

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

In the Matter of
Revision of the Commission's Rules to
Ensure Compatibility With Enhanced 911
Emergency Calling Systems
CC Docket No. 94-102

ORDER

Adopted: October 10, 2003

Released: October 21, 2003

By the Commission:

I. INTRODUCTION

1. In this Order, we deny in part, and grant in part, a Petition from OnStar that asks the Commission to determine that embedded telematics operating on wireless carrier networks are not "handsets" as that term is used in the Commission's Enhanced 911 (E911) rules and orders. We determine that the OnStar embedded, in-vehicle telematics units that provide a Commercial Mobile Radio Service (CMRS) personal calling service are handsets or mobile phones in accordance with Part 20 of the Commission's rules and that the E911 Phase II requirements there apply to such equipment. Further, on our own motion, we grant a temporary, conditional waiver of the Commission's E911 Phase II rules, including the equipment activation requirements, as they apply to wireless licensees that furnish the underlying wireless service for OnStar telematics units. This waiver is effective until December 31, 2005. With the waiver, wireless licensees will not have to include OnStar analog and first generation digital telematics units installed in OnStar equipped vehicles prior to that date in their quarterly compliance reports, subject to the conditions specified.

II. BACKGROUND

2. OnStar's Service. OnStar is an original equipment manufacturer of telematics units and a provider of telematics services. OnStar's system combines wireless communications, autonomous geographic positioning system (GPS) capability, and voice recognition technology that are integrated into automobiles' electrical architecture. OnStar telematics units cannot be removed from vehicles, and

1 Ex parte Petition for Ruling filed by OnStar (Dec. 3, 2002).

2 OnStar is a wholly owned subsidiary of General Motors Corporation (GM) and its telematics equipment is installed in various GM automobile model lines as well as automobiles of other manufacturers such as Toyota, Honda, Subaru, and Volkswagon.

3 OnStar Petition at 2.

consequently, are not portable.<sup>4</sup> OnStar telematics services include navigational assistance, concierge services, stolen vehicle location, automatic airbag deployment/crash notification, and emergency services. OnStar provides these services through one of three call centers. Emergency calls made by pressing the OnStar “hot button” are delivered first to an OnStar call center, which, if necessary, then contacts a Public Safety Answering Point (PSAP) and orally relays pertinent information, including location.<sup>5</sup> In addition, OnStar offers as an option to its subscribers, a personal calling service, which is a voice-activated, prepaid wireless service. Emergency calls over this optional service are made by speaking “dial 911 dial” to OnStar’s voice-activated system and then delivered by the underlying wireless carrier directly to a PSAP or appropriate local emergency authority pursuant to the Commission’s rules.<sup>6</sup> Both services are currently provided over the analog-based service of the underlying carrier.

3. *E911 Phase II Rulings.* In 1999, in the *E911 Third Report and Order*, the Commission required CMRS licensees to provide location capability (Phase II) for subscribers, based on either a handset or network solution.<sup>7</sup> The *E911 Third Report and Order* also amended section 20.3 of the Commission’s rules<sup>8</sup> to define location-capable handsets as “portable or mobile phones that contain special location-determining hardware and/or software, which is used by a licensee to locate 911 calls.” The Commission did not endorse or require the use of any particular technology in order to meet the location criteria adopted for Phase II.<sup>9</sup>

4. On December 3, 2002, OnStar filed its Petition. OnStar seeks clarification that (1) embedded telematics units that operate on wireless calling networks are not “handsets” as that term is used in the Commission’s E911 orders, and (2) such units are not included in calculating a wireless licensee’s obligation to meet location capable handset activation requirements for implementing Phase II for E911 pursuant to section 20.18 (g) of the Commission’s rules. Also in December 2002, the Commission initiated a rulemaking proceeding, seeking comment on whether it should extend its E911 Phase I and Phase II rule requirements for location capability to various services, including telematics service providers.<sup>10</sup> The Commission further sought comment on whether telematics devices ought to be considered as handsets pursuant to section 20.18.

5. The Commission noted the filing of the OnStar Petition and mentioned that comment on it would be sought separately.<sup>11</sup> Accordingly, the Commission’s Wireless Telecommunications Bureau (Wireless Bureau) released a Public Notice seeking comment in the same docket.<sup>12</sup> Six comments and five reply comments were filed responding to the OnStar Petition.

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<sup>4</sup> *Id.*

<sup>5</sup> See Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, IB Docket No. 99-67, *Further Notice of Proposed Rulemaking*, 17 FCC Rcd 25576, 25601(2002), at paras. 61-63 (*E911 Scope NPRM*).

<sup>6</sup> *See id.*

<sup>7</sup> Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling System, CC Docket No. 94-102, RM-8143, *Third Report and Order*, 14 FCC Rcd 17388 (1999) (*E911 Third Report and Order*).

