

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, DC 20554

In the Matter of	)	
	)	
Telecommunications Relay Services and	)	
Speech-to-Speech Services for Individuals with	)	CG Docket No. 03-123
Hearing and Speech Disabilities	)	
	)	
Comment Sought on Application of VTCSecure,	)	
LLC, for Certification to Provide Internet Protocol	)	
Captioned Telephone Service	)	
	)	
Comment Sought on Application of MachineGenius,	)	
Inc., for Certification to Provide Internet Protocol	)	
Captioned Telephone Service	)	
	)	
Comment Sought on Application of Clarity Products,	)	
LLC, for Certification to Provide Internet Protocol	)	
Captioned Telephone Service	)	

**REPLY COMMENTS OF HAMILTON RELAY, INC.**

Hamilton Relay, Inc. (“Hamilton”), by its counsel, submits these Reply Comments in response to other parties’ filings addressing three Public Notices (“Notices”) issued by the Commission’s Consumer and Governmental Affairs Bureau (“Bureau”) in the above-captioned matters.<sup>1</sup> The Notices solicited comment on filings submitted by Clarity Products, LLC (“Clarity”), MachineGenius, Inc. (“MachineGenius”), and VTCSecure, LLC (“VTCSecure”) (collectively, the “Applicants”).<sup>2</sup> Each Applicant seeks Commission approval to provide Internet

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<sup>1</sup> *Comment Sought on Application of VTCSecure, LLC, for Certification to Provide Internet Protocol Captioned Telephone Service*, Public Notice, CG Docket No. 03-123, DA 19-818 (rel. Aug. 26, 2019); *Comment Sought on Application of MachineGenius, Inc., for Certification to Provide Internet Protocol Captioned Telephone Service*, Public Notice, CG Docket No. 03-123, DA 19-819 (rel. Aug. 26, 2019); *Comment Sought on Application of Clarity Products, LLC, for Certification to Provide Internet Protocol Captioned Telephone Service*, Public Notice, CG Docket No. 03-123, DA 19-820 (rel. Aug. 26, 2019).

<sup>2</sup> *See generally* MachineGenius, Inc., Internet-based TRS Certification Application, CG Docket No. 03-123 (filed Oct. 13, 2017) (“MachineGenius Application”) (proposing ASR-only IP CTS); (continued)...

Protocol Captioned Telephone Services (“IP CTS”) using an automated speech recognition (“ASR”)-only approach.

As the record assembled by the Bureau unanimously attests, it would be premature for the Commission to grant the Applications at this time. The agency must first take necessary steps to ensure that ASR-only IP CTS can operate with statutorily mandated functional equivalency, consistent with Commission-adopted mandatory minimum standards. Commenters also demonstrate that in order for ASR-only operations to be found in compliance with mandatory minimum standards, they must, at the very least, be demonstrated in real-world call situations and in call conditions that are applicable to the diverse spectrum of IP CTS users. Finally, the comments make plain that the Applicants’ requested waivers are unjustified and would endanger the principal of functional equivalence.

Accordingly, and as Hamilton’s initial filing argues, the Bureau should hold the Applications in abeyance until the Commission has adopted a sufficiently fulsome regulatory framework for ASR-only IP CTS.

**I. The Record Reflects Universal Opposition to the Commission Granting the Applications Without First Taking Steps to Ensure Functionally Equivalent Service**

For any statistical evaluation to be meaningful, the underpinning metrics must be rigorous and independently verifiable. Whatever the Commission eventually determines regarding ASR-only approaches to IP CTS, before the agency can begin to evaluate whether a

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VTCSecure, LLC, Internet-based TRS Certification Application, CG Docket No. 03-123 (filed May 26, 2017) (“VTCSecure Application”) (proposing to provide IP CTS solely using ASR engines on some calls but using CAs on other calls); Clarity Products, LLC, Internet-based TRS Certification Application, CG Docket No. 03-123 (filed Apr. 24, 2019) (“Clarity Application”) (collectively, the “Applications”).

specific ASR-only offering satisfies statutory mandates, a commonly understood ASR-only set of metrics is needed.

