

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

In the Matter of)
)
Implementation of the NET 911 Improvement) WC Docket No. 08-171
Act of 2008)

To: The Commission

REPLY COMMENTS OF VERIZON WIRELESS

Verizon Wireless hereby submits reply comments in the Commission’s *Notice of Proposed Rulemaking* in the above-captioned proceeding.¹ The Commission issued the *NPRM* as a first step toward compliance with the 90-day statutory deadline for implementing the provisions of the New and Emerging Technologies 911 Improvement Act of 2008 (the “NET 911 Act”).²

As part of the *NPRM*, the Commission seeks comment on a separate issue regarding the provision of location information for subscribers of mobile VoIP devices while roaming.³ Should the Commission decide to act on this distinct, limited issue now, it should affirm that it is permissible to: (1) route mobile VoIP calls to an appropriate PSAP based on available location information, for example, via current wireless autolocation techniques, or by providing the PSAP with the access point of the WiFi hotspot where such information is known; or (2) route such

¹ *In the Matter of Implementation of the NET 911 Improvement Act of 2008*, Notice of Proposed Rulemaking, WC Docket No. 08-171, FCC 08-195 (rel. Aug. 25, 2008) (“*NPRM*”).

² See New and Emerging Technologies 911 Improvement Act of 2008, Pub. L. 110-283, 122 Stat. 2620, § 101(2) (adding new Section 6 the Wireless Communications and Public Safety Act of 1999 (the “911 Act”), to be codified at 47 U.S.C. § 615a-1(c)(1)). Unless otherwise indicated, statutory citations will reference the amended 911 Act.

³ See *NPRM* at ¶ 7.

calls to a central emergency call center with trained technicians.⁴ But it should not mandate “last known cell” technology or any other specific technology. Finally, the Commission should not delegate enforcement authority to state or local agencies.

I. The Commission Should Confirm that Mobile VoIP 911 Calls May Be Routed to an Appropriate PSAP or Emergency Call Center, But Should Not Mandate “Last Known Cell” Technology

The Commission seeks comment on “what requirements should be placed on the roaming partners of [CMRS-WiFi] dual-mode service providers to provide access to information necessary to employ ‘last known cell’ in a roaming area in the same manner that dual-mode providers such as T-Mobile use such information when in their own network.”⁵ Verizon Wireless agrees with industry and public safety alike that the NET 911 Act does not compel the Commission to address this issue within the 90-day statutory deadline, and that the Commission should not adopt rules at this time.⁶ Should the Commission determine that near term action on this issue is warranted, it should confirm that mobile VoIP calls may be routed to an appropriate PSAP based on available location information, and at minimum routed to a centralized emergency call center with trained technicians. Further action at this time is premature, however, for a number of reasons.

⁴ T-Mobile, the only wireless company with a commercially available mobile VoIP product, states that none of the WiFi-based 911 calls placed from its dual-mode handsets from February 1, 2008 to August 27, 2008 were placed by customers roaming outside its service area. Comments of T-Mobile USA, Inc., filed Sept. 9, 2008, at 3. Were there a 911 coverage gap where both wireless autolocation and the address of the WiFi access point fail, T-Mobile has implemented a call center of trained emergency services technicians as a back-up to handle 911 calls, similar to how telematics and mobile satellite service (“MSS”) providers do today as their only solution.

⁵ *NPRM* at ¶ 7.

⁶ See Comments of NENA and APCO, filed Sept. 9, 2008 at 11-12; Comments of Sprint Nextel Corporation, filed Sept. 9, 2008, at 10-13; T-Mobile Comments at 4-13; Initial Comments of the VON Coalition, filed Sept. 9, 2008, at 15-18.

First, standards are currently being developed to facilitate the exchange of 911 location information between access and application service providers, such as wireless carriers and mobile interconnected VoIP providers. These efforts are estimated to be completed in mid-2009. Last known cell is one type of location information method, but it is not the only one. Verizon Wireless is aware that several vendors are working on positioning methods for IP-based networks which may ultimately prove more accurate than last known cell. The Commission should ensure that any near-term action not inadvertently preclude the development and availability of potentially more robust solutions.

