# Avaya G650 Gateway, Release 6.2 Voluntary Product Accessibility Template (VPAT)

The Avaya G650 is a complementary gateway for S8500/S8700/10/20-based media servers. It can accommodate a range of analog, digital, ISDN, and IP (over the LAN) phone station configurations, with voice transport options over IP, analog, TDM, or ATM.

The G650 is administered via the Avaya Communication Manager administrative interface, which is described in the Communication Manager Voluntary Product Accessibility Template (VPAT).

#### **Support Levels**

Support Level	Description	
Supports	The Avaya G650 fully meets the letter and intent of the criterion.	
Supports with Exceptions/Minor Exceptions	The Avaya G650 does not fully meet the letter and intent of the criterion, but provides some level of access relative to the criterion.	
Supports through Equivalent Facilitation	The Avaya G650 provides an alternate way to meet the intent of the criterion.	
Supports when combined with Compatible Assistive Technology	The Avaya G650 fully meets the letter and intent of the criterion when used in combination with compatible assistive technology.	
Does Not Support	The Avaya G650 does not meet the letter or intent of the criterion.	
Not Applicable	The criterion does not apply.	
Not Applicable – Fundamental Alteration Exception Applies	A fundamental alteration of the Avaya G650 is required to meet the criterion.	

#### **Compliance Summary**

Criteria	Support Levels
Section 1194.21 Software Applications and Operating Systems	Not Applicable
Section 1194.22 Web-based Intranet and Internet Information and Applications	Not Applicable
Section 1194.23 Telecommunications Products	Supports
Section 1194.24 Video and Multi-media Products	Not Applicable
Section 1194.25 Self-Contained, Closed Products	Not Applicable
Section 1194.26 Desktop and Portable Computers	Not Applicable
Section 1194.31 Functional Performance Criteria	Supports
Section 1194.41 Information, Documentation and Support	Supports

## § 1194.23 Telecommunications Products

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Criteria	Support Levels	Remarks and Explanations	
1194.23(a) Telecommunications products or systems which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a standard non-acoustic connection point for TTYs. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.	Supports	The Avaya G650 Gateway has industry standard RJ-11 analog ports that permit direct connection of standard TTY devices. There is no aspect of the G650 that would disrupt the ability of a microphone-equipped device to support the intermixing of speech and TTY use.	
1194.23(b) Telecommunications products, which include voice communication functionality, shall support all commonly used crossmanufacturer non-proprietary standard TTY signal protocols.	Supports	When communicating with other Avaya systems, the Avaya G650 Gateway encodes analog 45.45 baud Baudot TTY signals (the TTY format most commonly used in the US) and 50 baud Baudot signals (a format commonly used outside of the US in countries such as Australia, Ireland, and the UK) as redundant data packets that, in essence, contain descriptions of the tones rather than the tones themselves. The encoding format for these descriptive packets conforms to RFC-2833, an international standard for the transmission of audio tones on IP networks. The receiving systems use these descriptions to reconstruct the original analog TTY signals. Independent testing has verified that this approach provides reliable transport of TTY signals when G.729 compression is being used on the audio channels, even with packet loss rates up to 10%. (These are network conditions so poor that <i>voice</i> communication is difficult.)  A mechanism commonly used by other vendors is to transport the TTY signals within IP networks as uncompressed G.711 audio packets. In addition to the approach described in the previous paragraph, the G650 also supports an Avaya-only G.711 "pass-through" approach similar to that used by others. Specifically, when used in pass-through mode, the firmware of the G650 detects the audio tones that indicate the type of device being used (FAX, modem, or TTY) and then uses G.711 to encode and transport the signals over the IP network. Note that pass-through mode provides higher quality transmission when endpoints are synchronized to the same clock source. Note also that some text telephony modem protocols such as 300 baud and 1200 baud ASCII, as well as the non-Baudot V.18 protocols commonly used outside the US, are not supported by the approach described in the	

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		previous paragraph, but are supported by the G650 pass-through mechanism.
		Interoperability with non-Avaya equipment is supported when signals are encoded in G.711 voice mode, with all proprietary mechanisms set to OFF on the system administrator's "ip-codec set" form.
1194.23(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.	Supports	The Avaya G650 Gateway's automated attendant feature supports the presentation of TTY menus and announcements. The G650 does not have an inherent voicemail or IVR capability. (Please note that extensive TTY support is provided by the Avaya voicemail and IVR platforms that would be used in conjunction with the G650.)
1194.23(d) Voice mail, messaging, auto- attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.	Supports	The time-out period and behavior of the Avaya G650 Gateway's automated attendant feature is controlled by the associated Avaya Communication Manager server. The G650 does not have an inherent voicemail or IVR capability. (Please note that the Avaya voicemail and IVR platforms that would be used in conjunction with the G650 conform to this requirement).
1194.23(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.	Not applicable	This requirement applies to endpoint devices that are co-located with the user, such as telephones, PC-based soft phones, and TTYs.
1194.23(f) For transmitted voice signals, telecommunications products shall provide a gain adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain shall be provided.	Not applicable	This requirement applies to endpoint devices that are co-located with the user, such as telephones and PC-based softphones.
1194.23(g) If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the volume to the default level after every use.	Not applicable	This requirement applies to endpoint devices that are co-located with the user, such as telephones and PC-based softphones.
1194.23(h) Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.	Not applicable	This requirement applies to endpoint devices that are co-located with the user, such as telephones and PC-based softphones.
1194.23(i) Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.	Not applicable	This requirement applies to endpoint devices that are co-located with the user, such as telephones and PC-based softphones.

