (2002).

<sup>130</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517410 Satellite Telecommunications,” <http://www.census.gov/naics/2007/def/ND517410.HTM> (last visited Oct. 21, 2009).

<sup>131</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” tbl. 4, NAICS code 517410 (rel. Nov. 2005).

<sup>132</sup> *Id.* An additional 38 firms had annual receipts of \$25 million or more.

<sup>133</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517919 All Other Telecommunications,” <http://www.census.gov/naics/2007/def/ND517919.HTM#N517919> (last visited Oct. 21, 2009).

<sup>134</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” tbl. 4, NAICS code 517910 (issued Nov. 2005).

<sup>135</sup> *Id.* An additional 14 firms had annual receipts of \$25 million or more.

deemed a wireless business to be small if it has 1,500 or fewer employees. Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year. Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more. For the category of Cellular and Other Wireless Telecommunications, data for 2002 show that there were 1,397 firms that operated for the entire year. Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more. Thus, we estimate that the majority of wireless firms are small.

43. *Part 15 Device Manufacturers.* The Commission has not developed a definition of small entities applicable to unlicensed communications devices manufacturers. Therefore, we will utilize the SBA definition applicable to 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>136</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.<sup>137</sup> According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.<sup>138</sup> Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.<sup>139</sup> Thus, under this size standard, the majority of firms can be considered small.

44. *Telephone Apparatus Manufacturing.* The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.”<sup>140</sup> The SBA has developed a small business size standard for Telephone Apparatus

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<sup>136</sup> U.S. Census Bureau, 2002 NAICS Definitions, “334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing”; <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

<sup>137</sup> 13 C.F.R. § 121.201, NAICS code 334220.

<sup>138</sup> U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220 (released May 26, 2005); <http://factfinder.census.gov>. The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 929.

<sup>139</sup> *Id.* An additional 18 establishments had employment of 1,000 or more.

<sup>140</sup> U.S. Census Bureau, 2002 NAICS Definitions, “334210 Telephone Apparatus Manufacturing”; <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

Manufacturing, which is: all such firms having 1,000 or fewer employees.<sup>141</sup> According to Census Bureau data for 2002, there were a total of 518 establishments in this category that operated for the entire year.<sup>142</sup> Of this total, 511 had employment of under 1,000, and an additional 7 had employment of 1,000 to 2,499.<sup>143</sup> Thus, under this size standard, the majority of firms can be considered small.

45. *Other Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).”<sup>144</sup> The SBA has developed a small business size standard for Other Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees.<sup>145</sup> According to Census Bureau data for 2002, there were a total of 503 establishments in this category that operated for the entire year.<sup>146</sup> Of this total, 493 had employment of under 500, and an additional 7 had employment of 500 to 999.<sup>147</sup> Thus, under this size standard, the majority of firms can be considered small.

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

46. Should the Commission decide to extend the automatic roaming requirement to non-interconnected services or features, including those that are information services, such as broadband Internet access service, or other non-CMRS services, the only reporting or recordkeeping costs incurred will be administrative costs to ensure that an entity’s practices are in compliance with the automatic data roaming rule. The additional compliance requirement is that providers must provide automatic roaming

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<sup>141</sup> 13 C.F.R. § 121.201, NAICS code 334210.

<sup>142</sup> U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334210 (released May 26, 2005); <http://factfinder.census.gov>. The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 450.

<sup>143</sup> *Id.* An additional 4 establishments had employment of 2,500 or more.

<sup>144</sup> U.S. Census Bureau, 2002 NAICS Definitions, “334290 Other Communications Equipment Manufacturing”; <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

<sup>145</sup> 13 C.F.R. § 121.201, NAICS code 334290.

<sup>146</sup> U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334290 (released May 26, 2005); <http://factfinder.census.gov>. The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 471.

<sup>147</sup> *Id.* An additional 3 establishments had employment of 1,000 or more.

to any requesting technologically compatible carrier on reasonable and non-discriminatory terms and conditions.<sup>148</sup> We seek comment on the possible burden such requirements would place on small entities. Also, we seek comment on whether a special approach toward any possible compliance burden on small entities might be appropriate. Entities, especially small businesses, are encouraged to quantify the costs and benefits of any compliance requirement that may result from this proceeding.

