### Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
	)	
Telecommunications Relay Services and Speech-	)	CG Docket No. 03-123
to-Speech Services for Individuals with Hearing	)	
and Speech Disabilities	)	
	)	

### ORDER

Adopted: August 31, 2021

Released: August 31, 2021

By the Chief, Consumer and Governmental Affairs Bureau:

## I. INTRODUCTION

1. The Consumer and Governmental Affairs Bureau (Bureau) of the Federal Communications Commission (Commission or FCC) conditionally grants certification to CaptionCall, LLC (CaptionCall) to provide Internet Protocol Captioned Telephone Service (IP CTS) on a fully automatic basis.<sup>1</sup> With this form of IP CTS, automatic speech recognition (ASR) technology is used to produce captions for telephone calls without the participation of a communications assistant (CA).<sup>2</sup> Conditional certification permits CaptionCall to receive support from the TRS Fund for such fully automatic, or ASR-only, IP CTS pending verification that its actual provision of service to registered users meets or exceeds the Commission's TRS minimum standards.<sup>3</sup>

## II. BACKGROUND

2. CaptionCall currently is conditionally certified to provide TRS Fund-supported IP CTS by relying on CAs to produce telephone captions.<sup>4</sup> An IP CTS provider may be conditionally authorized

<sup>2</sup> Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket Nos. 13-24 and 03-123, Report and Order, Declaratory Ruling, Further Notice of Proposed Rulemaking, and Notice of Inquiry, 33 FCC Rcd 5800, 5827, para. 48 (2018) (2018 ASR Declaratory Ruling).

<sup>3</sup> See Structure and Practices of the Video Relay Service Program, CG Docket No. 10-51, Second Report and Order and Order, 26 FCC Rcd 10898, 10914-15, para. 37 (2011) (2011 Internet-based TRS Certification Order) (authorizing conditional certification); 2018 ASR Declaratory Ruling, 33 FCC Rcd at 5835, para. 64 (noting that applications for certification to provide ASR-based IP CTS may be granted on a conditional basis).

<sup>4</sup> See Notice of Grant of Conditional Certification for Sorenson Communications, Inc., as Reorganized Pursuant to Chapter 11, to Provide Internet-Based Telecommunications Relay Services Pending Commission Action on

<sup>&</sup>lt;sup>1</sup> See Application of CaptionCall, LLC and Sorenson Communications, LLC to Expand its Internet Protocol Captioned Telephone Service Certification to Incorporate Automatic Speech Recognition (ASR)-Only Captioning, CG Docket No. 03-123 (filed Nov. 13, 2020) (CaptionCall Application), https://ecfsapi.fcc.gov/file/1114096667910/2020-11-

<sup>&</sup>lt;u>13%20REDACTED%20CaptionCall%20Update%20to%20Add%20ASR%20Final%20As%20Filed\_Redacted.pdf</u> (redacted). IP CTS, a form of Internet-based telecommunications relay service (TRS), allows individuals with hearing loss to both read captions and use their residual hearing to understand a telephone conversation. *See* 47 CFR § 64.601(a)(22) (defining IP CTS). Captions may be displayed on a specialized IP CTS device or an off-theshelf computer, tablet, or smartphone. Internet-based TRS providers obtain certification from the Commission in order to be eligible to receive compensation for minutes of use from the Interstate TRS Fund. *Id.* § 64.606(a)(2).

to use ASR to generate captions without CA assistance—in other words, to provide fully automatic IP CTS—if the Commission finds that the provider's service using this method will meet or exceed the Commission's minimum TRS standards.<sup>5</sup> On November 13, 2020, CaptionCall requested Commission approval to provide fully automatic IP CTS.<sup>6</sup>

3. CaptionCall proposes initially to use ASR-only captioning only for calls for which a CA is unavailable.<sup>7</sup> CaptionCall adds that "[i]n time," it "would seek to expand the use of ASR-only as it identifies other ways to enhance its services"<sup>8</sup> but "expects that the vast majority of calls will continue to be CA-captioned, with ASR captioning expanded only as CaptionCall determines it can do so without sacrificing caption quality."<sup>9</sup> Regardless of whether the captions are generated by CA or ASR, the generated captions are transmitted via the Internet to the end user's CaptionCall phone or application.<sup>10</sup> According to CaptionCall, all other IP CTS processes and functionalities will remain unchanged.<sup>11</sup>

4. On November 19, 2020, the Bureau released a Public Notice seeking comment on CaptionCall's application.<sup>12</sup> On December 21, 2020, a coalition of consumer groups and accessibility

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Sorenson's Application for Certification, CG Docket Nos. 03-123, 10-51, and 13-24, Public Notice, 29 FCC Rcd 4111 (CGB 2014) (Sorenson Conditional Certification Notice). Effective December 1, 2020, Sorenson Communications, LLC (Sorenson), transferred Sorenson's conditional IP CTS certification to CaptionCall. Letter from John T. Nakahata, Counsel for Sorenson, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 10-51 and 03-123 (filed Nov. 19, 2020). With CaptionCall's CA-assisted service, a CA revoices a caller's speech into a speech recognition software program that is customized to that CA's voice. CaptionCall Application at 3-4. The resulting captions, which can be corrected or supplemented by the CA, are then transmitted via the Internet to the registered user's CaptionCall device or application. *Id*.

<sup>5</sup> 2018 ASR Declaratory Ruling, 33 FCC Rcd at 5827-35, paras. 48-64.