<sup>8</sup> 47 C.F.R. § 20.3.

<sup>9</sup> See *E911 Third Report and Order*, 14 FCC Rcd at 17404, 17424 & n.122, paras. 32, 81.

<sup>10</sup> *E911 Scope NPRM*, 17 FCC Rcd 25576, 25599.

<sup>11</sup> See *E911 Scope NPRM*, 17 FCC Rcd at 25599 n.167.

<sup>12</sup> Wireless Telecommunications Bureau Seeks Comment on OnStar Petition for Declaratory Ruling Regarding the Applicability of the Commission’s E911 Phase II Requirements for Wireless “Handsets” to In-vehicle, Embedded Telematics Units, CC Docket No. 94-102, DA 02-3565 (Dec. 20, 2002).

6. *OnStar's Petition*. In its Petition OnStar argues that embedded telematics devices should not be treated as location capable handsets for purposes of the Commission's E911 Phase II rules and, therefore, should not be subject to the equipment activation requirements at this time. OnStar contends that the assumptions concerning conventional handset technology on which the Commission's E911 Phase II decision was based are not applicable to embedded telematics devices. OnStar asserts that in contrast to handset-based Phase II technology which developed around a network assisted Global Positioning System/Advanced Forward Link Trilateration (AGPS/AFLT) solution, embedded telematics units use autonomous (stand-alone) GPS. OnStar submits that although handsets have relatively short lifecycles and are independent units routinely exchanged, retrofitting existing embedded analog telematics units with digital units is much more costly due to technology and accessibility factors. In addition, OnStar argues that embedded telematics units should not be treated as handsets in calculating compliance with underlying wireless licensees' handset activation requirements pursuant to the Commission's rules.<sup>13</sup> OnStar further contends that wireless carriers serving large populations of telematics units will lose at least some of the benefit of the five percent margin for handset compliance for E911 Phase II by December 31, 2005, with respect to "true handsets."<sup>14</sup>

7. OnStar further requests that any clarification be limited to telematics devices that: (1) use single transceivers, (2) are designed to provide the location with specificity equal or superior to the Commission's Phase II requirements, and (3) if enabled to provide personal wireless calling for telematics service customers, be subject to the condition that the customers subscribe to a telematics call center service capable of interacting with PSAPs nationwide.

8. OnStar requests relief because, first, its analog-based telematics units do not meet E911 Phase II requirements, due to the difference between the autonomous GPS that it uses and the AGPS/AFLT solution that wireless carriers have begun to deploy for handsets.<sup>15</sup> Moreover, OnStar submits that because of the single transceiver in its units that provides the capability of simultaneously transmitting voice and data necessary to support its telematics service, it is encountering difficulty in reconciling the two GPS approaches to provide E911 Phase II capability with the interconnected wireless calling service.<sup>16</sup> Further, OnStar submits that it is attempting to achieve this reconciliation in its transition from analog-based technology to digital in its telematics units.<sup>17</sup>

9. Second, OnStar asserts that as part of this transition, it is also attempting to make the wireless calling service with its digital units Phase II compliant. It submits that it faces additional technological and deployment uncertainties,<sup>18</sup> but projects initial installation of digital units in some model year 2004 vehicles.<sup>19</sup> Due to these problems, OnStar further submits that its initial digital units will not be fully Phase II compliant and that it may take two to three model years to complete deployment.<sup>20</sup> As a result,

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<sup>13</sup> OnStar Petition at 7-8

<sup>14</sup> *Id.*

<sup>15</sup> See OnStar Petition at 5-6; see also, OnStar Reply Comments at 5.

<sup>16</sup> See *id.*

<sup>17</sup> See *id.* OnStar and its carrier partners who provide the underlying analog wireless service face the sunset of the analog AMPS based service requirement in December, 2007. See Year 2000 Biennial Regulatory Review – Amendments of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, WT Docket No. 01-108, *Report and Order*, 17 FCC Rcd 18485 (2002), *recons. pending*.

<sup>18</sup> See OnStar Petition at 6-7; OnStar Reply Comments at 5-6.

<sup>19</sup> See OnStar Petition at n.3; OnStar Reply Comments at 4.