On this front and as Hamilton previously demonstrated, the “Commission in essence has created a paradox. On the one hand, it directed the Bureau to approve providers of ASR-only IP CTS if they meet the mandatory minimum standards under the Commission’s rules”—yet “[o]n the other,” it “failed to articulate any standards by which the Bureau can conclude that fully-automated ASR can satisfy the Commission’s requirements, and it failed to adopt a rate methodology for any such service.”<sup>3</sup> Every other commenter in the record echoed these concerns. For instance, Ultratec emphasizes that the Commission has “not yet adopted IP CTS performance metrics” generally—and that such metrics are especially “crucial ... in connection with a new and untested [telecommunications relays service (‘TRS’)] technology such as ASR-only IP CTS that has not been proven through more than a decade of successful use by the deaf and hard-of-hearing community, like [communications assistant (‘CA’)]-based IP CTS has.”<sup>4</sup> Similarly, Consumer Groups demonstrate that the Commission has a fundamental “obligation to establish regulations pertaining to IP CTS that ensure the service meets the functional equivalency standard” under Section 225 of the Communications Act of 1934, as amended (the “Act”)<sup>5</sup>—and has failed to do so.<sup>6</sup>

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<sup>3</sup> Comments of Hamilton Relay, Inc., CG Docket No. 03-123, at 3 (filed Sept. 25, 2019) (“Hamilton Comments”).

<sup>4</sup> Comments of Ultratec, Inc., CG Docket No. 03-123, at 12 (filed Sept. 25, 2019) (“Ultratec Comments”).

<sup>5</sup> Comments on Applications for Certification as Providers of ASR-Based IP CTS of the Hearing Loss Association of America *et al.*, CG Docket Nos. 13-124, 03-123, at 3-5 (filed Sept. 25, 2019) (“Consumer Groups Comments”) (citing in part 47 U.S.C. § 225(a)(3): “The term ‘telecommunications relay services’ means telephone transmission services that provide the ability for an individual who is deaf, hard of hearing, deaf-blind, or who has a speech disability (continued)...”).

Hamilton agrees with another commenter that, “[g]iven the current state of ASR ... it is unclear if ASR-only providers are able to generate captions that are at least comparable to currently available CA-assisted IP CTS, especially with respect to difficult calls.”<sup>7</sup> Therefore, because “[a]llowing the proliferation of ASR-based IP CTS services without *first* ensuring that these services are functionally equivalent will undermine and dilute the quality of IP CTS services nationwide,” at “a minimum, the Bureau must ensure that each certificated ASR-based offering is comparable in quality to current IP CTS offerings” by promulgating “standardized metrics to make that comparison.”<sup>8</sup>

## **II. Commenters Demonstrate that ASR-Only Must Be Tested in Real-World Call Situations in Order to Confirm Compliance with Mandatory Minimum Standards**

Initial comments show that before any ASR-only service can be approved, real-world call situation demonstrations are needed to confirm that such services comply with the Commission’s mandatory minimum standards. One of the fundamental minimum standards is that captions be provided verbatim.<sup>9</sup> The Applications do not sufficiently demonstrate compliance with that

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to engage in communication by wire or radio with one or more individuals, in a manner that is *functionally equivalent* to the ability of a hearing individual who does not have a speech disability to communicate using voice communication services by wire or radio.” (emphasis added)).

<sup>6</sup> *Id.* at 5 (“the Commission has not produced any requirements, guidelines, and minimum standards pertaining specifically to IP CTS providers providing ASR-based offerings”).

<sup>7</sup> Comments of CaptionCall, LLC on the Applications *et al.*, CG Docket No. 03-123, at 4 (filed Sept. 25, 2019) (“CaptionCall Comments”) (internal quotations, citations omitted).

<sup>8</sup> Comments of Sprint Corporation, CG Docket No. 03-123, at 3 (filed Sept. 25, 2019) (emphasis in original) (“Sprint Comments”); *see also id.* at 4-6 (explaining why “the test results provided [by Applicants] are not and cannot be a substitute for standardized metrics, which do not exist today either for ASR-based services or for the CA-assisted IP CTS services that the [Commission] has asked applicants to use as a basis for comparison”).

<sup>9</sup> 47 C.F.R. § 64.604(a)(2)(ii).

standard. As Sprint notes, the purported “test results” provided by the Applicants “are not detailed enough” in real-world application “to allow the Bureau to engage in reasoned decision-making”—reflecting the inadequacy of a private testing-only approach, in part, and defeating the purpose of “allowing public notice and comment” on how the Applications function for on-the-ground everyday IP CTS users.<sup>10</sup> Indeed, at least one commenter’s own testing has “found that [ASR captioning accuracy] is not yet sufficiently accurate in ... real-world circumstances.”<sup>11</sup> In the end, as Ultratec explains, it would be “inappropriate for the Commission to conduct an experiment regarding the adequacy of ASR-only IP CTS using actual deaf and hard-of-hearing users” – the agency must not use “newly certified ASR-only providers (and their deaf and hard-of-hearing customers) as a test bed to determine the efficacy of [the former’s] service.”<sup>12</sup> Instead, the Commission must “guard against providers’ performing tests under conditions to achieve predetermined outcomes and/or in scenarios that do not reflect real-world calling scenarios”<sup>13</sup> by requiring the Applicants to demonstrate compliance with mandatory minimum standards in real-world testing environments that reflect the diverse range of IP CTS users and their individual needs. Hamilton believes that consumer groups can be instrumental in facilitating this required review.