<sup>6</sup> CaptionCall Application.

<sup>7</sup> *Id.* at 5; *see also* Letter from John T. Nakahata, Counsel to CaptionCall, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 03-123, at 2 (filed Aug. 4, 2021) (CaptionCall Application Supplement) (stating that, while CaptionCall's preference is to use CAs to handle 911 calls, the need to ensure that such calls are prioritized ahead of all other calls could result in a 911 call being captioned by the ASR platform in some situations).

<sup>8</sup> CaptionCall Application at 5.

<sup>9</sup> *Id*. at 7.

<sup>10</sup> *Id*. at 6.

<sup>11</sup> *Id.* at 5 (stating that its "user registration and certification, 911 call handling and routing, collection and reporting of billing-related data for the TRS Administrator, [and] network monitoring and complaint processes" will remain the same).

<sup>12</sup> See Comment Sought on Amendment to Application of CaptionCall, LLC, for Certification as a Provider of IP Captioned Telephone Service, CG Docket No. 03-123, Public Notice, 35 FCC Rcd 13027 (CGB 2020) (Notice of Application). As noted above, CaptionCall is currently conditionally certified to provide CA-assisted IP CTS. When an applicant is conditionally certified to provide an Internet-based form of TRS, such as IP CTS, the original application remains in pending status until full certification is granted. See 2011 Internet-based TRS Certification Order, 26 FCC Rcd at 10914-15, para. 37; see also Sorenson Conditional Certification Notice, 29 FCC Rcd at 4114-15. Although CaptionCall styled its November 2020 filing as an "Application," the Notice of Application referred to it as an "Amendment" to CaptionCall's pending application for full certification. The application did not formally request such an amendment, however. Subsequently, CaptionCall filed an "Update and Verification" of the pre-2020 application for full IP CTS certification, which expressly adds information regarding its proposed provision of fully automatic IP CTS. Update and Verification of Internet-Based TRS Certification Application of CaptionCall, LLC for Internet Protocol Captioned Telephone Service, CG Docket No. 03-123, at 7 (filed Dec. 18, 2020) (CaptionCall IP CTS Application Update),

https://ecfsapi.fcc.gov/file/1218330924974/REDACTED\_CaptionCall%20Update%20and%20Verification%20(202 0-12-18).pdf (redacted). In this Order, we adopt CaptionCall's nomenclature, referring to its November 2020 filing as an "application" rather than an "amendment." research organizations filed comments raising a number of concerns with the application, as well as more general concerns about certifying ASR-only IP CTS providers without first establishing metrics for service quality.<sup>13</sup> On January 5, 2021, CaptionCall filed reply comments.<sup>14</sup> In a subsequent *ex parte* letter, noting the inconsistency of denying certification to applicants that are similarly situated to others previously certified, most of the Consumer Groups and Accessibility Researchers affirmed that they will not specifically oppose certification of "pending ASR-based applications that the Commission concludes will deliver a similar level of quality to those already certified."<sup>15</sup> On August 4, 2021, CaptionCall submitted a supplemental filing clarifying certain aspects of its ASR application.<sup>16</sup>

# III. CERTIFICATION

5. We find that CaptionCall's application facially meets the applicable certification requirements, and we conditionally modify CaptionCall's certification to permit the provision of fully automatic IP CTS.<sup>17</sup> Conditional certification allows the Commission to verify—based on actual operating conditions—that CaptionCall's provision of fully automatic IP CTS will meet or exceed the minimum TRS standards. By granting conditional certification, we eliminate unnecessary delay in the availability of TRS using improved technologies.<sup>18</sup>

6. *Sufficiency of the Application*. CaptionCall's application is facially sufficient to satisfy the Commission's certification requirements. CaptionCall is currently conditionally certified to provide CA-assisted IP CTS, and in this instance, we find no reason to expand our review of its application beyond considering whether CaptionCall will meet those minimum TRS standards potentially affected by its proposed introduction of ASR-only captioning as an alternative to CA-assisted captioning. The application and supporting information<sup>19</sup> provide a detailed explanation as to how CaptionCall will provide fully automatic IP CTS and meet all minimum standards relevant to consideration of its application.<sup>20</sup> In particular, CaptionCall has sufficiently supported its claims regarding its use of ASR and the efficacy of such use in meeting the Commission's minimum TRS standards relating to speed of answer, service continuity, caption delay, accuracy, readability, verbatim transcription, privacy, and

<sup>14</sup> See Reply Comments of CaptionCall, LLC, CG Docket No. 03-123 (filed Jan. 05, 2021) (CaptionCall Reply).

<sup>15</sup> Letter from Blake E. Reid, Counsel to TDI, on behalf of HLAA, TDI, NAD, ALDA, CPADO, DSA, DHH-RERC, and IT-RERC, CG Docket Nos. 03-123, 10-51, and 13-24, at 2 (filed Mar. 26, 2021) (HLAA et al. March 26 *Ex Parte*).

<sup>16</sup> See Letter from John T. Nakahata, Counsel to CaptionCall, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 03-123 (filed Aug. 4, 2021) (CaptionCall Application Supplement) (redacted).

<sup>17</sup> See 47 CFR § 64.606(a)-(b).

<sup>19</sup> See CaptionCall Application at 11-14; CaptionCall Application Supplement at 1-2.

<sup>20</sup> See 47 CFR § 64.604(a) (operational standards); *id.* § 64.604(b) (technical standards); *id.* § 9.14 (emergency call handling).

