

**Before The  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C.**

In re: )  
 )  
Telecommunications Relay Services and )  
Speech-to-Speech Services for Individuals ) CG Docket No. 03-123  
With Hearing and Speech Disabilities )  
Application for TRS Certification to )  
Provide IP Captioned Telephone Service )

To: Chief, Consumer and Governmental Affairs Bureau,  
Internet-based TRS Certification Application

**INTERNET-BASED TRS CERTIFICATION APPLICATION**

MACHINEGENIUS, INC.

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MACHINEGENIUS, INC.**

MachineGenius, Inc. (“MachineGenius”, “Applicant”, or “Company”), by counsel and pursuant to the Commission’s January 11, 2007, Declaratory Ruling in this proceeding<sup>1</sup>, and FCC Rule Sections 64.604, 64.605 and 64.606,<sup>2</sup> respectfully submits this Application for certification to provide Internet Protocol Captioned Telephone Service (“IP CTS”). MachineGenius respectfully requests expeditious review and grant of this Application, because the proliferation of new and innovative forms of telecommunications relay service (“TRS”) is consistent with federal law and Commission regulations, and has been determined to be in the public interest.

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<sup>1</sup> *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, Declaratory Ruling, 22 FCC Rcd 379 (Jan. 11, 2007) (“*IP CTS Ruling*”). See also *Public Notice*, CG Docket No. 03-123, DA 08-478, 23 FCC Rcd 2889 (Feb. 28, 2008) (“*Public Notice*”).

<sup>2</sup> 47 C.F.R. §§ 64.604, 64.605 and 64.606.

FCC Rule Section 64.606,<sup>3</sup> as amended, governs FCC consideration of Internet-based TRS certification applications. An entity desiring to provide Internet-based TRS and to receive compensation from the Interstate TRS Fund must submit documentation in the form of a narrative application to the Chief of the FCC's Consumer and Governmental Affairs Bureau ("CGB"). The application must be captioned "Internet-based TRS Certification Application."

Under Section 64.606 of the Commission's Rules, the following information and documents must be set forth in the application:

1. A description of the forms of Internet-based TRS to be provided (i.e., VRS, IP Relay, and/or IP CTS).
2. A description of how the applicant will meet all non-waived mandatory minimum standards applicable to each form of TRS offered, including documentary and other evidence.
3. A list of (a) individuals or entities that hold 10 percent or more equity interest in the applicant, (b) have the power to vote 10 percent or more of the securities of the applicant, or (c) exercise *de jure* or *de facto* control over the applicant, along with (d) a description of the applicant's organizational structure, and (e) the names of its executives, officers, members of its board of directors, general partners (in the case of a partnership), and managing members (in the case of a limited liability company).
4. A list of the number of the applicant's full-time and part-time employees involved in TRS operations, broken down by at least the following categories: executives and officers; video phone installers (in the case of VRS), communications assistants, and persons involved in marketing and sponsorship activities.

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<sup>3</sup> 47 C.F.R. § 64.606.

5. Copies of employment agreements for all of the provider's employees directly involved in TRS operations, executives, and communications assistants must be retained for five years from the date of the application and made available upon request to the FCC but need not be included with the application. The provider must also keep a list of the names of all employees directly involved in TRS operations for a five-year period.
6. All applicants must provide in the application a list of all sponsorship arrangements relating to Internet-based TRS, including any associated written agreements.
7. The application must include a description of the provider's complaint procedures.
8. The application must include a statement that the provider will file annual compliance reports demonstrating continued compliance with these rules.

As shown below, MachineGenius meets all requirements for certification to provide IP CTS as set forth in FCC Rule Section 64.606.<sup>4</sup> Accordingly, the Company requests that the Commission grant its Application. In support of this Application, MachineGenius submits the following.

**I. Background**

MachineGenius is a recently-formed technology start-up corporation, formed in Delaware, and based in Holliston, Massachusetts. The Company has no corporate parents, or subsidiaries.

MachineGenius seeks certification to provide Internet Protocol Captioned Telephone Service ("IP CTS") by means of Internet-based TRS ("iTRS"), as defined in 47 CFR § 64.601(a)(15) and 47 CFR § 64.601(a)(16). At this time, MachineGenius is seeking authority to provide IP CTS service only and accordingly be compensated from the federal TRS Fund for its

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<sup>4</sup> 47 C.F.R. § 64.606.

services. However, if in the future economic conditions permit, the Company may seek certification to provide other forms of iTRS.

## **II. MachineGenius IP CTS Offering**

The MachineGenius solution provides improved technology designed to reduce cost of delivery of IP CTS, prevent waste, fraud, and abuse, and improve user experience of IP CTS. Notable features of the MachineGenius service are described below.

