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Via ECFS

Marlene H. Dortch, Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street, SW, Room TW-A325
Washington, DC 20554

Re: Brookings Municipal Utilities d/b/a Swiftel Communications
Initial Implementation Plan and First Progress Report
E911 Location Accuracy, PS Docket No. 07-114

Dear Ms. Dortch:

Pursuant to Section 20.18(i)(4)(i) and (ii) of the Commission's Rules, The City of Brookings Municipal Utilities d/b/a Swiftel Communications ("Swiftel" or "the Company") hereby submits its initial implementation plan and first progress report on implementation of indoor location accuracy improvements.

Please contact the undersigned counsel should you have any questions.

Very truly yours,



D. Cary Mitchell
Its Counsel

Brookings Municipal Utilities d/b/a Swiftel Communications

Initial Implementation Plan and First Progress Report For Implementing Indoor Wireless E911 Location Accuracy Requirements

Introduction

The City of Brookings Municipal Utilities d/b/a Swiftel Communications (“Swiftel” or “the Company”) is a small Tier III wireless carrier that provides mobile voice and data services in eastern South Dakota and northwest Iowa pursuant to an affiliation arrangement with Sprint Corporation (“Sprint”). In this document Swiftel describes its Implementation Plan (the “Plan”) and First Progress Report (the “Report”) toward meeting the extended location accuracy benchmarks for indoor 9-1-1 calls that the Federal Communications Commission (“FCC” or “Commission”) adopted in its *Fourth Report and Order* on Wireless E911 Location Accuracy Requirements (the “*Fourth R&O*”).¹

To facilitate its affiliation arrangement with Sprint, Swiftel has configured its network to operate as a seamless part of the Sprint nationwide network. Swiftel’s customers utilize Sprint-configured wireless devices and the Company relies on Sprint for the provision and support of Location Based Services (“LBS”), including managed Enhanced 911 (“E911”) processes. As a result of this arrangement, Swiftel is a direct beneficiary of Sprint’s work on the development, testing and implementation of E911 indoor location accuracy solutions and participation in industry standards bodies. These efforts are described in Sprint’s Initial Implementation Plan and Progress Report that was filed with the Commission on February 3, 2017,² and which is incorporated herein by reference.

As of the date of this Report, Swiftel notes that no PSAPs in its service area have requested E911 service. Nevertheless, as a result of its affiliation with Sprint, Swiftel’s network already has LBS enabled, and the Company will be capable of delivering highly accurate 9-1-1 caller location information once PSAPs in its service area are capable of utilizing such data and submit a formal request. Swiftel provides this Plan and Report to demonstrate the Company’s awareness of and commitment to meeting the Commission’s wireless E911 indoor location accuracy requirements.

Indoor Location Requirements

In the *Fourth R&O*, the FCC adopted rules to improve indoor location accuracy by requiring CMRS providers to meet wireless 911 location accuracy metrics at periodic benchmarks. The substantive requirements are summarized below, and inform our company’s Implementation Plan.

Horizontal Location

With respect to horizontal location, the Commission’s rules require non-nationwide CMRS providers to provide (1) dispatchable location, or (2) x/y (horizontal) location within 50 meters, for the following

¹ Wireless E911 Location Accuracy Requirements, *Fourth Report and Order*, PS Docket No. 07-114, 30 FCC Rcd 1259 (2015) (*Fourth R&O*) and rules 47 C.F.R. § 20.18(i) et seq.

² Sprint Wireless E911 Location Accuracy Initial Implementation Plan and Progress Report, PS Docket No. 07-114 (filed February 3, 2017) (“*Sprint Initial Implementation Plan and Progress Report*”).

percentages of wireless 911 calls within the following timeframes (measured from the **April 3, 2015** Effective Date of rules adopted in the *Fourth Report and Order*):

- Within 2 years (2017): 40 percent of all wireless 911 calls.
- Within 3 years (2018): 50 percent of all wireless 911 calls.
- Within 5 years (2020*): 70 percent of all wireless 911 calls.
- Within 6 years (2021*): 80 percent of all wireless 911 calls.

* NOTE: Regional, small, and rural providers are permitted extend the five and six-year deadlines based on the timing of VoLTE deployment in their networks.

Vertical Location

With respect to vertical location, the Commission's rules require non-nationwide CMRS providers to meet the following requirements:

- Within 3 years of the August 3, 2015 effective date, all CMRS providers must make uncompensated barometric data available to PSAPs from any handset that has the capability to deliver barometric sensor data.
- Within 6 years, nationwide CMRS providers must deploy either (1) dispatchable location, or (2) z-axis technology that achieves the Commission-approved z-axis metric, in each of the top 25 CMAs:
 - The National Emergency Address Database (NEAD) must be populated with a total number of dispatchable location reference points in the CMA equal to 25 percent of the CMA population if dispatchable location is used.
 - CMRS providers must deploy z-axis technology to cover 80 percent of the CMA population if z-axis technology is used.
- Within 8 years, nationwide CMRS providers must deploy dispatchable location or z-axis technology in accordance with the above benchmarks in each of the top 50 CMAs.

