

March 25, 2019

Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Implementing Kari's Law and Section 506 of RAY BAUM'S Act*, PS Docket No. 18-261; *Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems*, PS Docket No. 17-239.

Dear Ms. Dortch:

On March 21, 2019, Doug Kerr and Isaac Roach of Sorenson Communications, LLC ("Sorenson"), Shane Roylance of CaptionCall, LLC ("CaptionCall"), Elliot Tarloff of Jenner & Block, outside counsel to CaptionCall, William Quinn and the undersigned, both of Harris, Wiltshire & Grannis, outside counsel to Sorenson, met with Eliot Greenwald, Bob Aldrich and Michael Scott of the Consumer and Governmental Affairs Bureau ("CBG"), Ken Carlberg, Erika Olsen, John Evanoff and Nellie Foosaner of the Public Safety and Homeland Security Bureau ("PSHSB"), and David "Raster" Schmidt of the Office of the Managing Director, regarding the September 26, 2018 Notice of Proposed Rulemaking.¹ We expressed our support for the Commission's efforts to improve E911 location information and explained what Sorenson and CaptionCall are doing to deliver accurate and actionable caller location information to First Responders. As explained in Sorenson's and CaptionCall's comments, Telecommunications Relay Services ("TRS")—including Video Relay Service ("VRS") and Internet Protocol Captioned Telephone Service ("IP CTS")—each have unique functionalities and characteristics. Moreover Sorenson and CaptionCall, respectively, provide VRS and IP CTS as both fixed services and over mobile applications, each involving its own unique architecture. Thus, the flexibility the Commission proposed in Paragraph 81 of the Kari's Law NPRM to allow TRS providers to use the Registered Location when a dispatchable location or high accuracy geolocation is not available will be essential.²

During the meeting, Sorenson and CaptionCall explained the relevant differences between fixed and mobile VRS and IP CTS offerings, and how the services operate in relation to

¹ *Implementing Kari's Law and Section 506 of RAY BAUM'S Act and Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems*, Notice of Proposed Rulemaking, FCC No. 18-132, PS Docket Nos. 18-261 & 17-239 (rel. Sep. 26, 2018) ("*Kari's Law NPRM*").

² *See* Comments of Sorenson Communications, LLC, PS Docket Nos. 17-239 & 18-261 (filed Dec. 10, 2018) ("Sorenson Comments"); Reply Comments of Sorenson Communications, LLC, PS Docket Nos. 17-239 & 18-261 (filed Feb. 8, 2019) ("Sorenson Reply Comments").

the user's underlying telecommunications service, the routing of 911 calls, and the provision of E911 information. We also identified some concerns with the proposed rules, which do not reflect the flexible approach the Commission proposed in Paragraph 81 of the NPRM or the practical limitations for Sorenson's and CaptionCall services.

I. Video Relay Service

We explained that Sorenson is the leading provider of VRS, and offers both fixed and mobile service. In both forms, VRS is provided “over-the-top” of the VRS user's internet access connection. Because the purpose of VRS is to provide translation between an ASL-speaking VRS user and an English or Spanish-speaking hearing party, the Video Interpreter (“VI,” *i.e.*, an ASL interpreter) is always a necessary part of a VRS call, and the VRS provider establishes the connection between the VRS user and the public switched telephone network (“PSTN”). As such, Sorenson, as a VRS provider, must arrange to route calls to the appropriate Public Safety Answering Point (“PSAP”). When a VRS caller places a 911 call, that caller first reaches the VI, who then must set up the 911 call to the PSAP. All VRS users receive ten-digit telephone numbers associated with their devices, which enables 911 callback; however, because VRS requires the VI to interpret between ASL and English or Spanish, any 911 callback also must be routed from the PSTN to Sorenson's VI in a call center, and then the VI contacts the user. In terms of emergency call handling, there are necessary differences between Sorenson's fixed and mobile VRS.