MachineGenius' IP CTS is delivered as a software-only Over-the-Top ("OTT") solution in the form of a softphone (developed by MachineGenius and branded "Olelo") installed on a user's existing mobile device. Olelo can be installed as an application on mobile smartphones and Wi-Fi/LTE-enabled tablets.<sup>5</sup> The user's experience is functionally equivalent and nearly identical to that of familiar default telephony applications which come factory-installed on mobile devices. Standard mobile telephony features like call history, contact lists, captioned voicemail, and speakerphone are included, and assistive devices and accessories like Bluetooth headsets can be used on mobile devices running Olelo. By leveraging existing mobile devices and internet connectivity, MachineGenius provides a familiar user experience and the freedom to make and receive IP CTS calls in a manner unrestricted by physical location.<sup>6</sup> Because Olelo is a software-only application running on physical devices that users already own, MachineGenius is able to reduce the cost of delivery of IP CTS, and reduce incentives to fraudulent use of IP CTS (*e.g.*, the ability to acquire a phone at low or no cost).

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<sup>5</sup> The service will initially be available on wireless mobile devices; however the Company has the ability to make the Olelo application available on PCs and laptops and may do so in the future.

<sup>6</sup> Like all Over-the-Top services, the Olelo application works only in locations with available Wi-Fi / LTE connectivity.

Users are automatically provided with a new, private 10-digit phone number in their area code tied to the Olelo application; this is the inbound number at which calling parties can reach the user and the ANI associated with outbound calls utilizing the Olelo application. Neither inbound nor outbound calls require dialing a special number to connect with the relay service; dialing is identical to the mobile/PSTN dialing experience. When a party wishes to call the Olelo user, they simply dial the user's new phone number, and the Olelo softphone rings on the mobile device. When the call is answered by the user, real-time captions of the conversation appear in the Olelo application. Users may choose to set up conditional call-forwarding from their native mobile phone number to their Olelo number, so that calls to the native mobile number are optionally routed to Olelo.<sup>7</sup>

The Olelo softphone uses SIP/RTP signaling and media, a proven industry standard for VoIP telephony, and the connection between softphone and relay service is an OTT service leveraging a user's existing internet connectivity, whether Wi-Fi or LTE. While it is possible for both parties to a call to utilize the Olelo application, it is not required. The MachineGenius relay service communicates via a SIP trunk provider with the Public Switched Telephone Network ("PSTN"). Any of a number of SIP trunk providers may be leveraged; MachineGenius has selected [CONFIDENTIAL] [END CONFIDENTIAL]<sup>8</sup>

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<sup>7</sup> Porting of existing mobile numbers, while possible, is not recommended as it will interfere with the mobile phone's native telephony functionality. Users can continue to use their existing mobile number, phone service, and native mobile telephony application to make and receive calls which may not be appropriate to IP CTS, including calls made by parties unauthorized to use IP CTS.

<sup>8</sup> The Company seeks confidential treatment of proprietary information contained within this Application, the disclosure of which could cause material commercial harm to the Company if disclosed publicly, pursuant to Section 0.459 of the Commission's Rules. 47 C.F.R. § 0.459. A public version of this Application is being filed concurrently with the non-public version of the Application.

Recent advances in Automated Speech Recognition (“ASR”) technology have enabled a fully-automated approach to delivering high-quality, low-latency IP CTS captions. ASR is approaching human-level transcription of open-content conversation, and scalable, cost-efficient solutions are now commercially available. This presents an opportunity for substantial cost-savings over currently available IP CTS services that utilize Communications Assistants (“CAs”). *Exhibit A* provides additional information about ASR technology.<sup>9</sup>

MachineGenius IP CTS uses fully automated speech recognition (“ASR”) in place of Communications Assistants to generate call captions. Distinct from the augmentative use of speech recognition by CAs, MachineGenius employs no human intermediaries listening to, revoicing, or transcribing calls. MachineGenius’ ASR captioning accuracy is comparable to the accuracy provided by CAs.

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<sup>9</sup> *Exhibit A* contains confidential and proprietary information and therefore the Company requests it be filed under seal in accordance with § 0.459 of the Commission’s Rules. 47 C.F.R. § 0.459.

[END CONFIDENTIAL]

Fully automated speech recognition offers benefits beyond cost savings, including:

1. **Real-time captioning.** Captions are delivered in real-time, with sub-second latency, enabling more fluid and efficient conversation and overall improved user experience;
2. **Two-sided captioning.** Captions of both the IP CTS user and the counterparty caller/callee are optionally available to the user, providing increased understandability of call transcripts; this is not feasible with human CAs. The dramatically lower costs of ASR versus human CAs makes this economically achievable;
3. **Instant speed-to-answer.** Because calls are routed through an automated service for captioning, rather than answered by CAs, speed-to-answer is on the order of tens of milliseconds and queuing of calls is nonexistent; this exceeds by a wide margin benchmarks related to service performance, results in improved user experience, and meets a higher standard of functional equivalence;
4. **Scalability.** Scaling is elastic and demand-driven, and performance does not diminish with increased call volume; because the MachineGenius captioning workflow does not have human participants, capacity can be added instantly without the need to hire, train, and manage CAs; likewise if demand decreases there is no excess staff. CA utilization rates and scheduling are non-issues. These factors permit efficient service delivery at a lower cost than workflows involving CAs.
5. **Language support.** Because commercial speech recognition is available in many languages, MachineGenius can easily add support for additional languages with no changes to product or staff.