Moreover, as Sprint notes, IP CTS providers are engaged in ongoing efforts to generate quality of service standards to govern IP CTS, and “[o]nly *after* these metrics are developed and

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<sup>10</sup> Sprint Comments at 4-5.

<sup>11</sup> Ultratec Comments at 14.

<sup>12</sup> *Id.* at 12.

<sup>13</sup> CaptionCall Comments at 7.

implemented will the Bureau have an appropriate basis for evaluating whether the [Applicants'] proposed ASR-based offerings can be provided in a functionally equivalent fashion.<sup>14</sup>

### **III. The Applicants' Requested Waivers Are Unjustified and, if Granted, Would Not Ensure Functional Equivalence**

Finally, each Applicant has requested numerous waivers in their Applications. The expansive scope of these waiver requests demonstrates that ASR-only IP CTS, as proposed in the Applications, simply cannot meet current mandatory minimum standards that the Commission has determined are necessary to achieve functional equivalence with voice communications.<sup>15</sup>

As the record shows, the Applicants “seek tacit and formal waivers of many, if not all, the mandatory minimum standards that currently apply to human CAs”<sup>16</sup>—in contravention of the spirit of Congress’s “functional equivalence” mandate.<sup>17</sup> The Consumer Groups correctly note that “formally or tacitly waiving the existing mandatory minimum standards for CAs would effectively undercut the *quality, privacy, and safety* values that IP CTS consumers should have the right to depend on from all providers”—and “[d]oing so would potentially set back efforts by the Commission, the IP CTS industry, and consumers to raise the bar for quality on a technology-neutral basis.”<sup>18</sup> This three-category analysis—breaking down the Applicants’ waiver requests by their implications, respectively, on quality, privacy, and safety—provides a

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<sup>14</sup> Sprint Comments at 6-7 (emphasis in original).

<sup>15</sup> See Hamilton Comments at 6.

<sup>16</sup> Consumer Groups Comments at iv.

<sup>17</sup> See 47 U.S.C. § 225(a)(3).

<sup>18</sup> Consumer Groups Comments at iv-v.

useful lens. Using these categories, none of the Applicants have met the “high hurdle” standard required to show that a waiver of Commission rules would serve the public interest.<sup>19</sup>

**Quality.** For example, each Applicant seeks a waiver of various aspects of Section 64.604(a)(1) of the Commission’s rules, which is designed to ensure quality of service by setting minimum standards for CA skills.<sup>20</sup> This rule in part requires that “all CAs be sufficiently trained to effectively meet the *specialized* communications needs of individuals with hearing and speech disabilities.”<sup>21</sup> Such training is important to ensuring a faithful—*i.e.*, verbatim—representation of the call, and to avoiding “invisible errors” in the delivery of captions.<sup>22</sup> Yet no Applicant has submitted evidence publicly demonstrating that their proposed ASR engine will be trained to meet the specialized needs of IP CTS users. Rather, the Applications appear to rely merely on general-purpose, commercial ASR engines that have not been shown to have the necessary cultural competency or adaptations for various dialects, accents, and speech

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<sup>19</sup> 47 C.F.R. § 1.3 (Commission rules may be waived for good cause). The Commission adheres strictly to its rules unless a party can demonstrate that “in the public interest the rule should be waived.” *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Declaratory Ruling, 18 FCC Rcd 16121, 16130 (2003) (citing *FPC v. Texaco, Inc.*, 377 U.S. 33, 39 (1964)). The party petitioning the Commission for a waiver bears the heavy burden of showing good cause: “[an] applicant [for a waiver] faces a high hurdle even at the starting gate.” *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969). In addition, the Commission must explain why deviation from the rule better serves the public interest. *Northeast Cellular Telephone Company, L.P. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

<sup>20</sup> 47 C.F.R. § 64.604(a)(1); Clarity Application at C-1; MachineGenius, Inc. Request for Waiver, CG Docket No. 03-123, at 2 (filed Oct. 13, 2017) (“MachineGenius Waiver Request”); VTCSecure, LLC Request for Waiver, CG Docket No. 03-123, at 2 (filed Sept. 13, 2019) (“VTCSecure Waiver Request”).

<sup>21</sup> 47 C.F.R. § 64.604(a)(1)(i) (emphasis added).