<sup>20</sup> See *id.*

the timeframe to meet the 100% activation requirements under the Commission's E911 Phase II rules cannot be achieved.<sup>21</sup>

10. A majority of the commenters, including ComCARE Alliance, support the OnStar Petition. They agree with OnStar's contention that embedded, in-vehicle telematics handsets are not conventional handsets within the meaning of the Commission's rules, and that the *E911 Third Report and Order* rests on assumptions that did not contemplate telematics units. They contend that telematics devices are designed very differently than wireless handsets.<sup>22</sup> They argue that merely because a telematics provider uses wireless networks to facilitate communication with its customers, the Commission should not require that embedded telematics devices conform to the requirements imposed on wireless handsets.<sup>23</sup> ComCARE Alliance asserts that wireless calling services, such as OnStar's personal calling service, are ancillary services to the location-based telematics safety and security services that telematics providers offer.<sup>24</sup>

11. Among the opposing commenters, APCO, NENA, and NASNA jointly argue that OnStar has not presented a sufficient case for a declaratory ruling. They further assert that Section 20.18(g) of the Commission's rules does not distinguish between portable (hand-held) and mobile (typically vehicle-mounted) units and that OnStar units appear to fit the definition of location determining handsets.<sup>25</sup> They contend that a wireless carrier providing service for such units ostensibly would have to treat them as subject to Section 20.18(g).<sup>26</sup> Intrado asserts that OnStar is requesting a waiver rather than a clarification of the Commission's rules.<sup>27</sup> APCO, NENA, and NASNA further argue that the requirement for 95 percent activation by 2005 is based on the difficulty of replacing all legacy handsets, especially those outside the direct control of wireless carriers.<sup>28</sup>

### III. DISCUSSION

#### A. Provision of CMRS Service by OnStar Embedded Telematics Units Qualifies Them as Handsets or Mobile Phones under the Commission's Rules

12. As several commenters assert,<sup>29</sup> we recognize that prior Commission orders addressing Phase II criteria for handsets did not specifically address in-vehicle telematics units.<sup>30</sup> To clarify how the Commission's rules may apply to these embedded devices, we initially address general terminology that is commonly used in the Commission's treatment of various mobile services. First, in those services,

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<sup>21</sup> See OnStar Petition at 7.

<sup>22</sup> ComCARE Alliance Comments at 3; CTIA Comments at 4; Verizon Comments at 2-3; MBUSA Reply Comments at 3-4; Toyota Reply Comments at 3.

<sup>23</sup> See Verizon Comments at 2; Toyota Reply Comments at 3.

<sup>24</sup> ComCARE Alliance Comments at 6 (further asserting that telematics customers primarily sign up for the location-based safety and security services).

<sup>25</sup> APCO, NENA and NASNA Joint Comments at 2-3. See also, Intrado Comments at 3-4; AT&T Wireless Reply Comments at 1.

<sup>26</sup> APCO, NENA and NASNA Joint Comments at 2-3.

<sup>27</sup> Intrado Comments at 3-4.

<sup>28</sup> APCO, NENA, and NASNA Joint Comments at 4.

<sup>29</sup> See CTIA Comments at 4; Verizon Comments at 2-3; OnStar Reply Comments at 2.

<sup>30</sup> See *E911 Third Report and Order*, 14 FCC Rcd 17388; Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Fourth Memorandum Opinion and Order, 15 FCC Rcd, 17442 (2000) (*E911 Fourth Memorandum Opinion and Order*).

such as PCS, the term “mobile station” is defined as “a station in the mobile service intended to be used while in motion or during halts at unspecified points.”<sup>31</sup> Section 22.99 of the rules for cellular service defines “mobile station” as “one or more transmitters that are capable of operation while in motion.”<sup>32</sup> Further, in Part 20 of the Commission’s rules, the definition of “mobile service” comprises an interacting group of “base, mobile, portable, and associated control and relay stations . . . .”<sup>33</sup> Based on these definitions, we find that it can clearly be inferred from the use of such terms that mobile stations include both mobile phones and handsets that function as such a station. Because they are capable of operating as transmitters while in motion, we find that telematics units installed in vehicles function as mobile stations, *i.e.*, mobile phones or handsets.

13. Further, we find that Part 20 of the Commission’s rules treats the terms “handsets” and “mobile phones” interchangeably. For instance, the definition of “location-capable handsets” in Section 20.3 includes “portable or mobile phones that contain special location-determining hardware and/or software, . . . .”<sup>34</sup> In addition, Section 20.18(g), which includes the Commission’s E911 Phase II requirements, also uses the terms “portable or mobile phones” in the same sense that it applies the requirements to “handsets.”<sup>35</sup>

14. We do not agree with the comments that the characteristic of telematics units being embedded in the vehicle rather than “portable” should exclude such units from being classified as mobile phones.<sup>36</sup> Because embedded in-vehicle telematics function as mobile stations, the fact that they are not portable is immaterial. For instance, the fact that more recent OnStar units use integrated voice activation rather than handsets does not change their function as mobile phones.<sup>37</sup>

