

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications)	PS Docket No. 11-153
)	
Framework for Next Generation 911 Deployment)	PS Docket No. 10-255
)	

REPLY COMMENTS OF VERIZON AND VERIZON WIRELESS¹

The record in this proceeding supports a voluntary, consensus-driven framework for text-to-911 deployment that will facilitate industry’s and public safety stakeholders’ efficient transition to IP-enabled networks and services while achieving important public safety objectives. Thus, as discussed below and in Verizon’s comments, the Commission should allow the Voluntary Agreement between wireless providers and public safety organizations to proceed or, if the Commission nevertheless adopt rules, limit their scope to the technically feasible parameters of that Agreement.

I. THE COMMISSION SHOULD ALLOW THE VOLUNTARY MULTI-STAKEHOLDER AGREEMENT TO PROCEED.

At least two particular factual points in the record warrant continued use of the Voluntary Agreement framework. First, commenters uniformly acknowledge that any proposed regulatory mandate should consider PSAPs’ demand for text-to-911 capabilities.² The record also reflects

¹ In addition to Verizon Wireless, the Verizon companies participating in this filing are the regulated, wholly owned subsidiaries of Verizon Communications Inc. (collectively, “Verizon”).

² See Verizon Comments at 3-4; APCO Comments at 5; CTIA Comments at 7-8; NTCA Comments at 5.

that significant questions remain concerning PSAP demand for SMS-based text-to-911, due to funding concerns and ambivalence about whether to focus resources on interim SMS-based text-to-911 versus more robust IP-enabled text capabilities.³ That is so even as PSAPs face minimal obstacles to implementation. The Commission cannot meaningfully address PSAP demand until an appropriate time after the Voluntary Agreement is fully in effect and text-to-911 becomes more widely available.

Second, commenters indicate that a substantial and increasing number of the more popular over-the-top (“OTT”) text messaging services or applications are not “interconnected text” services that would be subject to text-to-911 requirements (or, for that matter, the current bounceback rule) on the basis that they only incidentally use 10-digit phone numbers to identify users of the same application.⁴ The VON Coalition, moreover, states that many such services cannot send or receive text messages to and from all text-capable telephone numbers or to and from users of other text applications.⁵ If the Commission agrees with this conclusion, then a principal *raison d’être* for new Commission rules – consumers’ ever more expansive use of text-messaging services – becomes less significant.⁶ Such a conclusion would further militate in

³ See APCO Comments at 4-5; NENA Comments at 4, 7-8; National Association of State 911 Administrators (NASNA) Comments at 4.

⁴ See Information Technology Industry Coalition Comments at 3-4; Microsoft Comments at 3-4; Twilio Comments at 8-9; Voice on the Net (VON) Coalition Comments at 2-4.

⁵ See VON Coalition Comments at 3.

⁶ See *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment*, Policy Statement and Second Further Notice of Proposed Rulemaking, 29 FCC Rcd 1547, ¶ 10 n.33 (2014) (“*Policy Statement*” or “*Second FNPRM*,” as applicable) (“to the extent that consumers are gravitating to” IP-based messaging applications “as their primary means of communicating by text, they may reasonably come to expect that these applications support text-to-911” and citing reports that WhatsApp’s user base was 430 million in early 2014).

favor of continued *voluntary* measures while the Commission looks at IP-enabled non-voice services more holistically in the NG911 context.⁷ Otherwise, the Commission risks imposing disparate regulatory burdens on competing services, contrary to its long-held policy of competitive and technology neutrality.⁸ At a minimum, the Commission should clarify uncertainty regarding the scope of the rule⁹ so that the expectations of industry and public safety are clear and to ensure that wireless providers like Verizon are just as free to innovate and compete for consumer loyalty as OTT providers.

Finally, as a general matter, the record does not support the conclusion that regulation will bring about the public safety benefits of text-to-911 more effectively than voluntary efforts. Voluntary efforts *can* achieve important public safety objectives without regulatory action, as evidenced by last month's industry commitment to address law enforcement demands for anti-

⁷ See *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications Framework for Next Generation 911 Deployment*, Notice of Proposed Rulemaking, 28 FCC Rcd 7556, ¶¶ 68-83 (2011) (seeking comment on different text and other non-voice services that might be supported in an NG911 environment).