**6. Privacy.** Users can feel comfortable that there are no third-party CAs listening to the content of their calls. Audio and transcripts of calls are not stored remotely by MachineGenius<sup>10</sup> and are subject to the Company's privacy policy, as well as the Company's ASR vendor's privacy policy.<sup>11</sup>

MachineGenius' IP CTS provides a seamless user experience combined with highly-accurate transcription and captioning. Users of the Company's services are generally well-versed in the capabilities of their mobile devices, and how to utilize functionality provided by apps. The MachineGenius solution is intuitive and easy to use.

MachineGenius' IP CTS solution mitigates the opportunity for and impact of fraud with respect to the TRS fund. Because MachineGenius leverages a user's existing mobile device and internet connectivity, the only incremental value (versus freely available alternative technologies) that the Olelo application delivers free of charge for the user is the functionality of call captioning. As such, consumers with no need for call captioning have no incentive to use the Olelo product. For example, if a potential fraudster with a mobile device wants to make calls free of charge, they can use Wi-Fi calling with an existing mobile plan, or other free-of-charge, non-captioning OTT services. Similarly, potential fraudsters are not incentivized by a free or low-cost physical phone when registering for Olelo; it is a software-only product.

Because mobile devices are typically used by single owner, rather than being shared household devices, the likelihood of unauthorized (intentional or otherwise) use of IP CTS is diminished. However, even in cases where a mobile device is shared, Olelo's implementation as

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<sup>10</sup> The user may, at their option, store a copy of a call transcript locally on their mobile phone or tablet.

<sup>11</sup> [CONFIDENTIAL]

[END CONFIDENTIAL]

an ordinary application on a smart device makes it easy for non-authorized users to simply use native non-IP CTS telephony or other OTT apps on the device. [CONFIDENTIAL]

[END CONFIDENTIAL]

Overall, the nature of the MachineGenius IP CTS solution diminishes incentives for fraudulent use. Moreover, because of the lower per-minute cost-of-delivery associated with the MachineGenius solution, any fraudulent use would in absolute terms mitigate impact to the TRS fund.

### **III. MachineGenius Company Information**

MachineGenius is a privately-held Delaware corporation headquartered at 52 Dean Road, Holliston, Massachusetts, 01746. The Company does not have a corporate parent, affiliates, or subsidiaries. [CONFIDENTIAL]

[END CONFIDENTIAL] These are the only individuals or entities with the power to vote 10 percent or more of MachineGenius securities. No other person or entity exercises *de jure* or *de facto* control over the Company.

MachineGenius is a startup company with [CONFIDENTIAL]

[END CONFIDENTIAL]

The Company does not require video phone installers or Communications Assistants. The Company will add additional employees and/or contractors as needed to scale operations.

The Company will retain for five years copies of employment records for all executives and employees directly involved in IP CTS operations and make them available to the Commission upon request. The Company will also keep a list of the names of all employees directly involved in TRS operations for a five-year period.

MachineGenius does not have any sponsorship agreements at this time, but will comply with all applicable rules regarding the same, and make copies of any and all sponsorship agreements to the Commission upon request.

MachineGenius will report to the Commission any material changes in organizational structure, equity holdings, company leadership, company control, sponsorship agreements, and/or marketing activities within 30 days of such changes.

**IV. Description of How MachineGenius Will Meet All Non-Waived Mandatory Minimum Standards Applicable to IP CTS.**

MachineGenius understands that it will be required to comply with all of the rules and regulations applicable to IP CTS, regardless of the manner in which the Company provides the service. MachineGenius intends to become an active participant in future proceedings relating to any changing regulatory requirements applicable to the provision of IP CTS. Further, MachineGenius looks forward to working with the Commission and other stakeholders to determine the most effective means to promote the provision of functionally equivalent communications to the Deaf and Hard-of-Hearing Community.

The Commission has indicated that its rules applicable to TRS providers are applicable to IP CTS providers to the same extent that the rules are applicable to IP Relay providers.<sup>12</sup>

*A. Communications Assistants Requirements*

The FCC Rules state that CAs are required to have a typing speed of at least 60 words per minute; have competent typing, grammar, and spelling skills; be trained to meet the needs of those who are deaf and hard of hearing; be familiar with the deaf, hard-of-hearing, and speech-disabled cultures.<sup>13</sup> MachineGenius understands and can exceed the technical requirements of this rule. MachineGenius' service relies on ASR, thus, to the extent that the rules are applicable to CAs, MachineGenius requests these requirements be waived, pursuant to Section 1.3 of the Commission's Rules.<sup>14</sup> As demonstrated below, MachineGenius' ASR will meet or exceed the standards and requirements applicable to CAs.

MachineGenius' transcription occurs in real-time at a rate greater than the standard of 60 words per minute, which CAs are required to meet or exceed under the rules; the actual rate of transcription exceeds the empirical average rate of rapid speech of 150 words per minute. In addition, because of the nature of the ASR, it can be offered in different languages. For additional information pertaining to use of ASR for IP CTS, see *Exhibit A*.

CAs are also required to stay with a call for a minimum of ten minutes, and to transmit conversations in real-time.<sup>15</sup> As discussed above, MachineGenius' ASR generates and transmits

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<sup>12</sup> See *IP CTS Ruling*, at ¶¶ 29-30. In addition, the Commission also recognizes the similarity between IP CTS and traditional captioned telephone service ("Traditional CTS") and has stated that minimum standards waived with respect to Traditional CTS will also be waived with respect to IP CTS. *Id.* In either case, the Commission has encouraged TRS providers to offer waived features to the extent it is technically feasible to do so. *Id.* at ¶ 31.