15. In addition, we do not agree that a longer life cycle development, to which some commenters refer as a characteristic distinguishing telematics units from handsets,<sup>38</sup> excludes those units per se from being classified as mobile phones. Although the pace of technological development for handsets was a matter considered in establishing a schedule for implementing the requirements in Section 20.18,<sup>39</sup> we do not find that life cycle factors are determinative of whether telematics units can function as mobile phones for the purposes of Part 20.<sup>40</sup>

16. Moreover, in another context, the Commission has considered the applicability of its rules to telematics units. Concerning the Commission’s call completion requirements for wireless calls,<sup>41</sup> the Commission’s Wireless Telecommunications Bureau considered whether handsets integrated with a

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<sup>31</sup> 47 C.F.R. § 24.3. *See* 47 C.F.R. § 22.99; *see also*, 47 C.F.R. § 90.7 (Private Land Mobile Radio Service); 47 C.F.R. § 95.23(a) (Personal Radio Services). *See generally* 47 U.S.C. 153(k)(27), (28), (33), (35).

<sup>32</sup> 47 C.F.R. § 22.99.

<sup>33</sup> 47 C.F.R. § 20.3 – *Mobile Service* (b). *See* 47 U.S.C. 153(27).

<sup>34</sup> 47 C.F.R. § 20.3.

<sup>35</sup> 47 C.F.R. 20.18(g)(1)-(4). *See also*, NENA, APCO, and NASNA Joint Comments at 3.

<sup>36</sup> *See* Verizon Comments at 2; Toyota Reply Comments at 3; *see also*, OnStar Reply Comments at 3.

<sup>37</sup> *See E911 Scope NPRM*, 17 FCC Rcd at 25601, para. 61 & n.174.

<sup>38</sup> CTIA Comments at 4; Verizon Comments at 2; Toyota Reply Comments at 4

<sup>39</sup> *See E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17452, para. 23.

<sup>40</sup> We do recognize, however, that the life cycle characteristics of telematics devices are a factor in considering the issues of relief that we address below.

<sup>41</sup> 47 C.F.R. § 22.921.

vehicle telematics system should be granted a waiver of the relevant rule.<sup>42</sup> The fact that part of the system was embedded in the vehicle was irrelevant to the Wireless Bureau's treatment of those handsets as subject to the rule. The salient concern in the *Motorola Order* was to ensure that the handsets used with the telematics system were capable of dialing 911 to complete 911 calls as well as reaching the telematics call center.

17. In the *E911 Scope NPRM* proceeding, the Commission recognized that telematics units differ in that some may provide a wireless calling service.<sup>43</sup> Others, as some commenters submit, provide only a telematics service that uses underlying wireless service to directly connect to the call center of the telematics service provider, but does not use the interconnected public switched network.<sup>44</sup> Unlike a telematics unit with a commercial wireless service capability, then, units providing only telematics service cannot transmit and receive commercial wireless calls between the operator of the vehicle and other wireline or wireless end users.<sup>45</sup> The voice and data communications are transmitted only to the telematics call centers.

18. Thus, we find that such telematics units provided by OnStar that are not capable of providing wireless calling service are not within the definition of Section 20.3, and therefore, not subject to the E911 requirements of section 20.18(g) of the Commission's rules.<sup>46</sup> On the other hand, although OnStar telematics units do not have the appearance of "traditional" portable handsets, we find that some units are also capable of providing a commercial mobile radio service (CMRS) in addition to telematics services.<sup>47</sup> 911 calls may be made from them over the underlying CMRS network of the carrier licensees,<sup>48</sup> with whom OnStar has reached agreements to provide that wireless service, and thus may be potentially used by the licensee to determine the location of those calls.<sup>49</sup> We do not agree with the contention in some comments that because the CMRS offered by OnStar is optional, ancillary, or tethered, those OnStar telematics units are not within the scope of Part 20.<sup>50</sup> Their capability to function as mobile phones within the general definitions we have considered and to provide commercial wireless service through a licensee qualifies them as mobile phones within the definition Section 20.3 and, thus, within the scope of the E911 requirements pursuant to section 20.18(g) of the Commission's rules.

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<sup>42</sup> In the Matter of 911 Call Processing Modes, WT Docket No. 99-328, Order, 15 FCC Rcd 8143 (Wireless Telecom. Bur.) (granting equipment manufacturer, Motorola, a limited waiver from the Commission's call completion rule, 47 C.F.R. § 22.921, as it applied to Motorola handsets integrated into Motorola telematics units installed in vehicles) (*Motorola Order*). Although Section 22.921 applies directly to manufacturers and the E911 Phase II rules under Part 20 do not, the "functional" approach taken by the Wireless Bureau is also relevant here in interpreting the definitions. The Wireless Bureau also considered life cycle factors in its decision.

<sup>43</sup> *E911 Scope NPRM*, 17 FCC Rcd at 25599, para. 59.

