

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

In the Matter of)
)
Telecommunications Relay Services And)
Speech-to-Speech Services for Individuals)
with Hearing and Speech Disabilities) CG Docket No. 03-123
)
E911 Requirements for IP Enabled Services) WC Docket No. 05-196
)
To: The Commission

***REQUEST FOR CLARIFICATION OF REQUIREMENTS
FOR POPULATING THE iTRS DATABASE***

Purple Communications, Inc. (“Petitioner”) hereby request the Commission to clarify its requirements concerning the provision of routing information to the iTRS database maintained by NeuStar, Inc. Specifically, Petitioner request the Commission to confirm the allowance of the entry of multiple URIs in the iTRS database per local 10 digit TRS number, where URIs may contain either provider server address or direct-device IP address. As shown herein, supporting multiple URIs per local number and server routing will enable providers and consumers the much needed technical flexibility to take advantage of newer technology, such as Session Initiated Protocol (“SIP”), while maintaining interoperability with older devices and VRS platforms and improving the overall customer experience. It will reduce complexity in configuring customer premise (i.e., at home, office or other public locations) routing configurations, which is one of the larger problems customers face in accessing VRS. It will allow providers to use the most efficient technology for updating the NeuStar

iTRS database. It will facilitate call routing and network security. And it will facilitate the provision of enhanced services and additional devices to consumers.

According to information NeuStar has furnished to Petitioner, the iTRS database is currently capable of supporting multiple URI addresses per local phone number; yet, providers are not using this functionality in light of advice from NeuStar that there was no common understanding of how providers would interpret multiple URIs and the fact that providers were not prepared to handle multiple URIs. NeuStar and several providers have subsequently discussed a specific proposal on how to interpret multiple URIs which could be the basis of an agreed upon common method to do so. The ability to use multiple URIs will benefit consumers because it will allow providers to utilize different signaling protocols (e.g., SIP or H.323), while maintaining interoperability of devices, and will allow for a greater number of video phones to be used for the provision of VRS.

We can envision no policy issue in the use of multiple URIs. Review of the rules indicates that it is far from clear that the use of multiple URIs is prohibited. The industry continues to work on resolving technical issues which are impeding full consumer enjoyment of the 10 digit numbering program. The lack of resolution of this particular issue is one important impediment to full implementation of 10 digit numbering and functionally equivalent VRS service.

If a video phone can support both H.323 and SIP (or other protocols), which many devices currently can do, each address for these respective protocols could be loaded into the iTRS database for customers. Other providers and devices would then

be able to route calls to those users based upon whichever technology they support that is most efficient and which provide the best result for the customer. Petitioner therefore request the Commission to clarify that multiple URIs may be entered in the iTRS database for consumers' local 10 digit TRS numbers.

In conjunction, Petitioner seek the opportunity to provision URIs to the NeuStar iTRS database which would include the VRS provider's server's address in place of the direct IP Address of the consumer's CPE that is issued by the provider. The numerous benefits of server routing as an alternative to direct-device routing have been explained by numerous filings in the docket and do not implicate any of the negative concerns mentioned in the Commission's numbering order. *See Telecommunications Relay Services*, 23 FCC Rcd 11591, 11613-14 (2008). The server routing option would route each call to and from that consumer through the default provider server.

Among other problems, the lack of an option for server routing is inconsistent with a transition of the industry to the use of SIP since server routing is required as a core element of SIP-based network architecture. The Commission traditionally is reluctant to shoehorn the communications industry into any one technological solution. NeuStar's iTRS database currently supports the capabilities to implement both multiple URIs and server based routing with no changes required. Not allowing the use of Multiple URIs and server based routing limits the ability of the industry to innovate and to improve functionality for the customer. Petitioner support allowing server routing essentially for the reasons outlined in this filing.

Server routing would facilitative interoperability and functionality of VRS CPE devices. It should be noted that server routing is the standard architecture for all voice telephony services (ie. VoIP, cellular and landline). Additionally, there are many devices that are designed to route only through a home server and thus cannot be used today in by video relay providers and consumers due to the expense required to retrofit those devices and systems. Server routing also enables new services, features and security not available with direct-device routing. For example, consumers could more easily use devices at multiple locations with the same local phone number. In addition, with server routing, security of customers' home networks is enhanced because firewalls can be opened and closed securely since consumers' CPE will be able to recognize the provider's server as a trustworthy location. Indeed, many businesses and government agencies operating behind a firewall require incoming calls to come from predictable IP ranges in order for such calls to be accepted. This can easily and effectively be accomplished by server routing, in which calls from diverse IP addresses are funneled through an already-recognized server IP address.

The security benefits of server routing were also explained in various fillings in this docket by NeuStar during the initial discussions about how to initially implement a 10 digit numbering program.¹ Server routing also allows the consumer to easily support multiple VRS devices at the same location without "router issues" or

¹ See, e.g., NeuStar Reply Comments, 5-6 (August 25, 2008); NeuStar Ex Parte Presentation, at 9 (May 9, 2008).

increased expense. Additional functions become possible such as simultaneous ringing of multiple devices similar to how a multiple home landline phones ring.

The use of server routing should be left to the choice of the provider and consumer. The provider client relationship is essential to market innovation and client satisfaction, especially given that the provider will generally be the source for the consumer's CPE.

Furthermore, server routing will reduce provider operational costs for installation, education and management of customer devices in their efforts to meet the interoperability requirements under the Commission's Interoperability Ruling. These cost reductions should eventually reduce the overall burden on the Interstate TRS Fund.

URIsIn Petitioner' experience server routing results in a more efficient and simpler solution for the customer. Petitioner have received numerous complaints where consumers have multiple CPE devices installed but due to the limitation of direct IP address routing, consumers are frustrated by the limitations being placed upon them through this type of technology. Even at locations where a single video phone is installed, the requirement for specialized router settings, such as DMZ settings, requires a highly skilled installer to be on site to ensure proper setup of the customers' equipment. Server routing can remedy this issue.

Consumer privacy concerns are not a valid basis for prohibiting server routing. As mentioned, all major voice providers employ various forms of server routing. It is analogous to the routing system employed by the public switched telephone network,

where all calls transit the consumer's local exchange. Of course the FCC can adopt rules to protect consumer privacy, although such regulation may not be necessary given the providers' obligations and strong incentives to safeguard the privacy of those using their Internet-based services. This alternative, as opposed to placing unnecessary limitations on the technological flexibility of the relay services, better advances the public interest.

Finally, we believe that server routing should not increase the potential for a competitor to block or degrade calls initiated through a competitor. Even were a provider intending to block or degrade calls placed over the network of a competitor, Petitioner believe the proper remedy is for the Commission to treat such behavior harshly as a direct violation of the Interoperability Order.

In sum, Petitioner request the Commission to confirm the allowance of the entry of multiple URIs in the iTRS database per local 10 digit TRS number, where URIs may contain either provider server address or direct-device IP address. Multiple URIs and server routing will improve customer experiences and make call routing more efficient and help ensure full interoperability of CPE devices now and going forward. They will facilitate increased functionality and security for consumers. And they will not facilitate anticompetitive conduct or degrade consumer privacy. For all of these reasons, Petitioner request the FCC to clarify that multiple URIs may be provisioned to the iTRS database along with the provisioning of server IP addresses.

Respectfully submitted

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