<sup>13</sup> 47 C.F.R. § 64.604(a)(1)(i)-(iii).

<sup>14</sup> 47 C.F.R. § 1.3. The Company's Request for Waiver is being filed concurrently with this Application.

<sup>15</sup> 47 C.F.R. § 64.604(a)(1)(v) and § 64.604(a)(1)(vii).

captions in real-time, and, because CAs are not utilized, the captioning continues throughout the duration of the call, regardless of length. Finally, because of the nature of ASR, § 64.604(a)(2)(1)-(ii) of the Commission's Rules requiring the use of best efforts to accommodate a caller's gender preference for CAs is inapplicable.<sup>16</sup>

With regard to confidentiality and accuracy requirements for IP CTS, the Commission's Rules state that CAs are prohibited from disclosing the content of relayed conversations and, with limited exceptions, from keeping records of the content of calls, even where inconsistent with local and state law.<sup>17</sup> Further, CAs are prohibited from intentionally altering relayed conversations, and must relay all conversations verbatim, except in instances where illegal under other laws or requested otherwise.<sup>18</sup> ASR automatically transcribes calls verbatim, regardless of content, to the extent technically possible, and relays all captions verbatim. As such, intentionally altering a relayed conversation is impossible. No part of the MachineGenius IP CTS service will keep any records of the content of any conversation beyond the duration of the call; as such, disclosure of content of any relayed conversation is impossible. [CONFIDENTIAL]

[END CONFIDENTIAL]

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<sup>16</sup> 47 C.F.R. § 64.404(a)(1).

<sup>17</sup> 47 C.F.R. § 64.406(a)(2)(i).

<sup>18</sup> 47 C.F.R. § 64.406(a)(2)(ii).

MachineGenius will not refuse calls, or limit the length of calls, except in instances where credit authorization has been denied, or where the Commission has deemed that calls not be accepted in accordance with § 64.604(a)(3)(i)-(iii).<sup>19</sup> In that connection, the pay per call requirement is currently waived for IP CTS providers. Other types of calls, including text-to-voice, voice-to-text, VCO, two-line VCO, VCO to TTY, VCO to VOC, HCO, two-line HCO, HCO to TTY and HCO to HCO are either waived or are inapplicable to IP CTS. Call release and speed dialing are also inapplicable to IP CTS.

The Company's service is capable of handling all common call types normally provided by telecommunications carriers. The service does not assess long distance calling charges.

*B. Technical Standards*

MachineGenius will comply with all mandated technical standards, but requests waiver of the applicability of such rules to CAs, pursuant to Section 1.3 of the Commission's Rules.<sup>20</sup>

Under the Rules governing the use of voice mail with TRS services, CAs are required to alert users of recorded messages and interactive voice response ("IVR") systems via a "hot key" on the CAs terminal, and that providers offer answering machine and voice mail retrieval to its users.<sup>21</sup> However, the "hot key" provision is inapplicable to MachineGenius IP CTS provided as transcription occurs automatically in real-time without the use of CAs. Instead, the MachineGenius application automatically provides a visual indicator of a waiting voicemail in a manner consistent with the design of voice mail interfaces typical of mobile telephony applications. The Company's ASR will caption voice mail messages in the same manner as live

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<sup>19</sup> 47 C.F.R. § 64.406(a)(3)(i)-(iii).

<sup>20</sup> 47 C.F.R. § 1.3.

<sup>21</sup> 47 C.F.R. § 64.604(a)(3)(vii)-(viii).

calls handled by the MachineGenius service. IVRs are handled exactly like ordinary calls by the MachineGenius ASR service, *i.e.* all menu options are captioned.

MachineGenius will comply with the Commission's Rules mandating that TRS providers ensure that there is adequate staffing and facilities to provide its users for "efficient access under projected call volumes" such that the likelihood of a user receiving a busy signal as a result of CA unavailability is equivalent to what a voice caller would receive from the PSTN.<sup>22</sup> TRS providers are required to meet a standard of 85 percent of all calls being answered within 10 seconds by any method that results in actual completion of the call, and not placed in queue or on hold, measured on a daily basis and including any abandoned calls in the calculation.<sup>23</sup> MachineGenius IP CTS service meets or exceeds the provisions herein, in that the service will provide callers with efficient access under projected calling volumes, and that the probability of a busy response will be functionally equivalent to what a voice caller would experience in attempting to reach a party through the PSTN. Because MachineGenius does not utilize CAs, but rather provides its services via ASR, the Company will answer all calls within 1 second by a method which results in the caller's call immediately being placed, and the service will have adequate network facilities such that under projected calling volume the probability of a busy response shall be functionally equivalent to what a voice caller would experience in attempting to reach a party through the PSTN. MachineGenius acknowledges that:

- a. A call is considered delivered when MachineGenius' servers receive a SIP INVITE from either an Olelo client or from the PSTN via SIP Trunk.
- b. Abandoned calls shall be included in speed-of-answer calculations.