<sup>&</sup>lt;sup>13</sup> See Comments on Application of CaptionCall to Expand its IP Captioned Telephone Service of Hearing Loss Association of America (HLAA), Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI), National Association of the Deaf (NAD), Association of Late-Deafened Adults (ALDA), Cerebral Palsy and Deaf Organization (CPADO), Deaf Seniors of America (DSA), National Cued Speech Association (NCSA), Deaf/Hard of Hearing Technology Rehabilitation Engineering Center (DHH-RERC), Rehabilitation Engineering Research Center on Universal Interface & Information Technology Access (IT-RERC) (collectively Consumer Groups and Accessibility Researchers), CG Docket No. 03-123 (filed Dec. 21, 2020).

<sup>&</sup>lt;sup>18</sup> *Cf.* 47 U.S.C. § 225(d)(2) (requiring the Commission to ensure that its regulations do not discourage or impair the development of improved technologies); *see also 2018 ASR Declaratory Ruling*, 33 FCC Rcd at 5807, para. 13 (noting that, due to recent advances, ASR "holds great promise for a telephone communication experience that may be superior to and more efficient than existing IP CTS"); *id.* at 5829-30, para. 52 (allowing the introduction of ASR without delay will enable the Commission to "gather data that can inform our adoption of further measures to improve its utility").

emergency call handling.21

7. Speed of Answer and Service Continuity. CaptionCall has made a sufficient showing that using its chosen ASR technology for a portion of IP CTS calls will not adversely affect—and in fact will improve—its ability to meet or exceed the minimum TRS standards for speed of answer and service continuity. The speed-of-answer rule requires that calls be answered within 10 seconds for 85% of the calls handled each day.<sup>22</sup> CaptionCall reports that its CA-assisted service already "routinely exceeds" this standard.<sup>23</sup> For ASR-only captioning, CaptionCall states that its system connects 99% of ASR-only calls within less than two seconds.<sup>24</sup> CaptionCall reports that the ASR platform provides CaptionCall the ability "dynamically to increase its simultaneous ASR call capacity," up to a maximum that currently "far exceeds" the level of simultaneous calls on its service even during the height of the COVID-19 pandemic.<sup>25</sup> Further, CaptionCall predicts that the availability of ASR when all CAs are occupied will "eliminate hold time beyond the fractions of a second that it takes the [Automatic Call Distributer] to detect and route a call to" an available CA or to ASR.

8. We also find that the availability of ASR-only will help CaptionCall maintain service continuity. IP CTS providers must have redundancy features functionally equivalent to the equipment in telephone company central offices.<sup>26</sup> CaptionCall states that it has instituted "multiple redundancy features and safeguards" that include "emergency generators to ensure uninterruptable power for emergency use."<sup>27</sup> CaptionCall reports that the contract with its ASR vendor assures 99.9% service availability.<sup>28</sup> Further, CaptionCall states that it has architected its system to have multiple points of access to the ASR vendor, which are balanced to ensure that if any of them goes down, the others will be able to handle the additional traffic. In addition, there is diversity in the providers and communications routes used for transmission of speech and captions between CaptionCall's network and the vendor's system.<sup>29</sup> Based on these statements and the applicant's explanation of its service architecture, CaptionCall sufficiently shows that ASR-only captioning will not adversely affect, and in fact will improve, its ability to meet the applicable service continuity standard.

9. *Captioning Speed / Delay.* CaptionCall sufficiently supported its claim that its ASR technology will transcribe captions in real time and in compliance with the minimum TRS standards relating to captioning speed and delay.<sup>30</sup> CaptionCall reports that testing with simulations of audio files

<sup>24</sup> CaptionCall Application at 12; *see also id.* at 14 ("Test results show that ASR-only captioned calls are answered within 2 seconds by a method which results in the caller's call immediately being placed, and because of adequate network facilities, the probability of a busy response is functionally equivalent to what a voice caller would experience in attempting to reach a party through a voice telephone call.").

<sup>25</sup> CaptionCall Application Supplement at 2.

<sup>26</sup> 47 CFR § 64.604(b)(4)(ii).

<sup>29</sup> *Id*. at 1-2.

<sup>&</sup>lt;sup>21</sup> See 2018 ASR Declaratory Ruling, 33 FCC Rcd at 5834-35, para. 63 (noting that applicants to provide ASR-based IP CTS must support all claims regarding their use of ASR and its efficacy).

<sup>&</sup>lt;sup>22</sup> See 47 CFR § 64.604(b)(2)(ii).

<sup>&</sup>lt;sup>23</sup> CaptionCall Application at 14; see also CaptionCall IP CTS Application Update at 7 (redacted).

<sup>&</sup>lt;sup>27</sup> CaptionCall IP CTS Application Update at 8.

<sup>&</sup>lt;sup>28</sup> CaptionCall Application Supplement at 1.