Fixed VRS. For fixed service (*i.e.*, Sorenson's Videophones and desktop applications), Sorenson collects the Registered Location when its technician installs the system. Both Sorenson and its 911 service vendor, West, validate this address, and West conforms the address to the appropriate Master Street Address Guide (“MSAG”) format. The user is required to provide a valid address.³ This address is then used for routing the call to the appropriate PSAP and as the caller's E911 location. This address meets the definition of a “dispatchable location,” as it will contain both the street address and unit or suite information.⁴

Even Sorenson's fixed service videophones and desktop applications can be moved. In most cases, when a Sorenson user wants to change the location of his or her videophone, the user will request assistance from a Sorenson field technician. In that case, Sorenson's field technician updates the customer's Registered Location when installing the videophone at a new location. On rare occasions, however, a technology-savvy user will move the videophone without assistance from Sorenson. Sorenson provides multiple ways for the customer to change the Registered Location under these circumstances. For example, the customer can change his or her Registered Location from the videophone or by calling Sorenson Customer Service. In addition, Sorenson's videophones ask customers to reconfirm their locations whenever they are powered

³ If the address has not yet completed validation, the 911 call will be sent to West's Emergency Call Relay Center (“ECRC”).

⁴ The proposed rules define a “dispatchable location” as “A location delivered to the PSAP with a 911 call that consists of the street address of the calling party, plus additional information such as suite, apartment or similar information necessary to adequately identify the location of the calling party.” *Kari's Law NPRM*, App. A, § 9.3.

up after being powered down. In that scenario, the customer will see a screen that allows the customer to reconfirm his or her location, or to enter an updated location. Sorenson, however, necessarily relies on the customer to provide the correct location; Sorenson has no way automatically to determine the customer's location when the device powers up.

Because a VI is involved in every VRS call, there is another step that confirms a customer's location. When Sorenson's interpreter provides the 911 caller's location to the PSAP, the interpreter will both speak and sign the customer's location simultaneously. This allows the deaf caller to confirm the location being provided, and to make a correction if necessary.

Sorenson also has a back-up system in place for the very rare cases in which Sorenson does not have a Registered Location, the location fails or the PSAP is offline, Sorenson routes the call to the West ECRC. A West telecommunicator then obtains the VRS caller's location (via the VI), geocodes the location for routing, and conducts a "warm handoff" with the PSAP.

Mobile VRS. For its mobile applications (*i.e.*, applications running on laptops, or iOS or Android tablets), Sorenson collects the Registered Location when the customer installs and activates the application. As with the location it obtains from fixed VRS customers, Sorenson and West validate that address, and the user must provide a valid address. The mobile VRS customer can change his or her Registered Location from the application or by calling customer service. In addition, Sorenson's mobile VRS applications prompt the user to confirm his or her Registered Location whenever the user logs-in to the application on a new device.

Furthermore, because every call requires an interpreter, Sorenson's VIs begin every 911 call from a mobile endpoint that does not provide the caller's geolocation coordinates by asking the caller to confirm that he or she is calling from his or her Registered Location. If the caller confirms that he or she is calling from the Registered Location, then the call will be routed to West and from West to the PSAP, with E911 information provided based on the Registered Location. In this case, because Registered Location is used, the address provided will be a dispatchable location. If the endpoint does not provide the caller's geolocation coordinates, and the caller does not confirm that he or she is calling from the Registered Location, the call will be routed to West's ECRC, for handling as described above.

Sorenson is currently in the process of working with West to implement 911 routing and E911 location information based on device-based location, which Sorenson can, for some devices, receive with permission of the customer. When fully implemented, Sorenson will pass x,y that it receives from the device to West.⁵ West can then utilize choose whether it will route the call and provide E911 information based on x,y or on the Registered Location. As Sorenson understands it, if the location is within 50 meters of the caller's Registered Location, West will use the caller's Registered Location, which then will provide a dispatchable location. When

⁵ Sorenson Comments at 6. At present the call is routed to the Registered Location, with the VI providing the customer's reported location to the PSAP; Sorenson anticipates it will implement geolocation-based routing and E911 location information in the near future.

West passes on the x,y geolocation it received from Sorenson, however, that will not meet a strict definition of “dispatchable address.”

Sorenson does not know whether it will be able to use the NEAD. At present, it is still in development, and is not available to non-CMRS providers, such as Sorenson.