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<sup>22</sup> 47 C.F.R. § 64.604(b)(2)(i).

<sup>23</sup> 47 C.F.R. § 64.604(b)(2)(ii).

- c. Compliance with availability and speed-of-answer rules will be measured on a daily basis.
- d. The system shall be designed to a P.01 standard.
- e. Call attempt and blocked call rates will be provided upon request.<sup>24</sup>

The Company's IP CTS service will be available 24 hours a day, seven days a week, with redundant features, including uninterruptible power for emergency use.<sup>25</sup> Finally, to the extent applicable to IP CTS providers, the MachineGenius IP CTS service will comply with Commission Rules requiring TRS providers pass through, to the called party, the 10-digit number of the calling party.<sup>26</sup>

*C. Emergency Calling*

All emergency calls will be supported by MachineGenius' IP CTS and ASR.

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[END CONFIDENTIAL] MachineGenius will prioritize incoming emergency calls over non-emergency calls when applicable.<sup>27</sup>

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<sup>24</sup> *Id.*

<sup>25</sup> *See* § 64.604(b)(4). Although IP CTS providers are not required to meet this standard as other TRS providers are, MachineGenius intends to meet these requirements. The service will have redundancy features functionally equivalent to the equipment in normal central offices, including uninterruptible power for emergency use.

<sup>26</sup> *See* 47 C.F.R. § 64.604(b)(5)-(6).

<sup>27</sup> *See* 47 C.F.R. § 64.605(a)(2)(ii).



MachineGenius will ensure that information obtained as a result of this section is limited to that needed to facilitate 911 services, is made available only to emergency call handlers and emergency response or law enforcement personnel, and is used for the sole purpose of ascertaining a user's location in an emergency situation or for other emergency or law enforcement purposes.<sup>28</sup> As discussed above, MachineGenius' service will be available as an application on mobile devices initially, and the Company will maintain a Registered Location for each user. However, given the nature of the service, the Company will also leverage location information available on the mobile device in order to ascertain the user's location.

*D. Operational Requirements*

MachineGenius will maintain a log of all consumer complaints will retain the log until the next application for certification is granted. The log will include, at a minimum, the date the complaint was filed, the nature of the complaint, the date of resolution, and an explanation of the resolution. MachineGenius will submit summaries of logs indicating the number of complaints received for the 12-month period ending May 31 to the Commission by July 1 of each year.<sup>29</sup>

In accordance with FCC Rule Section 64.604(c)(2), MachineGenius has established a contact for TRS consumer information and to respond to any complaints about the provider:

Erik Strand  
MachineGenius Office of Consumer Inquiries  
52 Dean Rd  
Holliston, MA 01746  
Telephone: (508) 213-3022  
Facsimile: (508) 213-3083  
E-Mail: [feedback@machinegenius.com](mailto:feedback@machinegenius.com)

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<sup>28</sup> 47 C.F.R. § 64.605(a)(2)(vi).

<sup>29</sup> 47 C.F.R. § 64.604(c)(1).

Commission correspondence to MachineGenius should be addressed to:

Katherine Barker Marshall  
Potomac Law Group, PLLC  
1300 Pennsylvania Avenue, NW, Suite 700  
Washington, DC 20004  
Telephone: (202) 792-6433  
Facsimile: (202) 318-7707  
E-Mail: kmarshall@potomacclaw.com

TRS providers are required to undertake outreach and education efforts to inform the public about TRS, including to members of the Deaf and Hard-of-Hearing Communities as well as the general public.<sup>30</sup> Because MachineGenius' service is designed to serve the Deaf and Hard-of-Hearing communities exclusively, the Company's success in the marketplace is directly related to its outreach efforts.

MachineGenius plans to actively engage in outreach activities with the Deaf and Hard-of-Hearing Communities, including a strong presence at national, regional, and local events. MachineGenius intends to provide demonstrations and training sessions at these events, and seek feedback from users on the service, as well as suggestions for future features to be provided with the service. As these new features are developed, users will have the opportunity to participate in beta testing and provide feedback on those features. In addition, MachineGenius intends to become active within the Deaf and Hard-of-Hearing Communities, including membership in leading advocacy organizations.

The Commission has determined IP CTS is interstate in nature, and therefore compensable by the federal TRS Fund. MachineGenius seeks to be compensated for minutes of use of its IP CTS by the federal TRS Fund exclusively. Users will pay rates no greater than the rates paid for

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<sup>30</sup> 47 C.F.R. § 64.604(c)(3).

functionally equivalent voice communication services imposed by their underlying carrier or service provider, with respect to such factors as the duration of the call, the time of day, and the distance from the point of origination to the point of termination. Specifically, users of the service will pay only for Internet service, and not any additional fees associated with duration of call, distance of call, or time of day.<sup>31</sup> Finally, MachineGenius does not assess any additional charges for interexchange access, nor does it require that a user utilize a particular interexchange carrier in order to access MachineGenius' IP CTS.<sup>32</sup>

## V. Compliance

### A. TRS Administration

MachineGenius understands that as an IP CTS provider, it is mandated to provide the TRS Fund Administrator with true and accurate information required to calculate the TRS Fund's annual revenue requirements, and to comply with all TRS Fund rules, including, but not limited to those rules designed to ensure that TRS providers calculate monthly minutes of use accurately.<sup>33</sup> MachineGenius agrees to comply with any and all applicable rules associated with its IP CTS offering.