<sup>&</sup>lt;sup>30</sup> Currently, there is no quantitative standard for IP CTS caption delay *per se.* However, captions must be delivered "fast enough so that they keep up with the speed of the other party's speech," and "if captions are not keeping up with the speech (although a short delay is inevitable), at some point the provider is no longer offering relay service and the call is not compensable." *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Internet-based Captioned Telephone Service,* CG Docket No. 03-123, Declaratory Ruling, 22 FCC Rcd 379, 388-89, para. 22 & n.69 (2007) (2007 IP CTS Declaratory Ruling). In (continued....)

used for stenographer tests showed that its ASR-only captioning meets the typing speed standard of 60 words per minute.<sup>31</sup> CaptionCall further states that internal testing found the ASR-only system averages a captioning delay "of less than 2 seconds *from the time the phrase ends*."<sup>32</sup> Additionally, in performance testing of CA-assisted and ASR-only IP CTS technologies by the Commission's National Test Lab,<sup>33</sup> CaptionCall's median *per-word* caption delays for various call scenarios ranged from 3.3 to 3.8 seconds, while CA-assisted providers' median caption delays were significantly longer, averaging from 5.2 to 17.8 seconds.<sup>34</sup> These test results show that CaptionCall's ASR-only captioning will satisfy the Commission's minimum standards for captioning speed and delay.

10. Accuracy and Readability. Although the TRS rules do not currently provide metrics for accuracy and readability, the typing, grammar, and spelling of captions must be "competent," and conversations must be transcribed "verbatim," with no intentional alteration of content unless the user specifically requests summarization.<sup>35</sup> We find sufficient record evidence that CaptionCall's fully automatic IP CTS will meet or exceed the Commission's competence and "verbatim" requirements. CaptionCall states that it evaluated the performance of leading ASR vendors and selected an ASR platform based on accuracy, transcription formatting, including punctuation and capitalization, and user-friendly handling of acronyms, prices, dates, and numerics.<sup>36</sup> CaptionCall reports that it conducted internal testing of its engine's captioning accuracy using the audio files developed by the National Test Lab. The Word Error Rates reported from CaptionCall's internal testing are comparable to results of

<sup>31</sup> CaptionCall Application at 12; see also 47 CFR § 64.604(a)(1)(iii).

<sup>32</sup> CaptionCall Application at 12 (emphasis added).

<sup>33</sup> See FCC Telecommunications Relay Services Project, Captioning Device Performance Testing: [Caption Call] Automated Speech Recognition (ASR) Assessment, CG Docket No. 03-123, at 2 (posted by CGB on April 19, 2021) (NTL Test Report). The National Test Lab is operated by MITRE Corporation (MITRE) as part of the CMS Alliance to Modernize Healthcare Services, a Federally Funded Research and Development Center sponsored by the Centers for Medicare & Medicaid Services (CMS). *See* CMS Alliance to Modernize Healthcare, Internet Protocol Caption Telephone Service (IP CTS) Devices: Summary of Phase I Activities, at 1 (July 24, 2017), CG Docket Nos. 13-24 and 03-123 (filed by CGB Apr. 11, 2018).

<sup>34</sup> NTL Test Report at 4.

<sup>(</sup>Continued from previous page) -

addition, the typing speed standard for text-based TRS is applicable. *See id.* at 388, para. 22 n.69; 47 CFR § 64.604(a)(1)(iii) (requiring TRS CAs to have a minimum typing speed of 60 words per minute). Based on the test results and other evidence discussed above, CaptionCall has shown that its fully automatic IP CTS not only will meet this standard but also will "keep up with the speed of the other party's speech." *2007 IP CTS Declaratory Ruling*, 22 FCC Rcd at 388, para. 22. On October 2, 2020, the Commission released a Further Notice of Proposed Rulemaking that proposed quantitative standards for IP CTS caption delay. *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, CG Docket Nos. 13-24, 03-123, and 10-51, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 35 FCC Rcd 10866, 10896-903, paras. 62-81 (2020) (*IP CTS Metrics Further Notice*).

<sup>&</sup>lt;sup>35</sup> 47 CFR § 64.604(a)(1)(ii), (2)(ii). These standards apply to captions developed with ASR. *See Telecommunications Relay Services and Speech-to-Speech Services for Individual with Hearing and Speech Disabilities*, CC Docket No. 98-67, Declaratory Ruling, 18 FCC Rcd 16121, 16134-35, paras. 37-39 (2003); *2018 ASR Declaratory Ruling*, 33 FCC Rcd at 5832, para. 60. The Commission recently proposed a quantitative standard for accuracy based on measuring word error rate. *IP CTS Metrics Further Notice*, 35 FCC Rcd at 10900-02, paras. 71-78.

<sup>&</sup>lt;sup>36</sup> CaptionCall Application at 9, 13.

National Test Lab testing of other conditionally certified ASR-only providers and compare favorably with the average results for CA-assisted providers, described below.<sup>37</sup>

11. The National Test Lab's own testing provides further evidence that, in terms of accuracy, CaptionCall's ASR platform can outperform CA-assisted IP CTS. In repeated tests of five call scenarios, CaptionCall's ASR platform achieved median Word Error Rates ranging from 2.9 to 14.5, while CA-assisted providers' median Word Error Rates ranged from 8.9 to 19.5 on average.<sup>38</sup> These test results sufficiently support our determination, for the purpose of conditional certification, that CaptionCall's ASR-only captioning will meet or exceed the minimum TRS standards for competence and verbatim transcription, as well as CaptionCall's claim that "[t]here is no reason to believe that CaptionCall's implementation of ASR-only as described [in its application] will lead to service degradation."<sup>39</sup>