<sup>44</sup> See MBUSA Reply Comments at 2-3.

<sup>45</sup> ATX Technologies Comments in *E911 Joint Further Proceeding* at 8-9. (we incorporate by reference relevant comment from that proceeding).

<sup>46</sup> See Toyota Reply Comments at 1-2 (explaining that OnStar Lexus-Link telematics units do not provide the capability of connecting to the Public Switched Telephone Network (PSTN)).

<sup>47</sup> See 47 C.F.R § 20.3 for definition of commercial mobile radio service (CMRS). See also, 47 U.S.C. § 332(d).

<sup>48</sup> See APCO, NENA, and NASNA Joint Comments at 3 (regarding providing a public safety benefit when 911 is dialed in emergencies). See also, OnStar Reply Comments at 3 (agreeing that users of interconnected wireless calling service should have access to E911 capability).

<sup>49</sup> See 47 C.F.R § 20.3 (also describing "location-capable hand-set" as equipment containing ". . . location-determining hardware and/or software, which is used by a licensee to locate 911 calls.").

<sup>50</sup> See ComCARE Alliance Comments at 6; Verizon Comments at 2; Toyota Reply Comments at 3.

**B. The Commission's E911 Phase II Requirements Are Applicable to Carriers Who Provide the Underlying Commercial Wireless Service for OnStar's Embedded Telematics Units with CMRS Capability**

19. OnStar also seeks clarification of the equipment activation requirements of Section 20.18(g) of the Commission's rules, contending that embedded telematics units should not be considered in determinations of compliance with quantitative criteria set forth in the rule.<sup>51</sup> We clarify that the Commission's equipment activation rules do not apply to original equipment manufacturers of telematics equipment, such as OnStar, but rather to wireless carrier licensees.<sup>52</sup>

20. We agree with joint comments of the public safety organizations that suggest carriers are the responsible entities here with regard to the obligations concerning the deployment of qualifying telematics units in accordance with Section 20.18(g).<sup>53</sup> The Commission's E911 rules in Section 20.18 apply directly to carrier licensees rather than the manufacturers of the mobile phones and handsets. We find further that the scope of Section 20.18 reflects the criterion for CMRS service that we addressed above with regard to the definitional issue. Section 20.18 specifies that its provisions apply to the extent that service providers in the enumerated services "offer real-time two way switched voice service that is interconnected with the public switched network and utilize an in-network switching facility which enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls."<sup>54</sup> Thus, licensees who provide such service have a responsibility in terms of the requirements of that section with respect to the OnStar telematics units that are capable of providing commercial wireless service.<sup>55</sup>

21. We further note that in adopting the equipment activation rules, the Commission intended to be flexible regarding advances in equipment in order to accommodate new technological developments. The Commission believed that the optimal approach for implementing new solutions to meet public safety needs was to remain competitively neutral in regard to the different technologies that could be applied and deployed and not to discourage the introduction of new equipment and offerings that could be provide enhanced safety capabilities.<sup>56</sup> We find that the foregoing clarifications are consistent with those policies.

**C. Waiver for Wireless Carriers Who Provide the Underlying CMRS Service for OnStar from the Commission's E911 Phase II Requirements**

22. Because licensees subject to Section 20.18 of the Commission's rules have the responsibility to consider relevant OnStar telematics unit that provide CMRS, we also find that OnStar's Petition – concerning the activation requirements pursuant to Section 20.18(g) – also bears upon on the compliance plans that wireless carriers file with the Commission to demonstrate their progress to comply with E911 Phase II requirements.<sup>57</sup> We agree with OnStar that the timing of the introduction of its digital units and the technical problems it faces in making its telematics units fully Phase II compliant for its CMRS

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<sup>51</sup> See 47 C.F.R. §§ 20.18(g)(1)(i)-(v).

<sup>52</sup> See 47 C.F.R. § 20.18(g).

<sup>53</sup> NENA, APCO, and NASNA Joint Comments at 2, 4.

<sup>54</sup> See 47 C.F.R. § 20.18(a).

<sup>55</sup> See generally, 47 C.F.R. § 22.927 (pertaining to licensee responsibility for mobile stations).

<sup>56</sup> See *E911 Third Report and Order*, 14 FCC Rcd at 17404, para. 32.

<sup>57</sup> See NENA, APCO, and NASNA Joint Comments at 2 (raising issue that the matter of Phase II compliance pertaining to OnStar's unit may affect carrier compliance).

calling offering raises compliance problems for its underlying carrier partners.<sup>58</sup> Therefore, we conclude in this instance that a waiver of the E911 Phase II equipment activation rules to exempt OnStar analog and first generation digital telematics units for a limited period is an appropriate relief and is consistent with the Commission's prior waiver orders.<sup>59</sup> Consequently, on our own motion, pursuant to Section 1.3 of the Commission's rules, we grant wireless carriers a waiver of the Commission's E911 Phase II rules, including the particular equipment activation requirements of Section 20.18(g), with regard to the OnStar telematics units until December 31, 2005, and as conditioned below.<sup>60</sup> We also emphasize that the waiver applies only to OnStar telematics units that have the capability to enable OnStar's optional wireless calling service.