MachineGenius will certify that the minutes submitted for compensation were handled in compliance with Section 225 of the Communications Act of 1934, as amended ("the Act")<sup>34</sup>, and the Commission's rules and orders, and are not the result of impermissible financial incentives or

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<sup>31</sup> 47 C.F.R. § 64.604(c)(4).

<sup>32</sup> See 47 C.F.R. § 64.604(b)(3).

<sup>33</sup> 47 C.F.R. § 64.604(c)(5)(iii).

<sup>34</sup> 47 U.S.C. § 225.

payments to generate calls.<sup>35</sup> Upon submitting cost and demand data to the TRS Fund, the Company will certify under penalty of perjury that such information is true and correct.<sup>36</sup>

MachineGenius acknowledges that as a certified TRS provider, it is required to notify the Commission of substantive changes in its programs, services, and features within 60 days of the change occurs, and that the Company will remain in compliance with federal minimum standards after any changes to the Company's programs are made.<sup>37</sup>

MachineGenius acknowledges that all parties providing services or contributions or receiving payments from the federal TRS Fund are subject to the enforcement provisions specified in the Communications Act, the Americans with Disabilities Act, and the Commission's rules.<sup>38</sup>

MachineGenius will notify the administrator of its intent to participate in the TRS Fund thirty (30) days prior to submitting reports of IP CTS interstate minutes of use in order to receive payment settlements for interstate TRS, and failure to file may exclude MachineGenius from eligibility for the year.<sup>39</sup> Additionally, MachineGenius will file an annual report with the Commission, providing evidence that they are in compliance with Section 64.404 of the Commission's rules.<sup>40</sup> The Company will also file an annual report outlining its efforts to meet

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<sup>35</sup> 47 C.F.R. § 64.604(c)(5)(iii)(I).

<sup>36</sup> *Id.* Under § 64.604(c)(14) the following types of calls are compensable from the TRS fund:

- i. VCO-to-VCO calls between multiple captioned telephone relay service users, multiple IP CTS users, or captioned telephone relay service users and IP CTS users;
- ii. Calls between captioned telephone relay service or IP CTS users and TTY service users; and
- iii. Calls between captioned telephone relay service or IP CTS users and VRS users.

<sup>37</sup> 47 C.F.R. § 64.606(f)(2).

<sup>38</sup> 47 C.F.R. § 64.604(c)(5)(iii)(K).

<sup>39</sup> 47 C.F.R. § 64.604(c)(5)(iii)(G).

<sup>40</sup> 47 C.F.R. § 64.605(g).

waived mandatory minimum standards for their service offerings, to the extent the minimum standards are applicable to MachineGenius' IP CTS offerings.<sup>41</sup>

The Commission has stated that the mandatory minimum standards inapplicable to, or waived with respect to, IP Relay and Traditional CTS are also inapplicable to, or will be waived with respect to, IP CTS.<sup>42</sup> MachineGenius acknowledges that its IP CTS offering will not be required, at this time, to meet the following requirements:

- CA gender preference (Section 64.604(a)(1)(vi)).
- Handling calls in ASCII and Baudot formats (Section 64.604(b)(1)).
- Call release.
- Speech-to-speech relay service (and associated CA skill requirements).
- Hearing carry-over ("HCO") and VCO services (and associated CA skill requirements).
- Outbound 711 calling.
- Emergency call handling (Section 64.604(a)(4)).
- Equal access to interexchange carriers (Section 64.604(b)(3)).<sup>43</sup>
- Pay-per-call (900) service (Section 64.604(a)(3)(iv)).
- Three-way calling.
- Speed dialing.
- CA ASL competency, oral-to-type testing, and refusal of sequential calls.<sup>44</sup>

MachineGenius has developed a Compliance Plan to ensure compliance with the Commission's Rules governing IP CTS and its policies applicable to marketing and outreach activities. The main element of the plan requires MachineGenius to appoint a Compliance Officer prior to undertaking relay operations. The Company's Compliance Officer will be responsible for updating the plan, as needed, and overseeing the training of Company's personnel to ensure

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<sup>41</sup> *Id.*

<sup>42</sup> *IP CTS Ruling*, at ¶¶ 29-30.

<sup>43</sup> This requirement is permanently waived as long as the provider offers free long distance to its users. *See IP CTS Ruling*, at n. 101. As discussed previously, MachineGenius does not charge its users for interexchange services.

