

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
North Dakota Network Co. d/b/a)	
SRT Wireless)	
)	
Facilitating the Deployment of Text)	PS Docket No. 11-153
To-911 and Other Next Generation 911)	
Applications)	
)	
Framework for Next Generation 911)	PS Docket No. 10-255
Deployment)	
)	
Request for Temporary Waiver, or)	
Temporary Stay, of Section 20.18(n)(7))	
of the Rules)	

To: Chief, Public Safety and Homeland Security Bureau

PETITION FOR TEMPORARY WAIVER OR TEMPORARY STAY

North Dakota Network Company d/b/a SRT Wireless (“SRT”), by its attorneys and pursuant to Sections 1.3 and 1.925 of the Commission’s Rules, hereby requests a temporary waiver, or a temporary stay, of the requirement contained in new Section 20.18(n)(7) of the Rules that SRT provide consumers roaming on its system with an automatic bounce-back message when they attempt to send a text-to-911 message to a Public Safety Answering Point (“PSAP”) that cannot accept 911 text messages. In support hereof, the following is shown:

Background

SRT holds licenses in the Broadband PCS, AWS and 700 MHz band services in the State of North Dakota and the Company is a Tier III Commercial Mobile Radio Service (“CMRS”) service provider. As such, SRT is subject to the requirements of Rule Section 20.18(n)(7).

Relief Requested

The Rule 20.18(n)(7) requirement becomes effective on September 30, 2013. SRT requests a temporary waiver, or a temporary stay, for a period of one year, *i.e.*, up to and including September 30, 2014.

Rule Section 20.18(n) Requirements

Rule Section 20.18(n) was adopted by the Commission's recent decision in *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications, Framework for Next Generation 911 Deployment*, PS Docket Nos. 11-153 & 10-255, *Report and Order*, FCC 13-64, released May 17, 2013 ("R&O"). New Rule Section 20.18(n)(1) defines a "Covered Text Provider" as follows: "for purposes of this subsection (n), a 'covered text provider' includes all [Commercial Mobile Radio Service ("CMRS")] providers as well as all providers of interconnected text messaging services that enable consumers to send text messages to and receive text messages from all or substantially all text-capable U.S. telephone numbers, including through the use of applications downloaded or otherwise installed on mobile phones." As such, a covered text provider is one (such as SRT) that offers consumers a two-way text-messaging capability. In addition, new Rule Section 20.18(n)(7) specifies that "[a] CMRS provider subject to Section 20.12 shall provide an automatic bounce-back message to any consumer roaming on its network who sends a text message to 911 when (a) the consumer is located in an area where text-to-911 service is unavailable or (b) the CMRS provider does not support text-to-911 service at the time."

Serving Carriers Lack The Technical Ability To Provide The Bounce-Back Message

The new text-to-911 regulations contemplate that consumers will attempt to send text messages to Public Safety Answering Points (“PSAPs”) using Short Message Service (“SMS”) text messages; and that the bounce-back message advising the consumer that text-to-911 is unavailable in the area will likewise be sent by an SMS text message generated by the serving (as opposed to the home) carrier. As used herein, the term “serving carrier” refers to the carrier providing roaming service to the roamer. Although SMS text messaging has its limitations, SRT is committed to working with other stakeholders to implement text-to-911 in the most effective way possible given those limitations. Unfortunately, in adopting rules codifying the bounce-back message requirement, the Commission imposed a requirement on carriers serving roamers that ignores one of the key limitations of SMS text messaging – that only the home carrier can provide bounce-back messages to its subscribers, including when those subscribers are roaming on another carrier’s network.¹

Rule Section 20.18(n)(7) requires the serving carrier to generate a bounce-back message for consumers roaming on its network who attempt to reach 911 via SMS text message. The rule as currently written is problematic because it is not technically feasible for serving carriers to perform this function. It also suffers from legal problems because an infeasible requirement is *per se* arbitrary and capricious.² The result is that the Commission has adopted a rule that it is technically infeasible for carriers to meet.

¹ In the context of Rule Section 20.18(n)(7), the “serving carrier” is the one that receives the SMS message from a roamer using its network, and that passes the SMS message through its network and switches to the Short Message Service Center (SMSC) of the subscriber’s home carrier.

² See *Nuvio Corp. v. FCC*, 473 F.3d 302, 303 (D.C. Cir. 2006), *Alliance for Cannabis Therapeutics v. DEA*, 930 F.2d 936, 940 (D.C. Cir. 1991).

The Commission should defer (through the granting of waivers or temporary stays) imposing any text-to-911 requirements on carriers relating to roaming subscribers until those requirements are technically feasible.