23. In addressing the matter of waiver of its rules concerning E911, the Commission has generally noted that a waiver may be granted for good cause shown.<sup>61</sup> The Commission reiterated that the general standards for finding a waiver appropriate are if special circumstances warrant a deviation from the rule and such a deviation will serve the public interest.<sup>62</sup> Further, in the context of its E911 rules, the Commission has established and applied specific criteria in considering a waiver of the E911 Phase II activation requirements. Those criteria require that the circumstances underlying the waiver are to be "specific, focused, and limited in scope, and with a clear path to compliance."<sup>63</sup> There must also be concrete steps undertaken to come as close as possible to full compliance.<sup>64</sup>

24. Here, we find that OnStar's effort to coordinate with its underlying carriers a solution toward Phase II compliance in regard to its analog based calling service is complicated by the fact that its system is based on autonomous GPS rather than the assisted GPS/AFLT solution that underlying carriers are implementing. OnStar would have to reconcile the two different technical approaches when its telematics units are initialized to provide wireless calling.<sup>65</sup> Further, with respect to analog-based technology, OnStar would have to incur the costs and resolve the technical complexities in retrofitting its units to be compatible with the approach that the Commission has required of Verizon, which is the primary carrier currently offering analog service to OnStar.<sup>66</sup> These same factors would also apply to the limited number of analog units that OnStar may still produce as it phases out the production of analog units and introduces digital ones.

25. We also find additional special circumstances that OnStar and the carriers working with it face in resolving significant technical problems in the adaptation of OnStar's calling service offering to the digital solutions that they are implementing. As with analog, there exists the problem of OnStar's

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<sup>58</sup> See OnStar Petition at 7.

<sup>59</sup> See Public Notice, "Wireless Telecommunications Bureau Standardizes Carrier Reporting on Wireless E911 Implementation," DA 03-1902 (June 6, 2003) (containing a list of the Commission's prior waiver orders with respect to different wireless carriers).

<sup>60</sup> 47 C.F.R. § 1.3.

<sup>61</sup> *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17457, para. 43.

<sup>62</sup> *Id.*, at 17457 & n.75, para. 43, citing *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) citing *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

<sup>63</sup> *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17458, para. 44.

<sup>64</sup> *Id.*

<sup>65</sup> OnStar Petition at 6-8; OnStar Reply Comments at 5.

<sup>66</sup> Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems Request for Waiver by Verizon Wireless, CC Docket No. 94- 102, FCC 01- 299, 16 FCC Rcd 18364 (2001) (*Verizon Waiver Order*) (granting Verizon approval of its compliance plan and also imposing obligations for portions of its system that provide only analog service).



reconciling its autonomous GPS based system with the assisted GPS/AFLT solutions being implemented by underlying carriers. OnStar submits that such reconciliation is further complicated because the carriers need to engineer solutions for their own network, while OnStar has to coordinate cross-networks solutions among several carriers.<sup>67</sup>

26. Furthermore, we find that OnStar's plan concerning its transition to a digital personal calling option comports with the specific criteria noted above for waiver of E911 Phase II requirements. OnStar's filings indicate that it is aggressively attempting to modify its product so that its units can meet Phase II criteria. OnStar expressly intends to restrict the number of analog units to be produced as it expeditiously migrates to digital systems.<sup>68</sup> OnStar also stresses that it will begin to offer first generation digital units in 2004 model vehicles. OnStar's plan entails a three to four year phase-in of first and then second generation digital units, for example, 20, 70, 90, 100 percent per year over that period.<sup>69</sup> In addition, OnStar's filings show concrete steps for phasing in its digital capability. We find it crucial in this context that, with the differences in the technical operation of its telematics-based system compared to the solutions chosen by carriers for their handsets,<sup>70</sup> OnStar's submissions indicate a clear path that its wireless carrier partners can follow in working with it to full compliance with Phase II location criteria for OnStar's wireless calling service. OnStar further submits that it is continuing work with its automotive and wireless carrier partners towards a fully compliant Phase II solution and is planning to initiate that capability no later than 2006.

