



Federal Communications Commission
Washington, D.C. 20554

August 15, 2017

DA 17-776

The Honorable Betty Ann Kane
Chair, North American Numbering Council
c/o Public Service Commission of the District of Columbia
1325 G Street N.W., Suite 800
Washington, DC 20005

Amy L. Putnam
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Dear Chairwoman Kane and Ms. Putnam:

This letter responds to the petition filed by Onvoy Spectrum, LLC (Onvoy)¹ and provides guidance to Neustar, Inc. (Neustar) as the Routing Number Authority (RNA) regarding the administration of pseudo Automatic Number Identification (p-ANI) codes.² In particular, this letter determines that Onvoy Spectrum, LLC (Onvoy) may be assigned the p-ANI codes it seeks.

Onvoy, a VoIP Positioning Center (VPC) provider,³ has made the Commission aware of its need to obtain wireless p-ANI codes for a software solution it has developed and tested for 911 calling from portable or mobile devices.⁴ According to Onvoy, when a consumer using a Voice over Internet Protocol (VoIP)

¹ See *Petition for Waiver of Onvoy Spectrum, LLC*, WC Docket No. 13-97 *et al.* (filed Dec. 19, 2016) (Onvoy Petition); see also *Wireline Competition Bureau Seeks Comment on Onvoy Spectrum, LLC Petition for Waiver of Section 52.15(g)(2) of the Commission's Rules Regarding Access to Numbering Resources*, WC Docket No. 13-97 *et al.*, Public Notice, DA 16-1442 (WCB Dec. 22, 2016).

² A p-ANI is a number, consisting of the same quantity of digits as an Automatic Number Identification (ANI), that is not a North American Numbering Plan (NANP) telephone directory number and that may be used in place of an ANI to convey special meaning to the selective router, public safety answering point, and other elements of the 911 system. See *IP-Enabled Services, E911 Requirements for IP-Enabled Service Providers*, WC Docket Nos. 04-36, 05-196, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10252-53, para. 17 (2005) (*VoIP 911 Order*); 47 C.F.R. § 9.3. The Wireline Competition Bureau designated Neustar as the permanent RNA by letter dated June 28, 2007. See Letter from Thomas J. Navin, Chief, Wireline Competition Bureau, Federal Communications Commission, to Thomas M. Koutsy, Chair, North American Numbering Council (Jun. 28, 2007). The RNA administers p-ANI codes pursuant to guidelines set forth in the Pooling Administration contract. See Contract for Pooling Administration Services for the Federal Communications Commission, FCC Contract No FCC13C0007, Change Order # 19 (awarded through Contract Modification 16 on June 17, 2011) (*Pooling Administration Contract*).

³ “VPC providers are entities that help interconnected VoIP providers deliver 911 calls to the appropriate [PSAP]. Among other things, VPCs provide such capabilities as location-based call routing and real-time delivery to the PSAP of the caller’s location information.” *Numbering Policies for Modern Communications et al.*, WC Docket No. 13-97, *et al.*, Report and Order, 30 FCC Rcd 6839, 6841 n.6 (2015), citing *IP-Enabled Services, et al.*, WC Docket No. 04-36, *et al.*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10252-53, para. 17 (2005).

⁴ Onvoy Petition at 4-8, 13-14.

application with its solution calls 911 from a mobile phone on a Commercial Mobile Radio Service (CMRS) network, the device completes the emergency call using the native CMRS capability.⁵ However, Onvoy notes that if a consumer is using a non-phone device such as a tablet or laptop, or is using a CMRS device in data-only mode or without CMRS connectivity, there is no such emergency functionality.⁶ Onvoy's software-based 911 solution purports to provide this functionality, allowing delivery of emergency calls in these circumstances to public safety answering points (PSAPs) with current, real-time 911 location data, similar to the wireless enhanced 911 (E911) functionality provided by CMRS providers.

Onvoy's solution, however, is contingent upon its ability to provide to PSAPs geodetic coordinate location data derived from the actual location of devices, and to provide any location updates as may be requested by a PSAP, in the proper format. For some PSAPs, such geodetic data can only be transmitted, and the updating function will only operate, by using p-ANIs assigned for wireless signaling, rather than using p-ANIs assigned for VoIP signaling.⁷

In its petition and reply,⁸ Onvoy describes the benefits of its software-based 911 solution, such as:

- (1) Onvoy offers a solution for interconnected VoIP emergency 911 calls that provides to PSAPs the estimated location of the device from which the call is being made;
- (2) the solution provides geodetic coordinate location data derived from the actual location of the device, and provides any location updates as may be requested by a PSAP, utilizing wireless p-ANIs and connecting to the PSAP via the designated selective routing system or equivalent;
- (3) such connectivity and use of wireless p-ANIs is fully coordinated with the PSAP administrators in the jurisdictions in which the applicant seeks wireless p-ANIs;⁹
- (4) the solution interfaces with—but will not displace or adversely affect—911 infrastructure (including Next Generation 911 systems), and when installed on devices with CMRS capability the solution will not supplant or interfere with 911 calls being routed by the CMRS wireless E911 infrastructure whenever the device has CMRS connectivity;¹⁰ and
- (5) upon deployment of the solution to serve any PSAP, Onvoy is testing its solution to ensure proper operation.¹¹

⁵ *Id.* at 4.