12. *Privacy.* IP CTS providers are subject to the Commission's confidentiality requirements for TRS call content, which prohibit its retention for any purpose, either locally or in the cloud,<sup>40</sup> as well as obligations to protect customer information.<sup>41</sup> Our rules obligate a provider to protect call content and customer information regardless of the specific persons or entities (e.g., CAs, other employees, vendors, or agents) that a provider may designate to handle such information on its behalf.<sup>42</sup> CaptionCall's application sufficiently describes how its ASR-based service will comply with the Commission's TRS confidentiality requirements. CaptionCall states that its ASR-only system does not collect, store, or cache conversation content once the call is terminated.<sup>43</sup> More specifically, once the call terminates, all call content is "removed from [CaptionCall's] and [CaptionCall's] partner's systems."<sup>44</sup> CaptionCall also reports that its speech-to-text agreements with vendor partners do not allow for collection, storage, or cache of any user data or captions text.<sup>45</sup> Moreover, CaptionCall explains that ASR vendors do not have access to or the ability to store specific information which ties the user to call content.<sup>46</sup>

<sup>38</sup> NTL Test Report at 3.

<sup>39</sup> CaptionCall Application at 10. We believe the MITRE test results, published after the close of the comment period on this application, supply sufficient public information on the latency and accuracy results to address the Consumer Groups' concern about the transparency of testing for both caption delay and accuracy. *See* Consumer Groups and Accessibility Researchers Comments at 7-8; CaptionCall Reply at 4-5; NTL Test Report at 3-4.

<sup>40</sup> See 47 CFR § 64.604(a)(2)(i) (TRS call-content confidentiality requirements); see also 2018 ASR Declaratory *Ruling*, 33 FCC Rcd at 5832-33, para. 60 (clarifying that rules prohibiting TRS CAs from disclosing the content of a relayed conversation or keeping records of the content beyond the duration of a call apply to ASR-based IP CTS).

<sup>41</sup> See 47 CFR § 64.611(j)(1)(xii) (requiring IP CTS providers to maintain the confidentiality of user registration and certification information); 47 CFR §§ 64.2001-64.2011 (restricting disclosure and use of customer proprietary network information).

<sup>42</sup> See, e.g., 2018 ASR Declaratory Ruling, 33 FCC Rcd at 5832-33, para. 60.

<sup>43</sup> CaptionCall Application at 11, 13; *see also* CaptionCall IP CTS Application Update at 4 (explaining that CaptionCall's policies "bar its CAs from disclosing content of any relayed conversation" except where authorized by law).

<sup>44</sup> CaptionCall Application at 11. CaptionCall notes that, as with CA-assisted IP CTS, it "retains the data necessary to bill for calls," and states that this information is protected in accordance with the Commission's Customer Proprietary Network Information (CPNI) rules. *Id.*; *see also* CaptionCall IP CTS Application Update at Add. 3 (CaptionCall CPNI Certification and Statement of Operating Procedures); 47 CFR §§ 64.5105, 64.5107-64.5110.

<sup>45</sup> CaptionCall Application at 11. CaptionCall's agreements further ensure that vendor partners "will not use, or otherwise monitor, any audio or caption data for their personal use, be sold to other parties for marketing or other purposes, or be analyzed in any way that could violate the confidential nature of the users' phone calls." *Id.; see also* CaptionCall Reply at 5 ("CaptionCall has selected service options with its underlying speech recognition vendors that preclude the vendor from retaining call content beyond the end of the call.").

<sup>&</sup>lt;sup>37</sup> *Id.* at 10; CaptionCall Reply at 2. The numerical results were provided in the confidential version of the CaptionCall Application.

13. The Consumer Groups and Accessibility Researchers object to the lack of additional detail in CaptionCall's application about "monitoring or remedies for data breaches by its partners."<sup>47</sup> Absent some specific evidence or reason to suspect a substantial risk of data breach, we do not believe it is necessary to require CaptionCall to submit additional detail regarding monitoring or remedial provisions in its agreements with partners.<sup>48</sup> Such details are not required in our certification criteria.

14. Although the Consumer Groups and Accessibility Researchers also object that the application does not disclose "the specific privacy terms, conditions, and policies [CaptionCall] will impose on its users," they do not specify what kinds of terms, conditions, or policies they are concerned CaptionCall might "impose" on users or how such terms might conflict with the Commission's TRS privacy requirements.<sup>49</sup> Further, in this limited-scope certification proceeding, which only determines whether an applicant will comply with applicable Commission rules, we do not need to review applicants' general privacy policies with respect to compliance or consistency with federal and state laws that lie beyond the Commission's jurisdiction.

15. *Emergency Call Handling*. CaptionCall has established that the addition of its ASR-only platform will not adversely affect its ability to handle emergency calls in accordance with applicable Commission rules. Under the Commission's TRS standard for emergency call handling, an IP CTS provider covered by the rule must ensure that 911 calls and required caller information are delivered to the appropriate public safety answering point (PSAP).<sup>50</sup> CaptionCall's existing 911 call-routing procedures will remain unchanged after it deploys ASR.<sup>51</sup>

16. IP CTS providers also must ensure that 911 calls are given priority over non-911 calls.<sup>52</sup> CaptionCall's submissions indicate a clear preference to have 911 calls captioned by a CA.<sup>53</sup> To comply with the prioritization requirement, however, fully automatic captioning (which enables almost instantaneous speed of answer, eliminating any need for a call-answering "queue")<sup>54</sup> must be used for a 911 call in the event that no CA is immediately available to handle the call.<sup>55</sup> Based on the record evidence as to the speed and accuracy of CaptionCall's ASR platform, we see no reason for concern that fully automatic captioning of 911 calls in such circumstances would cause increased risk to emergency callers.