27. In addition, we find that OnStar's intended introduction of digital equipment reflects the requirement to continue to come as close as possible to full compliance. Beginning with the 2004 models in the second half of this year, OnStar's first generation units will have AFLT capability for any 911 calls dialed using the optional wireless calling service.<sup>71</sup> We find that although the AFLT capability may not meet the level of criteria for Phase II particularly in rural areas,<sup>72</sup> in view of the life cycle production matters that OnStar must coordinate with its automotive partners, the initial phase-in of an AFLT capability demonstrates that OnStar is pursuing an approach that will enable it and its wireless carrier partners to continue reach full Phase II compliance as expeditiously as possible.

28. We also find that granting a waiver will serve the public interest. Given OnStar's existing capability to assist in saving lives, granting a waiver will not result in the loss of public safety for OnStar's subscribers, who can receive prompt emergency service in response to calls made over OnStar's telematics services call centers. We agree with CTIA that OnStar's telematics service will provide a "safety net" until E911 Phase II service is ubiquitously deployed.<sup>73</sup> OnStar is currently forwarding more than 6000 calls per month via its telematics service to PSAPs that are first screened by its call center. The location data provided electronically with these calls generally meets or exceeds the location criteria

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<sup>67</sup> OnStar Reply Comments at 5.

<sup>68</sup> OnStar Reply Comments at 5.

<sup>69</sup> *Ex parte* Letter to Marlene H. Dortch, Secretary, Federal Communications Commission, from William L. Ball, Vice President, Public Policy, OnStar Corporation (April 29, 2003) (summarizing meeting with Jared Carlson, Deputy Chief, Policy Division, Wireless Telecommunications Bureau) (First April 29, 2003 Letter).

<sup>70</sup> *See* OnStar Petition at 6 (concerning differences between autonomous GPS of telematics and AGPS/AFLT that OnStar, its suppliers, and carrier partners are working to resolve); *see also*, OnStar Reply Comments at 5.

<sup>71</sup> First April 29, 2003 Letter at 2. *See also*, *Ex parte* Letter to Marlene H. Dortch, Secretary, Federal Communications Commission, from William L. Ball, Vice President, Public Policy, OnStar Corporation (April 29, 2003) (summarizing meeting with Bryan Tramont, Senior Legal Advisor, Office of the Chairman), at 2; OnStar Reply Comments at 4.

<sup>72</sup> *See Verizon Waiver Order*, 16 FCC Rcd at 18370, para. 17.

<sup>73</sup> CTIA Comments at 4.

specified by the Commission in its Phase II rules.<sup>74</sup> Further, OnStar call centers can forward that information, and also automatic crash notification data, nationwide from OnStar's telematics units to PSAPs regardless of whether the PSAPs are ready to initiate Phase II calling capability.<sup>75</sup> In view of the above public safety benefits that OnStar's primary telematics service provides, we agree with the general tenor of comments asserting that failure to provide relief would slow or impede provision of these benefits to OnStar subscribers.<sup>76</sup>

29. Second, it is apparent that the expectations of OnStar customers, who, in the first instance, call a telematics call center in emergency situations, differ from other customers who use traditional handsets to reach 911. In comparison to the number of emergency calls made to call centers, the number of calls made by OnStar customers dialing 911 (via voice-activation) appears to be small. Since the filing of its Petition, OnStar has submitted additional information, based on its total subscriber growth rate and the calling patterns of its subscribers who have dialed 911 through the optional personal calling service rather than called the OnStar call center.<sup>77</sup> This information indicates that regulatory relief would affect fewer than 11-13 calls per day (from an estimated 3.4-3.9 million units) to Phase II ready PSAPs by the end of 2006.<sup>78</sup> The comments of ComCARE Alliance also support this estimate.<sup>79</sup> The public safety merits of telematics service have also been noted and alleviate any immediate concerns we have over provision of emergency service.<sup>80</sup> OnStar notes that users of its optional wireless service must first subscribe to OnStar's basic safety and security call center service. Nevertheless, we urge OnStar to provide notification to its subscribers who purchase vehicles with the initial AFLT capable units that its telematics service should be the one that they should primarily resort to in emergencies.

#### IV. CONCLUSION AND WAIVER CONDITIONS

30. Based on the foregoing, we conclude that the circumstances regarding OnStar's telematics units that provide commercial calling service warrant granting a waiver to cover (1) carriers who are currently providing underlying wireless service to OnStar, and (2) its prospective wireless partners with whom it is attempting to work out arrangements as it migrates from analog to digital based equipment and service. OnStar's plan to achieve a fully Phase II compliant capability for its later generation digital units insofar as they provide an alternative through its optional personal calling service demonstrates its initiative and willingness to work with its wireless carrier partners who must also submit compliance plans. We urge OnStar and its wireless carrier partners to continue to work together to fully implement Phase II as addressed herein, so that consistent with the waiver conditions, all OnStar telematics units capable of offering CMRS are Phase II compliant after the expiration of the waiver.