⁸ See, e.g., *Policy Statement* ¶ 15; *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications Framework for Next Generation 911 Deployment*, Further Notice of Proposed Rulemaking, 27 FCC Rcd 15659, ¶¶ 90-93 (2012); *Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules Wireless E911 Location Accuracy Requirements E911 Requirements for IP-Enabled Service Providers*, Notice of Proposed Rulemaking, Third Report and Order, and Second Further Notice of Proposed Rulemaking, 26 FCC Rcd 10074, ¶ 23 (2011); *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Third Report and Order, 14 FCC Rcd 17388, ¶ 81 (1999) ("a policy of technological and competitive neutrality best promotes the public safety and welfare goals of this proceeding").

⁹ Sprint Comments at 5; Texas 9-1-1 Alliance *et al.* Comments at 5; TCS Comments at 21; VON Comments at 2-3; see also Letter from H. Russell Frisby, Jr., counsel for TeleCommunication Systems (TCS), to Marlene Dortch, FCC, PS Docket No. 11-153, at 4 (Jan. 24, 2014).

theft features for smartphones.¹⁰ Industry and public safety alike acknowledge the significant progress toward text-to-911 availability achieved through the Voluntary Agreement¹¹ – Verizon itself has launched service in over 60 jurisdictions as of April 1, with more jurisdictions added since filing comments last month. The record also confirms that other larger and smaller wireless providers alike are addressing the issue,¹² and that there is significant support for continued collaboration among industry parties to address text-to-911 capabilities for interconnected text services.¹³ Finally, commenters acknowledge that the efforts of different industry players in the Internet ecosystem will be necessary to achieve text-to-911 capability for interconnected text providers, including entities not traditionally subject to Commission regulation.¹⁴ For this reason as well, a multi-stakeholder approach is necessary to address the issue comprehensively and help avoid imposing disparate regulatory burdens on only part of a complex ecosystem.¹⁵

¹⁰ See CTIA, *CTIA and Participating Wireless Companies Announce the “Smartphone Anti-Theft Voluntary Commitment* (Apr. 15, 2014), <http://www.ctia.org/policy-initiatives/voluntary-guidelines/smartphone-anti-theft-voluntary-commitment>.

¹¹ Verizon Comments at 2-4; CTIA Comments at 8-9; APCO Comments at 2; NENA Comments at 12-13.

¹² See Verizon Comments at 3; NTCA Comments at 2.

¹³ Verizon Comments at 2-4; Comcast Comments at 3-4 (Commission should “encourag[e] the various industry stakeholders to resolve through a collaborative effort” OTT implementation issues); CTIA Comments at 4-5; CenturyLink Comments at 7-8 and n.14; see also Motorola Mobility Comments at 6 (“challenges will require focused collaboration by industry and public safety stakeholders that has been the hallmark of the CSRIC” and are appropriate for that body); APCO Comments at 7 (while supportive of rules, “generally favor[ing] collaborating with interested stakeholders to forge agreements that are achievable and serve the interests of public safety”).

¹⁴ See *infra* n.26.

¹⁵ Cf. The White House, *Consumer Data Privacy in a Networked World: A Framework for Protecting Privacy and Promoting Innovation in the Global Digital Economy*, at 24 (Feb. 2012) (explaining that through “reliance on multistakeholder processes” and “defer[ence] to the expert

II. ANY NEW RULES SHOULD NOT EXTEND BEYOND THE PARAMETERS OF THE VOLUNTARY AGREEMENT.

Should the Commission nevertheless proceed with new rules, it must ensure that they are technically feasible and do not hinder industry's and PSAPs' respective transitions to IP-enabled services and NG911 networks. The record in this proceeding confirms that the Commission can best achieve these objectives by limiting the scope of any near term rules to the capabilities under the Voluntary Agreement.

A. Near-Term Text-to-911 Capabilities Will Be Limited to SMS-Based Technology Solutions.

Commenters all generally acknowledge that compliance with any near-term deadlines would be feasible only with respect to SMS-based solutions.¹⁶ The record thus supports the Commission limiting any near term rules to the parameters of the Voluntary Agreement.

Verizon also agrees with public safety commenters that the Commission should apply any near-term rules consistently across competing wireless providers.¹⁷ To that end Verizon and others have suggested changes to the implementation requirements of the proposed rules, as well as limited waiver policies, that can accommodate the minimal number of smaller wireless providers

bodies that produce Internet technical standards" the United States "has generally avoided fragmented, prescriptive, and unpredictable rules that frustrate innovation" and that "legal requirements that prescribe specific technical requirements ... could fragment the global market for information technologies and services and inhibit innovation.")