<sup>47</sup> Consumer Groups and Accessibility Researchers Comments at 8.

<sup>48</sup> Our TRS certification rules do not require the submission of copies of each agreement an IP CTS applicant enters into with a partner. *See, e.g.*, 47 CFR § 64.606(a)(2)(ii)(A) (requiring VRS applicants, but not other certification applicants, to submit copies of agreements relating to, *inter alia*, call center technology).

<sup>49</sup> Consumer Groups and Accessibility Researchers Comments at 8.

<sup>50</sup> 47 CFR § 9.14(b)(2), (e); see also Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket Nos. 13-24 and 03-123, Report and Order, Further Notice of Proposed Rulemaking, and Order, 34 FCC Rcd 691, 711-15, paras. 44-53 (2019) (2019 IP CTS Order) (partially waiving certain provisions of the emergency call-handling rule for IP CTS providers).

<sup>51</sup> CaptionCall IP CTS Application Update at 11 (describing CaptionCall's emergency call-routing process).

 $^{52}$  47 CFR § 9.14(b)(2)(ii) (requiring Internet-based TRS providers to "[i]mplement a system that ensures that the provider answers an incoming emergency call before other non-emergency calls (*i.e.*, prioritize emergency calls and move them to the top of the queue")).

<sup>53</sup> CaptionCall Application at 5-8 (explaining CaptionCall's policy of having 911 calls captioned by CAs).

<sup>54</sup> See supra para. 7.

<sup>55</sup> *Cf.* CaptionCall Application Supplement at 2 (clarifying that the prioritization requirement may sometimes require having a 911 call captioned by ASR).

17. *Other Certification Criteria*. As noted above, CaptionCall is already conditionally certified to provide IP CTS and thus has been evaluated regarding compliance with those TRS standards that are unaffected by the introduction of ASR-only captioning. The General Counsel and Secretary of Sorenson Holdings, LLC, CaptionCall's indirect parent company, certified to the accuracy of the application.<sup>56</sup>

18. *Response to Other Commenter Concerns*. For the same reasons stated in the *ClearCaptions ASR Order*,<sup>57</sup> we decline to require CaptionCall to implement a system permitting users to switch between CA and ASR captioning—an option that is offered by only one of the four providers of fully automatic IP CTS certified to date.<sup>58</sup> Whether to impose such a requirement is a policy determination for the Commission to make, especially in light of the prior Commission rulings favoring competition among TRS providers to offer consumers different versions of TRS using various technologies and features.<sup>59</sup>

19. In sum, CaptionCall's application, the additional information submitted in support of the application, and the National Test Lab's test results facially establish that CaptionCall will meet or exceed the mandatory minimum standards applicable to its provision of fully automatic IP CTS, and that the company has in place sufficient procedures and remedies for ensuring compliance with the applicable TRS rules.<sup>60</sup>

20. *Conditional Certification.* We grant certification for CaptionCall's provision of fully automatic IP CTS on a conditional basis, for a period not to exceed two years, pending further verification that its ASR-based service complies with the Commission's mandatory minimum TRS standards. Because fully automatic IP CTS is a relatively new method for providing this service, we believe the best course is to collect additional information through observing CaptionCall's service in operation to

<sup>60</sup> See 47 CFR § 64.606(b)(2).

<sup>&</sup>lt;sup>56</sup> CaptionCall Application, Add. 1; CaptionCall Application Supplement, Add. 1.

<sup>&</sup>lt;sup>57</sup> Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket No. 03-123, Memorandum Opinion and Order, 36 FCC Rcd 7246, 7257, para. 24 (CGB 2021) (*ClearCaptions ASR Order*).

<sup>&</sup>lt;sup>58</sup> See Consumer Groups and Accessibility Researchers Comments at 6. Of the four previously certified providers of ASR-only IP CTS, two—MachineGenius, Inc., and Clarity Products, LLC—do not provide CA-assisted captioning for any calls. See Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket No. 03-123, Memorandum Opinion and Order, 35 FCC Rcd 4568, 4569, para. 2 (CGB 2020) (MachineGenius ASR Order); Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket No. 03-123, Memorandum Opinion and Order, 35 FCC Rcd 4568, 4569, para. 2 (CGB 2020) (MachineGenius ASR Order); Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket No. 03-123, Memorandum Opinion and Order, 35 FCC Rcd 5635, 5636, para. 2 (CGB 2020) (Clarity ASR Order). ClearCaptions, LLC, makes its own determinations regarding which mode of captioning is provided for non-911 calls. See ClearCaptions ASR Order, 36 FCC Rcd at 7247-48, 7257, paras. 3, 24. Only InnoCaption (Mezmo Corporation d/b/a InnoCaption) currently enables consumers to choose whether the captioning for a call is provided with CA assistance or on a fully automatic basis. See Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket Nos. 13-24 and 03-123, Memorandum Opinion and Order, 35 FCC Rcd 14193, 14195, para. 4 (CGB 2020) (InnoCaption ASR Order).