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

47. 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>149</sup>

48. The Commission's primary objective in this proceeding is to facilitate seamless wireless communications for consumers, even when they are outside of the coverage area of their own service providers. Recognizing wireless subscribers' increasing reliance on mobile telephony services, especially the growing demand of data services by consumers, the Second Further Notice seeks comment on whether it would serve the public interest to extend the applicability of the automatic roaming requirements to non-interconnected services or features, including those that are information services, such as wireless broadband Internet access services, or other non-CMRS services.

49. To the extent that addressing the issues raised in the Second Further Notice requires modifying the applicability of the automatic roaming rules, we seek comment on the effect that such rule changes will have on small entities, on whether alternative rules should be adopted for small entities in particular, and on what effect such alternative rules would have on those entities. We invite comment on ways in which the Commission can achieve its goals, but at the same time impose minimal burdens on small wireless service providers and small non-CMRS providers.

50. The item notes that, in their comments filed on the *2007 Further Notice*, several carriers argued that extending the automatic roaming requirements to non-interconnected services and features would subject networks to capacity restraints that would degrade the quality of service to the network's own customers. They also argued that there are technical issues associated with extending an automatic roaming requirement to wireless broadband Internet access services, such as, for example, different authentication methods and interoperability issues regarding methods for assigning IP addresses. The item seeks comment about whether advances in technology have helped to reduce the potential for these problems to occur or whether parties continue to have concerns with network capacity, network integrity, or network security issues that may be associated with roaming among data networks. To the extent that parties continue to have concerns about the potential for network capacity or other technical issues, the item seeks comment on potential methods to address such issues.

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

None.

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<sup>148</sup> See *supra* at ¶¶ 2, 3.

<sup>149</sup> See 5 U.S.C. § 603(c).

**STATEMENT OF  
CHAIRMAN JULIUS GENACHOWSKI**

Re: *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265.*

Today we take action to increase American consumers' access to mobile voice service, wherever and whenever they choose. We do so by creating a framework for voice roaming that will encourage carriers of all sizes to reach reasonable commercial agreements with each other, while also encouraging these carriers to continue investing in the coverage and capacity of existing voice networks. And we will adjudicate any disputes that may arise between carriers with a tailored, fact-based process that will support continued investment, innovation, and competition in mobile.

Consistent with the recommendation of the National Broadband Plan, our decision today also opens a broad inquiry into the critical issue of data roaming. As I have said before, there are few areas in communications that present greater promise for our country than mobile – in terms of driving our economy and delivering broad opportunity for all Americans – and our goal must be for America to lead the world in mobile. To promote this goal, we must ensure that American consumers have access to competitive broadband data communications services whenever they want and wherever they are, and also ensuring that the United States has the fastest and most extensive mobile networks in the world.

I thank the Bureau and my colleagues for their hard work on this complex and important item.

**STATEMENT OF  
COMMISSIONER MICHAEL J. COPPS**

Re: *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265.*

Saint Augustine wisely taught us that, “[i]t is human to err, but it is devilish to remain willfully in error.” Based on several years of experience and an extensive record, we now correct the error made in 2007 to exclude wireless roaming in a requesting carrier’s home market from the automatic roaming requirement. In our decision at the time, we clarified that technologically compatible carriers must deal with each other in good faith and without discrimination when negotiating voice roaming outside the requesting carrier’s home market. Although we encouraged similar arrangements for home-market roaming, we did not require it in the belief that not doing so would help promote facilities-based competition and foster build-out in those markets where the requesting carrier had spectrum rights. We were wrong. The record clearly shows that the 2007 home-market exclusion discouraged competition, hampered innovation and investment and harmed consumers.

So today we establish a clear and strong presumption in favor of automatic roaming, regardless of whether the request is for areas inside or outside of the requesting carrier’s home market. We continue to encourage carriers to negotiate roaming agreements based on reasonable terms and conditions. For those cases where commercial negotiations fail, roaming requests from carriers—small and large—will be viewed as presumptively reasonable and enjoy the protections of Title II of the Communications Act—and that’s always a good place to be, isn’t it? This item is very good news indeed for consumers who want to use their mobile phones as they are traveling across the county or across the country. After all, it is consumers who pay the price when their carriers have to accept inflated roaming rates or cannot reach a roaming agreement at all.