Second, the Commission's experience in implementing basic 911 and enhanced 911 ("E911") underscores the importance of not prejudging technology developments and the value of deferring to industry standards bodies. In 1999, for example, the Commission concluded that its initial E-911 Phase II requirements unintentionally precluded the use of promising handset-based location technology, and modified its rules to accommodate new solutions.⁷ Today, the Assisted-GPS/AFLT handset-based technology employed by Verizon Wireless and others is the most accurate solution commercially available. In 2002 the Commission imposed an ANI transmission requirement for non-service initialized handsets, but subsequently stayed and modified those rules, concluding that nearly-complete industry standards bodies efforts were preferable.⁸ Moreover, Congress's admonition in the NET 911 Act, that the Commission avoid

⁷ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Third Report and Order, 14 FCC Rcd. 17388, ¶ 34 ("the effect of [the initial] rules on handset-based ALI technologies was ... an unintended consequence").

⁸ *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Non-initialized Phones*, Report and Order, 17 FCC Rcd 8481 (2002), *stayed*, Order, 17 FCC Rcd. 19012 (WTB 2002), *modified on reconsideration*, Memorandum Opinion and Order 18 FCC Rcd 23383 (2003).

imposing “a specific technology or technological standard” for VoIP E911, also militates against limiting carriers’ technology choices here.⁹

Third, the Commission also needs to consider the technical and economic feasibility of its E911-related requirements.¹⁰ With the exception of T-Mobile, Verizon Wireless is not aware of any carrier that captures last known cell information as a normal course of business for use in real-time 911 call routing and location, or any that provides it to third party carriers. The retention of such information has technical and cost implications that must be considered with respect to data storage capabilities, call processing changes to key network elements, and connectivity arrangements between home and roaming carriers.¹¹

Fourth, the maintenance of last known cell information and the provision of such information *to third party providers* raise significant privacy issues. The *NPRM* does not discuss the issue of whether the sharing of such information with third party service providers – as opposed to emergency service providers – is protected under section 222(d)(4) of the Act.¹² Implementing a last known cell capability would require that such information be maintained for *all* roaming traffic – not just 911 calls – and shared with a third party provider. Further, the technical capability would need to be developed to route that location information to the

⁹ See 911 Act § 6(e)(1).

¹⁰ See *Nuvio Corp. v. FCC*, 473 F.3d 302, 303 (D.C. Cir. 2006) (“We deny [Nuvio’s] petition for review because we conclude that the Commission adequately considered not only the technical and economic feasibility of the deadline, *inquiries made necessary by the bar against arbitrary and capricious decision-making*, but also the public safety objectives the Commission is required to achieve.”) (emphasis added).

¹¹ See Sprint Nextel Comments at 12; see also Comments of AT&T, filed Sept. 9, 2008, at 8.

¹² Section 222(d)(4)(C) of the Communications Act of 1934, as amended (the “Act”), allows for the disclosure of or access to location information “to providers of information or database management services solely for purposes of assisting in the delivery of emergency services in response to an emergency.” 47 U.S.C. § 222(d)(4)(C). It is uncertain whether the disclosure of information for *all* roaming calls, not just 911 calls, to a third-party database provider would fall within the emergency services exception of this subsection of the Act.

appropriate carrier's MPC in real time for 911 call processing purposes. It is critical that the Commission carefully consider and address these issues prior to imposing any new requirements.

Finally, T-Mobile has already addressed the possibility that emergency calls may occur in an area where neither it nor its roaming partner can provide wireless autolocation technology in two ways: (1) the provision of the address of the access point that T-Mobile controls; and (2) use of a call center with trained emergency call technicians.¹³ Thus, there is no near term problem warranting further Commission action. Should the Commission choose to act at this time, it should consider as an interim measure confirming that mobile VoIP calls may be routed to an appropriate PSAP based on available location information (e.g., by wireless autolocation or known WiFi access point address), or routed to a centralized emergency call center with trained emergency call technicians.¹⁴ The Commission's and consumers' experience with such call centers in the telematics and MSS contexts underscores the public interest benefits of such an approach for the limited number of affected 911 calls.¹⁵

This approach would not be mutually exclusive of alternative solutions developed later by standards bodies, and the Commission could both allay any concerns regarding possible 911 service gaps without prematurely mandating a last known cell site approach. Such an approach

¹³ The latter is truly a back-up approach and, according to T-Mobile, has not been utilized in the preceding seven month period. T-Mobile Comments at 3.

¹⁴ The Washington State E911 Program has recommended a flexible "functional requirement that 911 calls be routed to the correct PSAP." Washington State E911 Program Comments, filed Sept. 8, 2008, at 3.