<sup>&</sup>lt;sup>59</sup> See, e.g., 2018 ASR Declaratory Ruling, 33 FCC Rcd at 5829-30, para. 52 (finding that functional equivalence would not be harmed by the introduction of fully automatic IP CTS, because consumers are unrestricted in their choice of service providers and "will continue to be able to select an IP CTS provider based on the overall quality of service each provider offers by means of the available methods"); 2007 IP CTS Declaratory Ruling, 22 FCC Rcd at 389, para. 24 (IP CTS should not be under the control of a single company); HLAA et al. March 26 *Ex Parte* at 2 (urging the Commission "to ensure that diverse modes of delivering IP CTS, including switched, hybrid human-ASR, and other humans-in-the-loop models, remain viable until the Commission ultimately adopts metrics").

confirm that this service will meet or exceed the minimum TRS standards.61

21. To assist the Bureau in a final determination of CaptionCall's qualifications to provide fully automatic IP CTS, we apply the same reporting requirements adopted in four previous orders conditionally certifying applicants to provide fully automatic IP CTS.<sup>62</sup> We require quarterly reports of consumer complaints during the initial year of service, to be filed with the Commission in the same format and with the same degree of detail required in the log of consumer complaints that providers must file annually with the Commission.<sup>63</sup> The first report shall be due February 1, 2022, and shall cover the period from the commencement of TRS-funded ASR service through December 31, 2021.<sup>64</sup> Each subsequent report shall be filed on the first day of the second month of each calendar quarter and shall cover the preceding calendar quarter. For example, the second report shall be due May 1, 2022, and shall cover the calendar quarter from January through March 2022. CaptionCall shall continue to file reports on a quarterly schedule until two years from the date of this Order or until the Commission acts on granting or denying full certification, whichever occurs earlier.<sup>65</sup>

22. Further, for this "hybrid" service, which offers both CA-assisted and fully automatic captioning, we impose additional conditions to ensure effective review of requests for Fund compensation and speed-of-answer reports, to prevent waste, fraud, and abuse, and to enable the Commission to assess usage levels for fully automatic and CA-assisted IP CTS, respectively.<sup>66</sup> Specifically, CaptionCall shall identify, in its monthly call detail reports, those calls and minutes handled by ASR without CA assistance. In addition, to enable the Administrator and the Commission to assess the impact of fully automatic IP CTS on speed-of-answer performance, CaptionCall shall report its daily speed-of-answer statistics separately for ASR and CA-based IP CTS calls, as well as the aggregate daily statistics for the two modes together.<sup>67</sup>

<sup>64</sup> The first report shall specify the date of CaptionCall's first TRS Fund-supported call using ASR as its commencement-of-service date for fully automatic IP CTS.

 $^{65}$  After such time, the Commission's rules require CaptionCall to file one annual consumer complaint log covering both CA-supported and fully automatic IP CTS. 47 CFR § 64.604(c)(1).

<sup>66</sup> See InnoCaption ASR Order, 35 FCC Rcd at 14202-03, para. 23; ClearCaptions ASR Order, 36 FCC Rcd at 7255, para. 19.

<sup>&</sup>lt;sup>61</sup> See 2011 Internet-based TRS Certification Order, 26 FCC Rcd at 10914-15, para. 37 (reserving the right to grant conditional certification "where the Commission, upon initial review of the application, determines that the application facially meets the certification requirements, but that the Commission needs to verify some of the information contained in the application"); 2018 ASR Declaratory Ruling, 33 FCC Rcd at 5834-35, para. 63 (stating that "no application to provide ASR will be approved unless the applicant demonstrates that the specific ASR technology described in the application meets applicable FCC requirements"); *id.* at 5835, para. 64 (noting that certification of an ASR-only provider may be granted on a conditional basis to enable assessment of an applicant's actual performance).

<sup>&</sup>lt;sup>62</sup> See MachineGenius ASR Order, 35 FCC Rcd at 4574, para. 13; Clarity ASR Order, 35 FCC Rcd at 5640-41, para.
13; InnoCaption ASR Order, 35 FCC Rcd at 14202, para. 22; ClearCaptions ASR Order, 36 FCC Rcd at 7255, para.
18.

<sup>&</sup>lt;sup>63</sup> See 47 CFR § 64.604(c)(1); see also 2018 ASR Declaratory Ruling, 33 FCC Rcd at 5835, para. 64 (noting that to the extent deemed necessary certification of a provider may be conditioned on the submission of periodic data to help confirm whether fully automatic IP CTS is providing functionally equivalent service).

<sup>&</sup>lt;sup>67</sup> See 47 CFR § 64.604(b)(2). In requiring separate reporting of speed of answer for each mode of service, we do not alter the current rule or the conditions of the pandemic-related waiver of that rule. See Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program, CG Docket Nos. 03-123 and 10-51, Order, DA 21-1064 (CGB Aug. 27, 2021) (extending through December 31, 2021, a partial waiver of the speed-of-answer rule, such that all TRS providers' compliance with speed-of-answer requirements is measured on a monthly, not daily, basis). Thus, speed-(continued....)

23. Pending a decision on full certification, the Bureau may request additional information in order to complete our review of CaptionCall's application, such as the results and protocols for performance tests conducted by CaptionCall or independent third parties.<sup>68</sup> We also require CaptionCall to report promptly any changes in the information previously provided to the Commission in its application and supplemental filings, including, for example, any changes in service agreements and suppliers or in the manner in which CaptionCall provides fully automatic IP CTS.