We also move forward with a further examination of the critical issue of access to data roaming. Not many of us buy a mobile phone these days only for the voice service. Consumers rely upon their mobile handsets to provide a dizzying array of data services. The National Broadband Plan makes it clear that consumer demand for mobile connectivity grows stronger by the day. So what good is your smartphone if you can roam for voice but not for any of the other services you bought it for? What kind of real competitive choice does that give consumers, especially those who live in rural America? Consumers should not have to be engineers or industry lobbyists to figure out which mobile services they can expect to work when they travel. They should be able to count on their phones working to the fullest extent that technology permits, wherever they happen to be. And carriers should have the right to negotiate roaming agreements at just and reasonable rates for their subscribers.

Although I would have gone further than we do here, because I believe we already have an adequate record to act on the issue of an automatic data-roaming obligation, I welcome a thorough review of the wireless data market, provided it is accomplished in a timely and expeditious manner. Consumers want data now and we need to open this door for them just as quickly as we can.

Lastly, let me say that—as we raise questions about the legal framework for an automatic data-roaming requirement—I remain fully confident that we have the authority we need to protect American wireless consumers. Previous Commissions have taken consumers on a dangerous deregulatory ride by moving broadband—including mobile broadband Internet access—outside of the statutory framework that applies to telecommunications carriers. The Commission abdicated its consumer protection

responsibilities in favor of a “no touch” regulatory approach that benefitted primarily big companies. Remember when we used to treat telephones as telephones and the telecommunications that enabled them as telecommunications services? We need to do that again.

**STATEMENT OF  
COMMISSIONER ROBERT M. McDOWELL**

Re: *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265.*

Today's order is the product of literally years of hard work by countless individuals. In the end, we are writing an important chapter in the FCC's history by making it easier for American consumers to enjoy seamless, nationwide wireless coverage while also preserving incentives for carriers to build out their own facilities resulting in more efficient use of our country's airwaves.

We achieve this accomplishment today unanimously. In so doing, I am reminded of one of the guiding principles espoused by that great telecommunications policy philosopher, Coach Mike Krzyzewski. Coach K often says that, "Two can beat one if they play as one. And five can beat two if they play as one." Today, the five of us are playing as one.

I am voting to support today's decision because it balances a number of other competing interests such as: promoting competition among multiple wireless carriers; encouraging new entry into the wireless market; and providing incentives for all carriers to invest and innovate.

In our August 2007 Order on roaming, which I supported, the Commission ruled that automatic voice roaming is a common carrier service subject to Title II of the Act. At the same time, however, the Commission did not extend that decision to those carriers that were requesting voice roaming in geographic areas where they held spectrum licenses to provide wireless services. In making this exclusion for "home roaming," we reasoned that imposing an automatic roaming obligation in home markets might discourage build-out in these markets, and, therefore, undermine facilities-based competition. We also recognized the importance of roaming and encouraged wireless carriers to continue to negotiate and reach automatic roaming contracts in those home markets.

In the intervening years, through numerous meetings with an array of interested parties, I learned that the great majority of carriers that were seeking regulatory relief here were successfully continuing to strike new roaming deals in the marketplace. On the other hand, I also learned that, in some instances, the home roaming exclusion unintentionally created confusion. Yes, once again a government rule produced an unintended consequence. The rule led some to conclude that a carrier effectively had no right to request roaming in any market where it held spectrum, and the would-be host carrier had no obligation to negotiate roaming arrangements for those markets. Carriers also complained that they had no rights under Title II to seek relief from the Commission for those disputes arising from roaming requests in home markets. As a result, for several years now, interested parties have sought to modify the home market exclusion in a number of cumbersome ways.

The good news today is that we agree on a new course. Specifically, we recognize that the better, simpler path is to eliminate the home market exclusion completely. We also clarify that wireless carriers have statutory rights to complain, even if they seek automatic voice roaming arrangements within a home market. By setting forth factors that the Commission will consider in the event of a complaint, we provide a framework that will provide both sides – the host and the requesting carriers – with greater incentives to succeed in negotiating roaming agreements based on reasonable terms and conditions. We allow market forces to drive flexible deals among market players to give consumers the benefit of seamless, nationwide voice services.

Finally, with respect to the Further Notice on data roaming, for some time now, I have requested that interested parties submit for our consideration a legal analysis setting forth the means to this end. The question is simple: Given that, in 2007, the Commission classified wireless broadband services as Title I without dissent, is there a legally sustainable path to mandate automatic data roaming? I have sought this analysis well before the D.C. Circuit's recent ruling in the *Comcast* case, which casts even more doubt on our jurisdiction in this area. I strongly encourage all commenters to give us their analyses of how the *Comcast* decision affects our ability to regulate data roaming.