¹⁵ See 47 C.F.R. § 25.284 (MSS requirements); *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Amendment of Parts 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements*, Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd. 25340, ¶¶ 31-39 (2003) (imposing call center requirements on MSS providers and noting they "face[] a number of unique network interconnection issues"); *id.* at ¶¶ 72-73 (describing public safety benefits of telematics providers' call centers).

would also enable the Commission sufficient time to develop a record and consider alternative approaches, consistent with its obligations under the Administrative Procedure Act.¹⁶

II. The Commission is Not Compelled to Address Mobile VoIP Roaming Issues Within the 90-Day Period of the NET 911 Act

Congress required the Commission to issue regulations implementing the NET 911 Act within 90 days of enactment.¹⁷ The NET 911 Act requires, in relevant part, that interconnected VoIP providers be in compliance with the Commission’s basic and enhanced 911 rules “as in effect on the date of enactment ... and as such requirements may be modified by the Commission from time to time.”¹⁸ The statute also affords interconnected VoIP providers explicit rights of access to 911 capabilities, including interconnection.¹⁹ Verizon Wireless agrees with various commenters, however, that more expansive requirements for mobile interconnected VoIP providers and their roaming partners fall outside the scope of matters that must be addressed within the 90 day period.²⁰

The Commission specifically seeks comment on “what requirements should be imposed on [a] mobile VoIP provider and its roaming partner when offering mobile VoIP service in a

¹⁶ See *supra* note 10.

¹⁷ 911 Act § 6(c)(1).

¹⁸ *Id.* § 6(a).

¹⁹ *Id.* § 6(b).

²⁰ See AT&T Comments at 7-8; Sprint Nextel Comments at 11-12; T-Mobile Comments at 4-8. Several Commissioners expressed the view that, with regard to the issue of CMRS providers’ roaming arrangements raised in the *NPRM*, any Commission order addressing the issue should proceed on a separate track from the NET 911 Act implementation. See *NPRM*, Statement of Commissioner Adelstein (“these issues are more appropriately addressed in a separate proceeding”); *id.*, Statement of Commissioner McDowell (issue is “worthy of additional study” but “in no way compelled by the plain language or intent of the NET 911 Act”); see also *id.*, Statement of Commissioner Copps (“first preference would be to deal with [these] issues ... in a single, comprehensive proceeding”).

roaming area outside its CMRS footprint.”²¹ Congress required, in certain circumstances, that interconnected VoIP providers have access to 911-related “capabilities” – provisioned by various third party providers and vendors – that are not otherwise provided to a CMRS provider.²² The statute does not, however, address the underlying roaming capabilities of a CMRS provider itself. Further, the mobile roaming issues raised in the *NPRM* are not “necessary” for providers of mobile VoIP to comply with the Commission’s rules as of the date of enactment, as the NET 911 Act requires.²³ As there are no E-911 rules governing wireless roaming agreements, wireless-to-wireless roaming arrangements are not subject to the 90-day deadline.²⁴ And as T-Mobile explains, Congress expressly contemplated that these sorts of autolocation capabilities would be considered on a separate timetable.²⁵

Additionally, Congress clarified that the NET 911 Act “does not give VoIP providers a right of access to the 911 infrastructure beyond what is needed to transmit, deliver, and complete 911 and E-911 calls and associated E-911 information.”²⁶ Rather, Congress had in mind “the

²¹ *NPRM* at ¶ 7.

²² The Commission suggests that mobile roaming arrangements may fall within the scope of new section 6(c)(1)(C) of the 911 Act. *See NPRM* at ¶ 7 (quoting language from § 6(c)(1)(C)). The “capabilities” referenced there, however, relate to the *911-related* capabilities provided by the owners of those capabilities that are not otherwise provided to (not by) a CMRS provider. *See id.*; H.R. Rep. No. 110-442, at 6 (2007) (“House Report”) (NET 911 Act provides rights “to access the emergency services infrastructure” and “key facilities and infrastructure ... needed to complete 911 and E-911 calls”); *see also* House Report at 6 (“[i]t is not the intent of this legislation to grant providers of VoIP access to any parts of the 911 infrastructure not needed to provide 911 and E-911 services”). By its terms, then, the statute does not cover the underlying commercial roaming capabilities of a CMRS provider itself, much less require CMRS providers to deploy new facilities or services that do not already exist.

²³ *See* 911 Act §§ 6(a), (c)(1)(C).

²⁴ *See* T-Mobile Comments at 6-7.