The record in the PS Docket No. 11-153 and 10-255 proceeding in which the requirement was adopted makes it abundantly clear that the Rule Section 20.18(n)(7) roaming requirement is not technically feasible. As parties to the proceeding explained, SMS messages are handled by the home carrier and interact directly with the home carrier's network; while, on the other hand, the serving carrier does not handle roaming SMS messages, and it is therefore not feasible for the serving carrier to provide the bounce-back message because the serving carrier does not process the user's SMS.³

As shown by, for example, T-Mobile USA, Inc. ("T-Mobile") in PS Docket No. 11-153 and PS Docket No. 10-255,⁴ it is well understood that current network architectures do not permit serving carriers to provide wireless subscribers roaming on their networks with an automatic bounce-back message. As T-Mobile has explained, this fact was expressed on the record in the PS Docket No. 11-153 and 10-255 proceeding;⁵ and the Emergency Access Advisory Committee ("EAAC") has also stated on the record that SMS messages are under "home operator control."⁶ Indeed, the *R&O* itself noted that home carriers are generally responsible for generating bounce-back messages.⁷

³ Comments of AT&T, Inc., PS Docket Nos. 11-153, 10-255, at 20-21 (March 11, 2013).

⁴ See T-Mobile USA, Inc. Comments in Support of CTIA Petition for Reconsideration, PS Docket Nos. 11-153, 10-255, pp. 3-6 (August 26, 2013).

⁵ See, e.g., Reply Comments of the Texas 9-1-1 Entities, PS Docket Nos. 11-153, 10-255 at 4 (February 8, 2013).

⁶ See EAAC, *Report of Emergency Access Advisory Committee (EAAC) Subcommittee 1 on Interim Text Messaging to 911* at 10 (March 1, 2013).

⁷ *R&O*, Para. 71.

Additionally, the National Emergency Number Association (“NENA”) recently stated that it supports a recent petition for reconsideration on this issue filed by CTIA – The Wireless Association noting that “CTIA’s position with respect to the limited question of which party should be responsible for delivering a bounce-back message is consistent with the understanding of the public safety;” and that “the roaming limitations of existing SMS systems were understood by the parties to the [December 6, 2012 Carrier-NENA-APCO Agreement].”⁸

Furthermore, the ATIS Tect-to-911 standards document does not address roaming,⁹ therefore, the serving carrier will automatically pass a 911 SMS directly to the home carrier’s SMSC. From there, the home carrier’s SMSC will pass the SMS to the Text Control Center (“TCC”) serving that home carrier. When the location lookup occurs, it will occur on the home carrier’s network. In the case of roaming SMS messages, the location determination, which is required in order to ascertain whether an applicable PSAP accepts 911 texts, will fail because the location information was not generated by the home network but rather by the serving network and the serving network does not pass along this location data with the SMS. In this regard, EAAC has advised that SMS messages sent between wireless provider networks do not automatically pass through the location information that the home carrier needs to determine whether text-to-911 is supported by the appropriate PSAP.¹⁰ Since the home carrier’s TCC is not provided location information and hence cannot determine PSAP

⁸ *Ex parte* Presentation of NENA, PS Docket Nos. 11-153, 10-255 (August 20, 2013).

⁹ *See Joint ATIS/TIA Native SMS to 9-1-1 Requirements and Architecture Specification Sec. 4* (working document) (“Roaming is not addressed in this version of this Standard”).

¹⁰ *See The Blooston Rural Carriers Comments in Partial Support of CTIA Petition*, PS Docket Nos. 11-153, 10-255 at pg. 6 (August 15, 2013).

text taking ability, it will generate a bounce-back message to the home carrier that will pass the message to its SMSC which is then delivered, via the roaming network, to the subscriber but it will not be able to state that the PSAP serving the area does not accept text-to-911 messages.

Changes to this configuration are simply not feasible. All SIM cards are coded with the Global Title of the home carrier's SMSC. When a roaming subscriber sends an SMS, the serving carrier routes that SMS to the home carrier's SMSC based on the Global Title. During this procedure, no serving carrier conducts any data manipulation – the serving carrier's network simply passes the message through based on the information provided by the SIM. Compliance with the Section 20.18(n)(7) roaming rule, however, require serving carriers to intercept the outbound roaming message and analyze it *before* passing it through to the home carrier's SMSC. This would have to be done to *every single SMS message* to determine which ones, if any, are directed to 911. In short, a separate platform would have to be developed to intercept and interrogate all outbound SMS traffic. If a message is to be delivered to 911, the serving carrier's network would have to manipulate the Global Title, changing it from home carrier to that of the serving carrier to ensure proper delivery. Implementing this new platform would require development and acceptance of new standards, design and significant modifications of the technology itself, and implementation across *all* carrier networks – requiring sizeable capital upgrades from *all* carriers as well as a lengthy deployment process.