I thank Chairman Genachowski for providing another opportunity for comment on this important issue. I look forward to learning more. In the meantime, I will continue to strongly encourage parties to continue to enter into roaming deals, including those that include data. As the Further Notice states, "in the two years since our 2007 Further Notice on data roaming, the wireless broadband industry has experienced a rapid evolution, with significant economic, technological, and regulatory developments, including developments in network and device technologies, spectrum use and availability, market participants, network deployments, and consumer demand and usage patterns." I highlight these positives to point out that they have occurred even *without* an FCC mandate for automatic data roaming.

I further thank the Chairman for bringing this matter forward immediately after completion of the Broadband Plan, and for handling this complicated issue in a comprehensive manner, as part of the broader roaming docket. I also thank Ruth Milkman and the dedicated team in the Wireless Bureau for your outstanding work in this area.

**STATEMENT OF  
COMMISSIONER MIGNON L. CLYBURN**

Re: *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265.*

When it comes to roaming for voice and data services, consumers need seamless, nationwide coverage. However, when the Commission adopted in 2007 a “home market exclusion” to its automatic roaming requirements, it undercut that goal. By repealing the home market exclusion in today’s Order, we are safeguarding consumers’ expectations of seamless coverage irrespective of whether they are calling from their carrier’s home market or from the home market of another.

I recognize that a number of smaller, rural, carriers opposed any mention in this Order about the appropriateness of considering a requesting carrier’s lack of build out, in its home markets, when determining if the terms of a roaming agreement are reasonable. According to these smaller carriers, larger nationwide carriers with greater bargaining positions in roaming negotiations, may use such language to propose unreasonable roaming agreements. I carefully considered those arguments. I have decided to support today’s Order, because the relevant language makes it clear that any roaming request is presumed to be reasonable, and no hosting carrier can use a requesting carrier’s lack of build out as the sole dispositive factor for imposing roaming terms and conditions.

I also fully support the Further Notice of Proposed Rulemaking that seeks additional comment on whether the Commission should extend roaming requirements to mobile data services not connected to the public switched telephone network. Such services would include wireless broadband Internet access services. The National Broadband Plan discussed how important these mobile broadband services are to making broadband service available and affordable throughout our Nation. The detailed and balanced questions posed by the Further Notice, will provide the Commission with a comprehensive record on its legal authority to impose roaming obligations on such services and the merits for imposing such obligations if it decides to do so.

**STATEMENT OF  
COMMISSIONER MEREDITH ATTWELL BAKER**

*Re: Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265.*

We act today in a straightforward, narrowly tailored way to ensure that voice services are available to consumers in all parts of the country, regardless of the location of their service provider. Recognizing the evolution of voice roaming services since the Commission's previous order on roaming, we have chosen not to impose negotiation mandates, set rates or timelines or otherwise create onerous burdens on carriers. Instead, we leave ample room for market-driven solutions and have established, through the creation of a rebuttable presumption, a simple procedure that should ensure that no reasonable request for roaming service is denied. This will further serve the interests of consumers who have come to expect anytime, anywhere voice communications.

I believe we are at the beginning of a revolution in mobile broadband services. Although we do not yet have a fully mature market in third generation wireless services, carriers are already beginning to deploy fourth generation networks that will take the benefits of mobile broadband to whole new levels, enabling a range of products and services that will likely prove to be even more transformational than their third generation counterparts. I applaud these efforts and investments.

Given the continuing evolution of the mobile broadband market, we should proceed with great caution before extending any automatic roaming obligations to data services. Important questions need to be resolved with respect to what authority the Commission might have, if any, to act in this area. We must continue to respect the distinctions between mobile voice and data markets. Our actions must be carefully crafted and appropriate to their unique characteristics. Most important, we should take no action that could inadvertently stifle the evolution of data roaming relationships that already exist or inhibit further buildout, investment and innovation.

Given the growing importance of the products and services that run over mobile broadband networks, it is reasonable to seek additional comment on the implications of extending the automatic roaming requirement to data networks. I look forward to hearing from a broad cross section of interested stakeholders in the coming weeks. I also would strongly urge members of the private sector to continue to work together to provide mobile data solutions that promote continued investment and innovation in third and fourth generation networks in all parts of the country to benefit wireless consumers wherever they live, work or travel.

Thank you to the staff of the Wireless Bureau and to my colleagues for their thoughtful work on this item.