<sup>22</sup> See Ultratec Comments at 14 (explaining that invisible errors are “language that is grammatically correct and that may seem correct when read but nevertheless is not a faithful representation of the speech”).

impediments that exist among IP CTS users. A waiver of this mandatory minimum standard therefore would create a risk that not all IP CTS users would receive accurate, verbatim service. As such, a waiver to deploy general-purpose commercial ASR engines has not been justified by the Applicants in the public record. Hamilton thus agrees with other commenters that the Applicants should present and publicly disclose real-world, diverse tests and other evidence regarding the quality of their proposed offerings.<sup>23</sup>

**Safety.** Similarly, the Applicants' waiver requests regarding the safety of IP CTS users reveal the current inadequacy of ASR-only services with respect to emergency call handling. VTCSecure fails to explain in any meaningful fashion, in seeking a waiver of Sections 64.605(a)(2)(iv) and 64.605(a)(2)(v), how its "plan ... to always have an agent come on during an emergency call"<sup>24</sup> could be implemented, or whether such a plan would permit VTCSecure to comply with mandatory minimum speed of answer requirements in such situations.<sup>25</sup> And MachineGenius's and Clarity's discussions of their 911-specific connectivity plans, and related waiver requests (in the latter's case), are equally vague and conclusory.<sup>26</sup> Such opaqueness regarding "adherence to the Commission's requirements for 911 connectivity" when safety-

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<sup>23</sup> See, e.g., Ultratec Comments at 4; see also Consumer Groups Comments at 9 ("The VTCSecure application includes [only] several conclusory statements regarding the quality of its offering."); *id.* at 11 ("MachineGenius's current application has many shortcomings similar to those of VTCSecure's application, including vague contentions about the performance of the MachineGenius offering."); *id.* at 12 ("The Clarity application likewise offers similar conclusions about quality with little supporting evidence. Clarity states that 'internal testing' yielded a 'very high level of accuracy.' ... [But a] conclusory contention that captions are highly accurate provides no basis for the Commission or the public to evaluate the quality of the service.").

<sup>24</sup> VTCSecure Request for Waiver, CG Docket No. 03-123, at 3 (filed Sept. 13, 2019).

<sup>25</sup> 47 C.F.R. § 64.604(b)(2)(ii).

<sup>26</sup> MachineGenius Application at 16; Clarity Application at 18; see also Consumer Groups at 15.



related calls “routinely arise under life and death circumstances”<sup>27</sup> fundamentally falls short of satisfying the public interest or the “high hurdle” waiver standard. It cannot be the case that the safety of IP CTS users can be brushed aside for the sake of expedited processing of the Applications.

**Privacy.** Finally, the Applicants’ requested waivers regarding privacy again demonstrate inadequate justification—and would permit the Applicants to provide non-functionally equivalent service to IP CTS users if permitted. As the Consumer Groups note, “VTCSecure simply does not address privacy concerns related to the use of ASR technology in the public version of its application and should be denied on those grounds alone.”<sup>28</sup> And the other two Applicants fail to acknowledge that “using ASR ... raises new privacy concerns that are different from those that arise with CA-based service.”<sup>29</sup> It is not enough to request a waiver of CA-centric privacy rules. As the Arizona Commission for the Deaf and Hard of Hearing noted: “Confidentiality of conversation does not only apply to CA’s but to the content of the information contained in the call itself, and [also] to the retention of the information. Vendors who provide caption services through ASR technology should still indicate whether or not the calls conducted through ASR will be 1) recorded, 2) stored, and . . . how they will maintain the confidentiality of the data and information contained in the call?”<sup>30</sup> The Applicants bear the

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<sup>27</sup> Consumer Groups at 14-15.

<sup>28</sup> Consumer Groups at 13.

<sup>29</sup> *Id.* at 14

<sup>30</sup> Comments of Arizona Commission for the Deaf and Hard of Hearing, CG Docket No. 03-123, at 2 (filed Oct. 8, 2019).

burden of demonstrating that the public interest is better served by waiving these requirements. They have not done so, and thus their waiver requests should be denied.

Ultimately, the Applicants are in an impossible position; by “putting the cart before the horse in failing to establish rules to govern ASR-based services, the Commission has both harmed the consumers who will suffer if ASR-based IP CTS is not functionally equivalent and established a difficult process for potential ASR-based providers, which must navigate the waiver request process before being certificated. Fortunately, the Commission again easily can rectify this issue by establishing both metrics and revised rules *before* acting on applications for ASR-based IP CTS.”<sup>31</sup>

#### **IV. Conclusion**

For the reasons set forth above, the Bureau should hold the Applications in abeyance until the Commission has adopted an appropriate regulatory framework for ASR-only IP CTS.

Respectfully submitted,

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<sup>31</sup> Sprint Comments at 9 (emphasis in original).