<http://www.whitehouse.gov/sites/default/files/privacy-final.pdf>.

¹⁶ Verizon Comments at 6-7; APCO Comments at 2-3; AT&T at 9-10; CTIA Comments at 9; Motorola Mobility Comments at 2-3; NENA Comments at 4-5; NTCA at 1-2; Sprint at 9; T-Mobile at 4-6; TCS Comments at 4, 6 (rules should not apply to MMS).

¹⁷ See APCO Comments at 2-3; NASNA Comments at 2; NENA Comments at 3-4.

that may face legitimate challenges while also meeting the Commission’s public safety objectives.¹⁸

The VON Coalition’s proposal that text-to-911 be mandated even for customers without a text messaging plan is outside the scope of the *Second NPRM* and should be rejected.¹⁹ Such a requirement is not part of the Voluntary Agreement and would unfairly shift the regulatory burden associated with an OTT provider’s customers to wireless providers by imposing an “all 911 calls” rule on text messaging.²⁰ Public safety stakeholders have also expressed concern for that rule’s impact on PSAP workloads for voice 911 calls.²¹ Moreover, as a legal matter, the Commission has already expressly indicated that the rule should not apply in the text-to-911 context.²²

In all events, the record supports affording wireless providers full flexibility to transition to IP-enabled text messaging services.²³ Requirements to regulate legacy wireless network components and services,²⁴ or that are dependent on the reconfiguration of legacy networks,²⁵

¹⁸ See Verizon Comments at 7, 16-18, AT&T Comments at 9-10; APCO Comments at 2-3; NASNA Comments at 2; NENA Comments at 3-4, 12-13; TCS Comments at 3-4.

¹⁹ VON Coalition Comments at 5.

²⁰ See 47 C.F.R. § 20.18(b).

²¹ See Letter from Telford Forgety, NENA, to Marlene Dortch, FCC, *Petition for a Notice of Inquiry Regarding Call Forwarding Requirements and Carrier Blocking Options for Non-Initialized Phones*, PS Docket No. 08-51 (Feb. 11, 2013).

²² See *Facilitating the Development of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment*, Report and Order, 28 FCC Rcd 7556, ¶ 76 (2013).

²³ See Verizon Comments at 2, 14-16; AT&T Comments at 4; NENA Comments at 6-7; T-Mobile Comments at 2-3.

²⁴ See Bandwidth.com Comments at 7; MediaFriends Comments at 4.

²⁵ See TruePosition Comments at 7-8; TCS Comments at 16-17.

would be inconsistent with this approach. As a result, such requirements could have the unintended effect of shackling wireless and interconnected text providers' text-to-911 capabilities and users to legacy technologies.

B. Interconnected Text Providers May Face Additional Challenges for Text-to-911 Implementation.

The record confirms that the so-called CMRS-based network model solution for OTT providers, in which the OTT application uses a device's SMS Application Processing Interface ("API"), has potential to enable them to deliver text messages to PSAPs. It also confirms, however, that the viability of that model is dependent on stakeholders in the Internet ecosystem other than wireless providers and, moreover, not all OTT text messaging services may be able to employ that solution. Specifically, the comments of public safety stakeholders, vendors, application providers and service providers all confirm that CMRS providers would play an incidental, secondary role in making the CMRS-based network model available to consumers.²⁶

For this reason and others, the Commission should not adopt its proposed "no blocking" requirement for CMRS providers. There is no legitimate reason to presume that regulations are needed to ensure that CMRS providers enter into commercially reasonable arrangements where technically feasible, particularly when CMRS providers have a track record of entering into commercial agreements in these areas. As AT&T notes, moreover, other options available to OTT providers may not require direct involvement by CMRS carriers, and as wireless providers

²⁶ Verizon Comments at 7-8; Alliance for Telecommunications Industry Solutions (ATIS) Comments at 3-4; Boulder Comments at 21-23; Comcast Comments at 2, 5-7; MediaFriends Comments at 3; Microsoft Comments at 8-9; Motorola Mobility Comments at 3-4; NENA Comments at 6-7; Sprint Comments at 3-7; T-Mobile Comments at 12-13; TCS Comments at 5-6; Twilio Comments at 2-3; VON Coalition Comments at 4-5; *see also* Telecommunications Industry Association Comments at 5.