<sup>44</sup> *IP CTS Ruling*, at ¶ 30, n. 105. MachineGenius is seeking a waiver for rules that specifically relate to the use of CAs, as discussed above, as the MachineGenius IP CTS service relies on ASR, which functionally meets or exceeds the matrices applicable to CAs.

compliance at all levels. The Compliance Officer will review all promotional and outreach activities to assure that they are in accordance with Commission requirements. In addition, the Compliance Officer will receive and review regular reports designed to identify anomalous calling patterns that may indicate abuse of the Company's service. MachineGenius has included a copy of its initial Compliance Plan as *Exhibit B*. Please note, *Exhibit B* contains confidential proprietary information, and Applicant requests it be filed under seal, in accordance with Section 0.459 of the Commission's Rules.<sup>45</sup>

MachineGenius will not take any reprisal in the form of a personnel action against any current or former employee or contractor who discloses to a designated manager of the provider, the Commission, the TRS Fund administrator or to any Federal or state law enforcement entity, any information that the reporting person reasonably believes evidences known or suspected violations of the Communications Act or TRS regulations, or any other activity that the reporting person reasonably believes constitutes waste, fraud, or abuse, or that otherwise could result in the improper billing of minutes of use to the TRS Fund, and discloses that information to a designated manager of the provider, the Commission, the TRS Fund administrator or to any Federal or state law enforcement entity.<sup>46</sup> MachineGenius will provide an accurate and complete description of these TRS whistleblower protections, including the right to notify the FCC's Office of Inspector General or its Enforcement Bureau, to all employees and contractors, in writing. MachineGenius will include an accurate and complete description of these TRS whistleblower protections in online or hard copy internal business policies.<sup>47</sup>

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<sup>45</sup> 47 C.F.R. § 0.459.

<sup>46</sup> 47 C.F.R. § 64.604(c)(5)(iii)(M).

<sup>47</sup> *Id.*

MachineGenius upon submitting minutes to the Fund for compensation will certify that the minutes were handled in compliance with Section 225 of the Act, and the Commission's rules and orders, and are not the result of impermissible financial incentives or payments to generate calls.<sup>48</sup> MachineGenius, upon submitting cost and demand data to the TRS Fund, will certify under penalty of perjury that such information is true and correct.<sup>49</sup>

MachineGenius recognizes that user data may not be used for any purpose other than to connect the TRS user with the called parties desired by that TRS user, and any associated billing for the service.<sup>50</sup> Such information will not be sold, distributed, shared or revealed in any other way by the relay center or its employees, unless compelled to do so by lawful order.<sup>51</sup>

MachineGenius does not have any sponsorship agreements at this time.

MachineGenius will notify the TRS Administrator of its intent to participate in the TRS Fund by notice delivered at least 30 days prior to submitting reports of IP CTS minutes of use. MachineGenius will advise the Administrator of its updated certification status, upon certification from the Commission.

#### *B. Users*

MachineGenius acknowledges that IP CTS providers eligible for receiving payments from the TRS fund must be certified by the Commission pursuant to Section 64.606 of the Commission's Rules,<sup>52</sup> and that users of an IP CTS provider's services must either be certified

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<sup>48</sup> 47 C.F.R. § 64.604(c)(5)(iii)(I).

<sup>49</sup> *Id.*

<sup>50</sup> 47 C.F.R. § 64.604(c)(7).

<sup>51</sup> *Id.*

<sup>52</sup> 47 C.F.R. § 64.606.

with a hearing loss by a hearing health professional, be authorized to participate in a state-run TRS fund, or pay a minimum of \$75 for any equipment or service.<sup>53</sup>

MachineGenius understands and acknowledges that it is strictly prohibited to provide any inducement, directly or indirectly, financial, or otherwise to any user to register or utilize the Company's IP CTS service.<sup>54</sup> Further, MachineGenius will not offer or provide to a hearing health professional any direct or indirect incentives, financial or otherwise, that are tied to a consumer's decision to register for or use IP CTS.<sup>55</sup> MachineGenius acknowledges that where it offers or provides IP CTS equipment, directly or indirectly, to a hearing health professional, and such professional makes or has the opportunity to make a profit on the sale of the equipment to consumers, MachineGenius will be deemed to be offering or providing a form of incentive tied to a consumer's decision to register for or use IP CTS.<sup>56</sup> Further, MachineGenius will not engage in joint marketing arrangements between IP CTS providers and hearing health professionals.<sup>57</sup>

MachineGenius will not seek compensation from the TRS Fund for any user that has not registered with MachineGenius in accordance with Commission Rules. Prior to provision of service to a user, the Company will require the user to register and provide a certification of hearing loss, in the manner prescribed in the Commission's Rules.<sup>58</sup> This process is also outlined in MachineGenius' Compliance Plan, attached as *Exhibit B*.

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<sup>53</sup> 47 C.F.R. § 64.604(c)(9)(v)-(ix).

<sup>54</sup> 47 C.F.R. § 64.604(c)(8)(i).

<sup>55</sup> 47 C.F.R. § 64.604(c)(8)(ii).

<sup>56</sup> *Id.*

<sup>57</sup> 47 C.F.R. § 64.604(c)(8)(iii). The term "hearing health professional" is defined in 47 C.F.R. § 64.604(c)(8)(iv).

<sup>58</sup> *See* 47 C.F.R. § 64.604(c)(9)(i)-(x).