Filer's status: Since Swiftel does not currently provide service in any of the top 50 CMAs, our company does not have any obligation to meet the dispatchable location or z-axis metric vertical location benchmarks. The E911 Phase II and indoor location solution that Swiftel implements in conjunction with Sprint will make uncompensated barometric data available to PSAPs from any handset that has the capability to deliver barometric sensor data.

Live 911 Call Data Reports

Quarterly reporting of live 911 data will begin no later than 18 months from the date the rules become effective (*i.e.*, February 3, 2017); CMRS providers will also provide quarterly live call data on a more granular basis that allows evaluation of the performance of individual location technologies within different morphologies (*e.g.*, dense urban, urban, suburban, rural). Non-nationwide CMRS providers must file reports every six months for the prior two calendar-year quarters, with each report due on the first business day of the second month after the six-month period for which data is reported. See Public Safety and Homeland Security Bureau Provides Guidance to CMRS Providers Regarding Submission of Periodic E911 Location Accuracy Live Call Data Reports, *Public Notice* DA 17-82.

Filer's Implementation Plan

Our company's Implementation Plan for meeting the Commission's extended location accuracy benchmarks for indoor 9-1-1 calls as adopted in the *Fourth R&O* follows below. As a very small Tier III service provider, Swiftel does not have the resources to participate in the standards and technology development process in the same way as Tier I and many Tier II companies. However, our Affiliate relationship with Sprint and utilization of Sprint's LBS and managed E911 processes developed in conjunction with West Security Services ("West") will allow Swiftel to timely meet the Commission's E911 and indoor location benchmarks.

Upon receipt of a valid request for E911 service, Swiftel will be ready to support E911 service and provide indoor location data in accordance with the Commission's Rules. Submission of periodic reports and compliance certifications to the FCC will be handled as follows:

- **Live 911 Call Data Reports - §20.18 (i)(3)(ii)**
Sprint is reporting live 9-1-1 call data on a quarterly basis as a single source report for itself and on behalf of its Affiliates.
- **Horizontal Location - §20.18 (i)(2)(i)**
Sprint is filing certifications of compliance for horizontal location milestones associated with the *Fourth R&O* for itself and on behalf of its Affiliates.
- **Vertical Location - §20.18 (i)(2)(ii)**
Sprint will be filing certifications of compliance for vertical location milestones associated with the *Fourth R&O* for itself and on behalf of its Affiliates.
- **Plans and Reports filed in PS Docket No. 07-114 - §20.18 (i)(4)(i)**
Swiftel's E911 indoor location accuracy plans will track plans described by Sprint in its *Initial Implementation Plan and Progress Report* as well as any subsequent additions or modifications.
- **Additional Reporting/Compliance – as necessary or upon PSAP request:**
Swiftel anticipates that it will meet any further E911 indoor location compliance benchmarks and respond to any PSAP data requests in conjunction with Sprint.

Latency: As of April 3, 2015, for purposes of measuring compliance with the location accuracy standards, a call will be deemed to satisfy the standard only if it provides the specified degree of location accuracy within a maximum latency period of 30 seconds, as measured from the time the user initiates the 911 call to the time the location fix appears at the location information center. [47 C.F.R. §20.18(h)(3)].

Confidence and Uncertainty Data ("C/U Data"): Upon a PSAP request, providers must submit for all wireless 911 calls (indoor/outdoor), x- and y-axis confidence and uncertainty information on a per-call basis, with a confidence level of 90%.

Provision of Live 911 Call Data for PSAPs: CMRS providers must record tracking data on all live 911 calls (including the positioning source method used to provide a location fix), along with the confidence and uncertainty data, which must be made available to PSAPs upon request and must be retained for 2

years. This requirement is separate from, and in addition to, the provisions for recurring reporting, as mentioned above. [47 C.F.R. §20.18(k)].

First Progress Report

As of the date of this Report, Swiftel notes that no PSAPs in its service area have requested E911 service. Nevertheless, as a result of its affiliation with Sprint, Swiftel's network already has LBS enabled, and the Company will be capable of delivering highly accurate 9-1-1 caller location information once PSAPs in its service area are capable of utilizing such data and submit a formal request.

Please direct any questions concerning this report to our counsel, Mr. Cary Mitchell, of the law firm of Blooston Mordkofsky Dickens Duffy & Prendergast, LLP. He can be reached by telephone at (202) 828-5538, or by email at cary@bloostonlaw.com.

August 3, 2017
Dated

Curt Kabris
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