24. Pursuant to this grant of conditional certification, CaptionCall may provide Fundsupported IP CTS in the manner described in its application, for a period not to exceed two years, pending a final determination of its qualifications to provide fully automatic IP CTS. This conditional certification is issued without prejudice to such final determination, which is dependent on verification of the information provided in CaptionCall's application, as well as the additional information provided pursuant to this order, and on the veracity of the applicant's representations that it will provide service in compliance with all pertinent Commission requirements. To assist in reaching a final determination, the Bureau may conduct one or more unannounced site visits to CaptionCall's premises and may request additional documentation relating to CaptionCall's provision of fully automatic IP CTS. Conversion to full certification will be granted if, based on a review of the applicant's documentation and other relevant information, the Commission finds that CaptionCall is in compliance with applicable Commission rules and orders and is qualified to receive compensation from the Fund for the provision of fully automatic IP CTS. If, at any time during the period in which CaptionCall is operating pursuant to this conditional certification, the Commission determines that CaptionCall has failed to provide sufficient supporting documentation for any of the assertions in its application, determines that any of those assertions cannot be supported, or finds evidence of any apparent rule violation, fraud, waste, or abuse, the Commission will take appropriate action, which may include the denial of CaptionCall's amended application. In the event of such denial, CaptionCall's conditional certification will automatically terminate thirty-five (35) days after such denial.69

25. *Preventing Misuse*. We remind CaptionCall and all other TRS providers that IP CTS is intended to provide a service functionally equivalent to voice telephone service, and must not be provided as a substitute for non-TRS in-person transcription services.<sup>70</sup> Further, although our rules do not prohibit

<sup>68</sup> See 2018 ASR Declaratory Ruling, 33 FCC Rcd at 5834-35, para. 63 (citing test results as an example of supporting information an ASR applicant might provide). With some exceptions, such as speed of answer, the Commission's minimum TRS standards do not currently include quantitative metrics. However, testing with respect to various performance criteria, such as caption delay and accuracy, may be helpful in the overall evaluation of this application for the purpose of deciding whether to grant full certification. Further, the Commission recently proposed to adopt quantified standards for caption delay and accuracy, which, if adopted, would be applicable to all IP CTS providers, including those applying for certification or authorized under conditional certification. *See IP CTS Metrics Further Notice*, 35 FCC Rcd at 10898-902, paras. 66-77.

<sup>69</sup> See 2011 Internet-based TRS Certification Order, 26 FCC Rcd at 10914-15, para. 37.

<sup>70</sup> For example, Communication Access Realtime Translation (CART) is often used to generate captions for live meetings, speeches, and other in-person situations where the provision of TRS Fund-supported relay services is not permitted. *See Notice of Conditional Grant of Application of Miracom USA, Inc., for Certification as a Provider of Internet Protocol Captioned Telephone Service Eligible for Compensation from the Telecommunications Relay Services Fund, CG Docket Nos. 03-123, 10-51, and 13-24, Public Notice, 29 FCC Rcd 5105, 5109-10 (2014); see also Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speechto-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket Nos. 10-51 and 03-123, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Rcd 8618, 8691, para. 180 & n.465 (2013) (explaining that the use of TRS Fund-supported VRS to substitute for video remote interpreting—a service that is used when an interpreter cannot be physically present to interpret for two or more persons who are in the same location—is not permitted).* 

<sup>(</sup>Continued from previous page) ·

of-answer compliance will continue to be determined based on a provider's overall performance in each daily or monthly measuring period, regardless of the captioning mode used.

CaptionCall from enabling its registered users to save the captions as they appear on a device, they do prohibit an IP CTS provider itself from retaining call transcripts or subsequently providing transcripts to IP CTS users beyond the duration of the call.<sup>71</sup> We also remind CaptionCall that its marketing of this service must conform with the Commission's rules.<sup>72</sup>

## IV. PROCEDURAL MATTERS

26. *People with Disabilities*: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice).

27. *Additional Information*. For further information regarding this item, please contact William Wallace, Disability Rights Office, Consumer and Governmental Affairs Bureau, at 202-418-2716 (voice) or by e-mail to William.Wallace@fcc.gov.

## V. ORDERING CLAUSES

28. Accordingly, IT IS ORDERED that, pursuant to section 225 of the Communications Act of 1934, as amended, 47 U.S.C. § 225, sections 0.141, 0.361, and 64.606(b)(2) of the Commission's rules, 47 CFR §§ 0.141, 0.361, 64.606(b)(2), and the authority delegated by paragraphs 60 and 64 of the Commission's *2018 ASR Declaratory Ruling*, the application of CaptionCall for certification to provide fully automatic IP CTS is GRANTED as conditioned in this Order.

29. IT IS FURTHER ORDERED, that CaptionCall is conditionally certified to provide IP CTS, as conditioned in this Order.

30. IT IS FURTHER ORDERED that, pursuant to section 1.102(b)(1) of the Commission's rules, 47 CFR § 1.102(b)(1), this Order SHALL BE EFFECTIVE upon release.

## FEDERAL COMMUNICATIONS COMMISSION

Patrick Webre, Chief Consumer and Governmental Affairs Bureau

<sup>&</sup>lt;sup>71</sup> See 47 CFR § 64.604(a)(2)(i). There is a limited exception applicable only to speech-to-speech services.

<sup>&</sup>lt;sup>72</sup> See, e.g., *id.* § 64.604(c)(8), (c)(11), (c)(13). The Commission has noted that the ease and convenience of using IP CTS, while facilitating use of the service by people with hearing loss who need it for effective communication, also creates a risk that IP CTS will be used even when it is not needed. *See 2018 ASR Declaratory Ruling*, 33 FCC Rcd at 5805, para. 9.