At present, it is equally technically impossible in a roaming scenario for location to be done by the home carrier's TCC after failure of location lookup. Such determination would require the TCC to determine that the message originated outside

the home carrier's network, determine the identity of the serving carrier, determine that the serving carrier is a U.S. carrier, determine whether it has links to the location information of that carrier, and determine the user's coarse location information – all before sending a query back to the serving carrier. This would be complex, extremely expensive, and require a lengthy implementation process – all of which is technically infeasible at this time.

With respect to SRT, these limitations are confirmed by the attached letter dated September 9, 2013 from The Hyde Company (“Hyde”), which provides Spatch Short Message Service Center (SMSC) support to SRT. The attached letter from John P. Cuches, Jr., Hyde's President (*see* Attachment A), confirms that text-to-911 service is not feasible for SRT's network. Moreover, as a small independent CMRS service provider, SRT is subject to and must implement national standards as defined by the governing standards bodies such as IEEE, and ITU. With no recognized standard for text-to-911 service, SRT does not have the personnel or financial resources to develop and implement this technical requirement on its own. At such time that interconnection of SMSC's and E911 systems becomes technically feasible, SRT Wireless will make all reasonable efforts to comply with the Commission's text-to-911 rules.

Waiver Standard

The Commission specified that “[a]ny covered providers who are unable to implement the bounce-back requirement by September 30, 2013 should file a request for waiver.” *R&O*, Para. 62. Waiver requests are evaluated under the general waiver standard set forth in Sections 1.3 and 1.925 of the Rules and the standards set forth in *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969), *appeal after remand*, 459 F.2d

1203 (D.C. Cir. 1972), *cert. denied* 409 U.S. 1027 (1972) and Northeast Cellular Telephone Company v. FCC, 897 F.2d 1146 (D.C. Cir. 1990).

Section 1.3 of the Rules states, in relevant part, that “[a]ny provision of the rules may be waived by the Commission on its own motion or on petition if good cause therefore is shown.” Section 1.925(b)(3) of the Rules states that the “Commission may grant a waiver request if it is shown that: (i) [t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) [i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”

The Relief Requested Is Warranted

The reason in support of this waiver request is starkly simple and can be stated concisely: It is currently technically infeasible for the serving carrier to generate the bounce-back text message mandated by Rule Section 20.18(n)(7). Indeed, even the home carrier (which would ordinarily generate a text message for one of its subscribers roaming on another system) cannot generate the message because SMS messages sent between networks do not automatically pass through from the roamed on system the location information that the home carrier needs to determine whether text-to-911 is supported by the appropriate PSAP in the serving carrier’s market. In view of these unique or unusual circumstances application of the rule would be inequitable, unduly burdensome and contrary to the public interest, and SRT has no reasonable alternative than to secure a waiver. Basic principles of administrative law prohibit the Commission

from compelling carriers to do the impossible,¹¹ and, accordingly, impossibility of performance clearly warrants a waiver as a matter of law.

WHEREFORE, based on the foregoing, SRT requests that the instant petition be granted.

Respectfully submitted,
**North Dakota Network Company d/b/a
SRT Wireless**

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¹¹ See, e.g., *Alliance for Cannabis Therapeutics v. DEA*, 930 F.2d 936, 940 (D.C. Cir. 1991); *Hughey v. JMS Development Corp.*, 78 F.3d 1523, 1530 (11th Cir. 1996).

Attachment A

September 9, 2013, Letter of John P. Cuches, Jr.
President, The Hyde Company



Shawn G. Grosz
Chief Technology Officer
SRT Communications
3615 North Broadway
PO Box 2027
Minot, ND 58702-2027

September 9, 2013

Dear Shawn,

With current wireless technology text messages (SMS), including messages with a destination address of 911, are routed directly to the home carriers message Center (MC) weather they originate locally or from a foreign network. Since text messages from subscribers of other carriers roaming on a network are routed directly back to the home carriers MC, the MC of the servicing carrier does not have access to that traffic and thus can not provide any kind of response or other processing.

The technology to implement this kind of functionality would require modifications to the switching network to allow for the detection and routing of a specific destination address to the local MC. To the best of our knowledge, this capability is not commercially available.

Sincerely,

A handwritten signature in black ink, appearing to read "John P. Cuches Jr.", is written over the word "Sincerely,".

John P. Cuches Jr.
President

REC'D IN ACCT.

SEP 24 2013

SRT