²⁵ *See id.* at 6 (citing NET 911 Act § 102 and discussing new section 3(d) of the National Telecommunications and Information Administration Organization Act).

²⁶ House Report at 13 (explaining new § 6(b) of the 911 Act).

emergency services infrastructure,²⁷ which includes selective routers and ALI databases, as well as third party vendor solutions. Access to the underlying call routing information of another CMRS provider – which most CMRS providers do not even maintain at present, much less provide to other carriers – is beyond the scope of what Congress intended to cover in the NET 911 Act. Nor does a roaming partner’s last known cell site constitute “interconnection” for purposes of the statute. The Commission has not conflated roaming arrangements into the context of interconnection, and there is no basis for the Commission to do so here.

III. The Commission Should Not Delegate Enforcement Authority to State Commissions or Local Agencies.

The Commission seeks comment on whether to “delegate authority to enforce any regulations issued under [section 6(c) of the 911 Act] to State commissions or other State or local agencies or programs with jurisdiction over emergency communications.”²⁸ While the statute did not alter those agencies’ existing authority, it expressly provides that such delegation may not be “inconsistent with Federal law or Commission requirements.”²⁹ Any permissible delegation is thus limited in scope, and Verizon Wireless agrees with a number of parties that no delegation of authority to states or localities is warranted.³⁰

A number of factors militate against delegating enforcement authority to states or localities. The provision of 911/E911 services and the practical implementation of Commission-imposed capabilities are driven by industry-based technical standards. The Commission has long recognized that consistent application and interpretation of Commission-imposed wireless

²⁷ *Id.* at 6

²⁸ *NPRM* at ¶ 12.

²⁹ 911 Act § 6(d).

³⁰ *See* Sprint Nextel Comments at 9-10; Comments of Verizon, filed Sept. 9, 2008, at 6-7; *see also* Comments of Qwest Communications International, Inc., filed Sept. 8, 2008, at 6 (delegation premature at this time).

technical requirements is not amenable to state or local enforcement.³¹ Wireless technical matters have long been the exclusive purview of the Commission, and this rationale applies with equal force to 911/E911— particularly, as Verizon explained, in the VoIP context.³² Also, wireless carriers maintain nationwide networks, and much of the 911 infrastructure for interconnected VoIP providers and mobile providers is via centralized, third party vendors such as Intrado and TCS that operate irrespective of the locality from which a 911 call originates. It is critical that enforcement of these standards be consistently applied and enforced. For these reasons, the Commission should not delegate enforcement authority to states or localities.

IV. Conclusion

For the foregoing reasons, the Commission in the near term could affirm that mobile VoIP calls may be routed to an appropriate PSAP based on available location information, and at minimum that such calls be routed to a centralized emergency call center with trained technicians. The technical and practical complexities presented by a “last known cell site” or

³¹ See *Broyde v. Gotham Tower, Inc.*, 13 F.3d 994 (6th Cir. 1994), citing *Head v. New Mexico Board of Examiners in Optometry*, 374 U.S. 424, 430 n. 6 (1963) (“[T]he FCC’s ... jurisdiction over the regulation of radio frequency interference [and] ‘over technical matters’ associated with the transmission of radio signals ‘is clearly exclusive.’”); *Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones*, Order on Reconsideration and Further Notice of Proposed Rulemaking, 20 FCC Rcd. 11221, ¶ 57 (2005) (retaining “exclusive jurisdiction over technical standards [including] determinations whether particular equipment complies with our [hearing aid compatibility] standards”).

³² See Verizon Comments at 6-7 (citing *IP-Enabled Services, E911 Requirements for IP-Enabled Service Providers*, First Report and Order, 20 FCC Rcd. 10245, ¶ 29 n.95 (2005)). The Commission has explained that “Federal preemption of intrastate E911 regulation may be necessary to ensure the achievement of various inseverable, nationwide aspects of E911 operations, including: (1) ubiquitous E911 operational compatibility; (2) the avoidance of state-by-state technical and operational requirements ...; and (3) the averting of confusion by end users, especially roamers” *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd. 18676, ¶ 104 (1996). The Commission thus held that “state actions that are incompatible with the policies and rules adopted in this Order are subject to preemption.” *Id.* at ¶ 105.

alternative approach, however, should be explored further, as it is premature to impose any such obligations and such action is not compelled by the NET 911 Act. Finally, the Commission should not delegate enforcement authority under the NET 911 Act to states or localities.

Respectfully submitted,

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