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1194.23(j) Products that transmit or	Supports	The manner in which the Avaya G650 Gateway
conduct information or communication,		supports the transmission of Baudot TTY signals
shall pass through cross-manufacturer,		and other text telephony protocols is described in
non-proprietary, industry-standard codes,		the response to 1194.23(b).
translation protocols, formats or other		
information necessary to provide the		Support for other cross-manufacturer, non-
information or communication in a usable		proprietary, industry-standard codes, translation
format. Technologies which use		protocols, formats or other non-voice information
encoding, signal compression, format		is provided by the "pass-through" mechanism
transformation, or similar techniques		described in the response to 1194.23(b).
shall not remove information needed for		
access or shall restore it upon delivery.		
1194.23(k)(1) Products which have	Not applicable	This requirement applies to endpoint devices that
mechanically operated controls or keys		are co-located with the user, such as telephones
shall comply with the following: Controls		and PC-based softphones.
and Keys shall be tactilely discernible		
without activating the controls or keys.		
1194.23(k)(2) Products which have	Not applicable	This requirement applies to endpoint devices that
mechanically operated controls or keys		are co-located with the user, such as telephones
shall comply with the following: Controls		and PC-based softphones.
and Keys shall be operable with one		
hand and shall not require tight grasping,		
pinching, twisting of the wrist. The force		
required to activate controls and keys		
shall be 5 lbs. (22.2N) maximum.		
1194.23(k)(3) Products which have	Not applicable	This requirement applies to endpoint devices that
mechanically operated controls or keys		are co-located with the user, such as telephones
shall comply with the following: If key		and PC-based softphones.
repeat is supported, the delay before		
repeat shall be adjustable to at least 2		
seconds. Key repeat rate shall be		
adjustable to 2 seconds per character.		
1194.23(k)(4) Products which have	Not applicable	This requirement applies to endpoint devices that
mechanically operated controls or keys		are co-located with the user, such as telephones
shall comply with the following: The		and PC-based softphones.
status of all locking or toggle controls or		·
keys shall be visually discernible, and		
discernible either through touch or		
sound.		

### § 1194.31 Functional Performance Criteria

Criteria	Support Levels	Remarks and Explanations
1194.31(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for assistive technology used by people who are blind or visually impaired shall be provided.	Supports	The manner in which the Avaya G650 supports administrators who are blind or visually impaired is documented in the Avaya Communication Manager Voluntary Product Accessibility Template (VPAT).  The G650 does not have a visual interface or function that is accessed by end users.
1194.31(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for assistive technology used by people who are visually impaired shall be provided.	Supports	The manner in which the Avaya G650 supports administrators who are blind or visually impaired is documented in the Avaya Communication Manager Voluntary Product Accessibility Template (VPAT).  The G650 does not have a visual interface or function that is accessed by end users.
1194.31(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for assistive technology used by people who are deaf or hard of hearing shall be provided.	Supports	The Avaya G650 administrative interface does not have an audio component.  The manner in which the G650 automated attendant function supports end users who are deaf or hard of hearing is documented in the response to 1194.23(c).
1194.31(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Supports	The Avaya G650 administrative interface does not have an audio component.  The manner in which the G650 automated attendant function supports end users who are deaf or hard of hearing is documented in the response to 1194.23(c).
1194.31(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for assistive technology used by people with disabilities shall be provided.	Supports	No mode of operation or information retrieval in the Avaya G650 Gateway requires user speech.
1194.31(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	Supports	No mode of operation or information retrieval in the Avaya G650 Gateway requires fine motor control or simultaneous actions. Operability with limited reach and strength is dependent on the user's terminal.

### § 1194.41 Information, Documentation and Support

Criteria	Support Levels	Remarks and Explanations
1194.41(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.	Supports	Will provide upon request.
1194.41(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supports	Will provide upon request.
1194.41(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports	Avaya's point-of-contact for accessibility-related issues:  Dr. Paul R. Michaelis Voice: 303-538-4101 TTY: 303-538-3740  prmichaelis-at-avaya.com

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