31. We also conclude that a waiver is in the public interest. Grant of a waiver of the

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<sup>74</sup> ComCARE Alliance Comments at 6; OnStar Reply Comments at 7. We also note that OnStar operators, unlike emergency call takers receiving 911 dialed calls from handsets that are not Phase II compliant, do not have to spend time questioning callers about their location. *Cf. E911 Fourth Report and Order*, 15 FCC Rcd at 17452, para. 26.

<sup>75</sup> ComCARE Alliance Comments at 4; Verizon Comments at 3-4; OnStar Reply Comments at 6.

<sup>76</sup> See ComCARE Alliance Comments at 5-6; OnStar Reply Comments at 5-6.

<sup>77</sup> OnStar Reply Comments at 7 & n.14

<sup>78</sup> See First April 29, 2003 Letter at 1.

<sup>79</sup> ComCARE Alliance Comments at 6.

<sup>80</sup> *Motorola Order*, 15 FCC Rcd at 8144-45, at para. 5. We note that with regard to the comments from other public safety related entities referring to a delay in the OnStar call center relaying location information to a PSAP, we have sought comment in the *E911 Scope NPRM* on the timeliness of 911 calling from telematics units. See APCO, NENA, and NASNA Joint Comments at 3; Intrado Comments at 6-7. See *E911 Scope NPRM*, 17 FCC Rcd at 25602-03, para. 69.

Commission's equipment activation rules serves to clarify the obligations of CMRS licensees by resolving that OnStar telematics units that provide CMRS do not have to be included in the count for the equipment activation requirements under section 20.18(g) prior to December 31, 2005.<sup>81</sup> Moreover, the waiver will allow OnStar and its wireless carrier partners a reasonable period to continue their cooperative effort to adjust the performance of OnStar's digital equipment.

32. Further, we believe that it is in the public interest to set the period of the waiver to expire December 31, 2005.<sup>82</sup> We believe this waiver period is reasonable because it takes into account the efforts of the affected wireless carriers and OnStar to work out any new and necessary arrangements concerning OnStar's transition to a digital-based service. The period also reflects the product life cycle factor for OnStar's planned phase-in of Phase II compliant units, beginning with an AFLT location capability.<sup>83</sup> We also anticipate that shortly into the waiver period we will address in the *E911 Scope NPRM* proceeding the larger telematics issues, which have been raised there. Accordingly, the grant of this waiver of Section 20.18(g) of the Commission's rules with respect to OnStar telematics units, as we set forth above, is conditioned on the determinations we make in that proceeding.

## V. ORDERING CLAUSES

33. Accordingly, IT IS ORDERED that, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 303(r), and sections 0.131, 0.331, 1.3, of the Commission's rules, 47 C.F.R. §§ 0.131, 0.331, 1.3, the Petition for Ruling filed by OnStar Corporation on December 3, 2002 IS DENIED IN PART AND GRANTED IN PART, as addressed herein.

34. IT IS FURTHER ORDERED that, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 303(r), and sections 0.131, 0.331, 1.3, of the Commission's rules, 47 C.F.R. §§ 0.131, 0.331, 1.3, a waiver of the Commission's E911 Phase II rules pursuant to Part 20 of the Commission's rules IS GRANTED to wireless licensees with respect to OnStar Corporation's telematics equipment that is capable of providing a commercial wireless service, as described, and subject to the conditions set forth, herein.

35. IT IS FURTHER ORDERED that this waiver is granted until December 31, 2005, unless otherwise modified by the Commission.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

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<sup>81</sup> See 47 C.F.R. 20.18(g)(iv)-(v); see also, 47 C.F.R. § 20.18(i).

<sup>82</sup> See *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17451, at para 22, citing *E911 Third Report and Order*, 14 FCC Rcd at 17426 (the Phase II rules are intended to be applied in a manner that takes into account practical and technical realities).

<sup>83</sup> This date generally reflects the introduction of 2006 vehicle model year. By then, based on OnStar's submissions, there will be 90 percent phase-in of digital telematics units. See *supra*, at para. 26.

**APPENDIX****List of Commenters**

Association of Public-Safety Officials-International, Inc., National Emergency Number Association, and  
National Association of State 9-1-1 Administrators (APCO, NENA, and NASNA)  
Cellular Telecommunications and Internet Association (CTIA)  
ComCARE Alliance  
Intrado, Inc. (Intrado)  
Motorola, Inc. (Motorola)  
Verizon Wireless (Verizon)

**List of Reply Commenters**

AT&T Wireless Services, Inc. (AT&T Wireless)  
Mercedes-Benz USA, LLC (MBUSA)  
OnStar Corporation  
Toyota Motor North America, Inc. (Toyota)  
Verizon