II. IP CTS

We explained that for the vast majority of its IP CTS users, CaptionCall is not involved with routing 911 calls or providing E911 information. In its typical, fixed configuration, IP CTS involves the provision of captions via an IP connection between CaptionCall and a user on an IP CTS telephone, but call set-up and routing for all calls, including 911, is handled by the user’s underlying telecommunications provider—whether a local telephone company such as AT&T or Verizon or a VoIP provider such as Comcast.⁶ Moreover, because CaptionCall receives the audio from the user’s device, which transmits that audio to CaptionCall via the internet, CaptionCall is not part of the call’s media stream. CaptionCall’s Communications Assistants (“CAs”) hear only the audio of the non-CaptionCall user. Thus, CAs do not have a way to speak to the hearing (non-CaptionCall) party.⁷

A relatively small number of CaptionCall users (currently approximately 2%) use CaptionCall Mobile. CaptionCall Mobile is an over-the-top application that operates using the CaptionCall user’s internet connection, whether a CMRS data connection or Wi-Fi. At present, it is available only for iPads. The underlying voice service is provided by an interconnected VoIP provider, Alianza, with whom CaptionCall contracts. All of these IP CTS users are assigned a ten-digit NANP telephone number, and thus can be reached by the PSAP through callback, which can then be captioned.

CaptionCall obtains each customer’s Registered Location at the time that the customer installs the CaptionCall Mobile application. Thereafter, the customer can change his or her Registered Location by calling CaptionCall customer service. CaptionCall provides the Registered Location information to Alianza, which validates the location and retains it for use in routing a 911 call and providing E911 information. At this time, Alianza does not have the capability to handle x,y from device-based location. CaptionCall can upgrade its location capabilities only as quickly as they are made available by its underlying interconnected VoIP provider. CaptionCall cannot itself drive technology development.

Because the underlying service is over-the-top interconnected VoIP, CaptionCall faces the same limitations as those providers in automatically detecting location changes and providing updated location information when the customer changes location frequently. At present, CaptionCall must rely on its customer accurately and timely to update his or her location.

⁶ Sorenson Reply Comments at 2-3.

⁷ *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Report & Order, FCC No. 19-11, CG Docket Nos. 13-24 and 03-123, ¶ 9 (rel. Feb. 15, 2019) (“2019 IP CTS NPRM”).

III. CONCERNS WITH THE PROPOSED RULES

Sorenson and CaptionCall expressed their concern that the proposed rules, as drafted, do not reflect the flexibility that the Commission recognized would be necessary in Paragraph 81 of the NPRM.⁸ Paragraph 81 specifically proposed that TRS providers have “flexibility in implementing dispatchable location solutions, and [be allowed] to fall back to Registered Location options when real-time dispatchable location is not feasible.” Given the range of service offerings, with their attendant differences and limitations, as described above, such flexibility is essential.⁹

For VRS, however, the draft rules appear to mandate the delivery of a “dispatchable location,” thereby precluding use of x,y geolocation information for mobile/nomadic applications.¹⁰ The draft rules also would require VRS providers to be able to identify whether the VRS device from which a call has been made has moved, including for fixed videophones that largely do not move;¹¹ this is not technically feasible at this time. And it is not clear whether the rules allow use of the ECRC as a back-up when the previously collected Registered Location is deemed unreliable, or when updated location is not available, such as if the user has not consented to allow Sorenson to use device-based location.

For IP CTS, the proposed rules could be construed to require the provider to collect dispatchable location from the caller at the start of every call.¹² In the first instance, the rule is too broad because it would include IP CTS calls for which the IP CTS provider does not handle 911 routing and the provision of E911 information. With respect to the small percentage of web/wireless IP CTS calls, such as over CaptionCall Mobile, the Commission has separately recognized that this is impractical because of the way IP CTS services are configured.¹³ In any event, it is also not technically feasible for an IP CTS provider that is providing voice connectivity to the end user to detect when the end user’s location has moved.

⁸ Sorenson Comments at 2.

⁹ Sorenson Reply Comments at 2-3.

¹⁰ *Kari’s Law NPRM*, App. A, § 9.14(d)(2)(ii), (iv).

¹¹ *Id.* App. A, § 9.14(d)(4).

¹² *Id.* App. A, § 9.14(b)(2)(iv)

¹³ *2019 IP CTS NPRM*, ¶ 48 (“[I]t is impractical to involve an IP CTS [Communications Assistant] in collecting and forwarding caller information or in reconnecting disconnected calls”).

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Sorenson and CaptionCall will follow-up with specific changes which we believe are necessary for the proposed rules.

Sincerely,

A handwritten signature in black ink, appearing to read "John T. Nakahata".

John T. Nakahata
Counsel to Sorenson Communications, LLC

cc: Ken Carlberg
Erika Olsen
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