⁶ *Id.* at 2, 4, 13, 14.

⁷ *Id.* at 6-7; *Initial Comments of Texas 9-1-1 Entities on the Petition for Waiver*, filed January 23, 2017, at 4, 6 n.13 (commenting on the Onvoy petition for waiver); *see also Pooling Administration Contract* at 5, Section 2. The wireless signaling in this instance is Emergency Service Routing Key (ESRK) signaling, needed instead of the Emergency Services Query Key (ESQK) signaling usually employed for VoIP-based calls.

⁸ *See* Onvoy Petition at 4, 6-7, 13-14; Onvoy Reply, WC Docket Nos. 13-97, 04-36, and 07-243, CC Docket No. 99-200, PS Docket No. 10-255, at 6 (Feb. 6, 2017) (Onvoy Reply).

⁹ Onvoy Reply at 6 (“Onvoy Spectrum is already engaged with PSAPs and the broader emergency services community, and will continue that engagement and close cooperation with emergency services providers before, during, and after the roll-out of its solution in local jurisdictions.” (internal quotation marks omitted)).

¹⁰ Onvoy Petition at 4 (“Thus, the proposed solution would not bypass the native 9-1-1 device capability if that is available. In other words, when a device has CMRS capability, and is able to connect to a cellular network, calls to 9-1-1 would reach the PSAP via CMRS in exactly the same fashion that they do today. But for those devices depending on WiFi for connectivity, Onvoy Spectrum’s solution would connect those devices to the existing 9-1-1 system for the first time.”).

¹¹ Specifically, Onvoy has stated that its “testing and implementation protocol includes built-in cooperation with local PSAPs,” which “includes custom-built testing and implementation parameters for each jurisdiction, ongoing live customer service to the 9-1-1 system in each jurisdiction, and a single point-of-contact for PSAPs for calls from any Onvoy Spectrum customer.” Onvoy Reply, WC Docket Nos. 13-97, 04-36, and 07-243, CC Docket No. 99-200, PS Docket No. 10-255, at 6 (Feb. 6, 2017).

Under Neustar's contract to provide the RNA services, p-ANI codes are to be administered from the 211 and 511 central office codes, on a technology-neutral basis.¹² The Commission also does not distinguish between the assignment or use of a particular p-ANI central office code number range by service provider technology (e.g., interconnected VoIP versus wireless).¹³ In many PSAP jurisdictions, a p-ANI from either the 211 or 511 code may be assigned to any type of provider, VoIP or wireless. But in some states and individual PSAP jurisdictions, existing routing configurations and operating conventions require that all VoIP 911 calls be transmitted by p-ANI codes with a 211 central office code, and all wireless 911 calls be transmitted by p-ANIs with a 511 code.¹⁴ In these localities, Onvoy and similar providers of 911 solutions must be assigned wireless p-ANIs with a 511 central office code or their solutions are not workable.

The function of providing location data for VoIP calls is within the definition of a VPC provider. Accordingly, under the Commission's rules, a provider of such a solution must first meet the eligibility requirements for VPC providers established by the Commission for access to p-ANI codes.¹⁵ Consistent with the Commission goals above, the Commission's rules, Neustar's obligations under the Pooling Administration Contract, and based on the representations made by Onvoy in its petition, including its representation that it will provide a bona fide 911 solution that is dependent on the type of p-ANI requested, the Bureau finds that Onvoy meets the Commission's eligibility requirements for a VPC provider and confirms that the RNA may permit Onvoy to be assigned p-ANI codes for wireless use.

Please let me know if you have any questions regarding this guidance. Thank you for your assistance in implementing it.

Sincerely,

Kris Anne Monteith
Chief
Wireline Competition Bureau

Cc: Ms. Kadian Ferguson, Contracting Officer, FCC Office of the Managing Director

¹² See *Pooling Administration Contract* at 15, Section 5.1(12) ("The RNA will initially assign non-dialable p-ANIs exclusively out of the 211 and 511 NXXs. There is no technological or other distinction between the two NPA-NXXs, which will be interchangeably assigned to wireless and VoIP providers.").

¹³ See *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Order on Reconsideration, 17 FCC Rcd 14789, 14794-95, para. 13 (2002) ("The Commission has strenuously avoided solutions that are other than technology-neutral in crafting regulatory requirements for E911 implementation." [footnote omitted]).

¹⁴ It is the Commission's understanding that the RNA takes these local conventions and needs into account when assigning p-ANI codes such that for those locales, 211 p-ANI codes are restricted to applicants meeting eligibility requirements as interconnected VoIP service providers or VPC providers, and 511 p-ANI codes are restricted to eligible wireless service providers.

¹⁵ See 47 CFR § 52.15(g)(2); *P-ANI Administration Guidelines*, ATIS-0300089, June 24, 2016 (Industry Numbering Committee, Alliance for Telecommunications Industry Solutions) at 6-8, 28 (footnotes omitted) (*P-ANI Administration Guidelines*), incorporated by reference in the *Pooling Administration Contract* at 3, 4, 10, 12, 17.