MachineGenius will ensure that each IP CTS telephone that it distributes, directly or indirectly, shall include a button, icon, or other comparable feature that is easily operable and requires only one step for the consumer to turn on captioning, to the extent this requirement is applicable to an application placed on the user's existing smartphone or other mobile device.<sup>59</sup> The Company's application will have this functionality. Further, MachineGenius will ensure that upon logging into the application, the user will see the following language in clearly legible font: "FEDERAL LAW PROHIBITS ANYONE BUT REGISTERED USERS WITH HEARING LOSS FROM USING THIS DEVICE WITH THE CAPTIONS ON."<sup>60</sup>

Finally, the Company will maintain its records of equipment or applications provided for a minimum of five years after the consumer ceases to utilize the service provided by MachineGenius.<sup>61</sup>

### *C. Complaints*

MachineGenius will respond to complaints in a timely manner, in accordance with its internal procedures and with the Commission's Rules.

All complaints, whether referred by the Commission, or lodged directly with the Company, will be reviewed to determine if the source of the complaint is technical or operational in nature, and will be categorized based on type, severity, and scope. Once the nature of the complaint is ascertained, MachineGenius will investigate the cause, including interviewing any employees and managers that may have additional facts related to the issue. Where the resolution to a complaint

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<sup>59</sup> 47 C.F.R. § 64.604(c)(10).

<sup>60</sup> 47 C.F.R. § 64.604(c)(11)(iii). In the event that MachineGenius distributes equipment, other than its application, it will include a label affixed on the equipment with the same language as required by this Rule.

<sup>61</sup> 47 C.F.R. § 64.604(c)(11)(iv).

requires a product change, software updates will be made in accordance with issue severity via hotfix, patch, or application updates. The user will receive a response to any complaint lodged, typically with an initial response within 48 hours, with the response including a summary of findings and closure of the issue once it is resolved. MachineGenius will satisfy and answer complaints forwarded to it by the Commission within the time specified by the Commission.<sup>62</sup> All complaints will be summarized in the Company's complaint log, which will include the action taken to resolve the complaint, and the date the matter was closed.

In order to prevent issues from arising, MachineGenius offers online FAQs and documentation to address common questions from users. In addition, a toll-free number to reach customer service, with the capacity to receive voice calls and TTY calls, will be made available through a contact area on the Company's website. Users may contact customer service to receive help or ask questions about services prior to launching a complaint. All calls and E-Mail will be taken by the Company's professional customer service representatives and they will work with users until all questions have fully been answered and the user is satisfied with their communication.

MachineGenius always welcomes feedback from its users for suggestions to improve its services. In addition, the Company plans to engage a user panel regularly to solicit feedback on existing services and ways to improve services going forward.

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<sup>62</sup> 47 C.F.R. § 64.604(c)(6)(v)(A)(3). MachineGenius will file with the Commission a statement designating an agent or agents whose principal responsibility will be to receive all complaints, inquiries, orders, decisions, and notices and other pronouncements forwarded by the Commission. Such designation will include a name or department designation, business address, telephone number (voice and TTY), facsimile number and, if available, internet e-mail address.

*D. Minimum Standards*

MachineGenius' services will not differ from the non-waived mandatory minimum standards the Commission has established except for those relating to the use of CAs. Concurrently with this Application, MachineGenius has filed for waiver of the rules relating to the use of CAs in connection with its IP CTS service. The Company's IP CTS service utilizes ASR, and will be provided in a manner that meets or exceeds the Commission's minimum standards for service provided through the use of CAs. Should the Commission establish new or modify current minimum standards for IP CTS services, MachineGenius' service will conform those standards, or MachineGenius will seek the requisite waiver from the Commission.

MachineGenius' use of ASR, rather than CAs to provide its IP CTS service does not violate the applicable mandatory minimum standards established by the Commission. The MachineGenius IP CTS service levels exceed the mandatory minimums, without the use of CAs.

**VI. Conclusion**


MachineGenius seeks certification as an IP CTS provider, with the ability to be compensated by the federal TRS Fund. MachineGenius acknowledges that certification granted under this section will remain in effect for five years, and that the Company will need to file for renewal of certification at least 90 days prior to expiration of its certification.<sup>63</sup> As demonstrated in this Application, MachineGenius meets the technical requirements necessary to provide IP CTS service. Accordingly, MachineGenius, Inc. respectfully requests that the Commission certify it as an IP CTS provider expeditiously.

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<sup>63</sup> 47 C.F.R. § 64.606.

Respectfully submitted,

**MACHINEGENIUS, INC.**

By: 

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Dated: October 13, 2017

## **Exhibit A**

### **ASR Information**

**Contains Confidential and Proprietary Information**

**Filed Under Seal, Pursuant to 47 C.F.R. § 0.459**

## **Exhibit B**

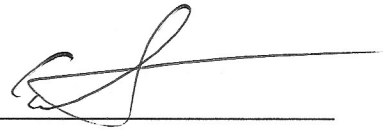
### **Compliance Plan**

**Contains Confidential and Proprietary Information**

**Filed Under Seal, Pursuant to 47 C.F.R. § 0.459**

## VERIFICATION

I swear under penalty of perjury that I am Erik Strand, Chief Executive Officer, an officer of the above-named applicant, MachineGenius, and that I have examined the foregoing submissions, and that all information required under the Commission's rules and orders has been provided and all statements of fact, as well as all documentation contained in this submission, are true, accurate, and complete.

A handwritten signature in black ink, appearing to be 'Erik Strand', written over a horizontal line.

Erik Strand, Chief Executive Officer

Dated: October 13, 2017