and consumers migrate to IP-enabled services and networks the Commission should incent OTT providers to develop their own all-IP solutions. For those OTT providers interested in using the CMRS network-based model, the Commission should allow them and other relevant parties to work collaboratively as a business matter to resolve these issues. This approach will give OTT providers the right incentives to work with OS providers and handset manufacturers to develop and update the necessary device APIs and, in the longer term, IP-enabled technologies compatible with all-IP networks. It also establishes a flexible approach to relationships between wireless and OTT application providers that is more appropriate for the transition to IP-enabled products and services.²⁷ And it would not effectively saddle wireless carriers with regulatory burdens that should be focused on the OTT provider's offering of text services to its end users.

C. Commenters Agree that Location and Roaming Requirements Are Not Technically Feasible at This Time.

Commenters have different views on the need for location and roaming capabilities for SMS-based solutions, but they generally agree that: (1) there are significant challenges to implementing these capabilities in the near or medium term;²⁸ and (2) any requirements should be standards-based²⁹ and will require participation of industry stakeholders beyond just wireless

²⁷ See Verizon Comments at 9-10, 20; AT&T Comments at 2-4; Bandwidth.com Comments at 4-6; NENA Comments at 6-7; T-Mobile Comments at 11-13; TCS Comments at 7-8; *see also* MediaFriends Comments at 3.

²⁸ Verizon Comments at 16-18; APCO Comments at 5-6, AT&T Comments at 5-7; Boulder Comments at 37-38; CenturyLink Comments at 5-6; CTIA Comments at 9-11; MediaFriends Comments at 7; Motorola Mobility Comments at 4-6; NENA Comments at 9-11; RWA Comments at 3; Sprint Comments at 9; T-Mobile Comments at 6-8; TCS Comments at 12.

²⁹ APCO Comments at 5-6, AT&T Comments at 5-7; ATIS Comments at 4-6; NENA Comments at 9-11; T-Mobile Comments at 7-10; *see also* TruePosition Comments at 10.

providers.³⁰ Employing existing E911 location capabilities for SMS thus requires more than “minor development effort,” as TruePosition suggests,³¹ and several commenters affirm Verizon’s concerns regarding the privacy implications of potential solutions.³²

TCS proposes a variety of potential approaches to address roaming in the SMS environment.³³ It also acknowledges the existing limitations of SMS-based solutions, however, and its suggestion of several different options *underscores* the need for a standards-based approach. Finally, allowing wireless providers to implement roaming and location capabilities through IP-enabled and standards-based global text telephony (GTT) services, or to leverage commercial LBS technologies, will help ensure that the Commission’s actions do not hinder the transition to IP-enabled networks and services.³⁴

D. SMS-Based Text-to-911 Is Available to PSAPs Requesting Service Consistent with the Voluntary Agreement.

Public safety stakeholders understandably express concern for the financial and operational impact of text-to-911 implementation, and suggest that new regulations will give many of them the incentive to make the necessary investments.³⁵ Verizon’s experience in the sixty-plus jurisdictions with whom it has launched the capability, however, indicates that there are no significant technical, financial or operational challenges for PSAPs to implement the

³⁰ APCO Comments at 5-6, AT&T Comments at 5-7; CTIA Comments at 11-12; MediaFriends Comments at 7; Motorola Mobility Comments at 4, 6; Sprint Comments at 9-12.

³¹ TruePosition Comments at 6.

³² *See* Verizon Comments at 15-16; Motorola Mobility Comments at 4-5; TCS Comments at 12; Twilio Comments at 7.

³³ TCS Comments at 15-18.

³⁴ AT&T Comments at 5-7; Bandwidth.com Comments at 6-7; NENA Comments at 9, 11; Sprint Comments at 12; T-Mobile Comments at 6, 9-10.

³⁵ *See* APCO Comments at 4-5; NENA Comments at 3-4; NASNA Comments at 4.

SMS-based text-to-911 solutions available today.³⁶ The record in comments appears consistent with Verizon's experience. For this reason as well, any new rules should be consistent with the parameters of the Voluntary Agreement.

Respectfully submitted,

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³⁶ See Verizon Comments at 3-4.