

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

In the Matter of)
)
Internet-Based Telecommunications Relay Service) WC Docket No. 10-191
Numbering)

COMMENTS OF NEUSTAR, INC.

On September 17, 2010, the Commission issued a Notice of Proposed Rulemaking to revise the manner in which toll free numbers are assigned or issued to the users of Internet-based Telecommunications Relay Services (iTRS).¹ The *Toll Free NPRM* also proposes to require toll free numbers remaining in the iTRS Numbering Directory to be linked in the directory to the geographically appropriate ten-digit telephone numbers of iTRS users.² Such linkage will allow an iTRS user's toll free number to follow seamlessly when the user ports a geographically appropriate number. As noted in the NPRM, this approach also "will permit a deaf or hard-of-hearing person to be reached at a toll free number by other deaf or hard-of-hearing users on direct calls that are completely Internet-based, and by hearing users that 'dial around' the user's default provider."³

As the Administrator of the iTRS Numbering Directory for the Commission, NeuStar, Inc. (Neustar) thought that it would be helpful to describe the process by which we recommend

¹Notice of Proposed Rulemaking, *In the Matters of Telecommunications Relay Services and Speech-to-Speech Services for Individuals With Hearing and Speech Disabilities; E911 Requirements for IP-Enabled Service Providers; Internet-Based Telecommunications Relay Service Numbering*, CG Docket No. 03-123, WC Docket No. 05-196, WC Docket No. 10-191, released September 17, 2010. ("*Toll Free NPRM*")

² See, *id.* at ¶¶21 and 22.

³ *Id.* at ¶21.

this mapping of toll free telephone numbers to geographically appropriate telephone numbers in the directory. NeuStar proposes to implement the CNAME Resource Record as defined in RFC1035 and updated by RFC2181. Currently, the only type of record that is permitted to be provisioned in the directory is a Name Authority Pointer (NAPTR) record, which, when evaluated, yields a Universal Resource Indicator (URI) containing either the IP address of a user's device for Video Relay Service (VRS) or the user name and provider domain of the iTRS user for IP Relay. CNAME records are treated differently by IP routing systems. Where a NAPTR yields a specific URI, a CNAME record is designed to allow one record in the directory to refer to another record, which, in turn, generates a new query of the IP routing system.

In the case of the iTRS Numbering Directory's handling of toll free numbers, each toll free number will be provisioned by the default provider with a CNAME resource record. The parameter for the CNAME would be a pointer to the ENUM entry for the associated geographic number. There would be no change in the manner in which the geographic numbers themselves are provisioned in the iTRS Numbering Directory. A call to the toll free number would generate a query in the directory that would return the CNAME that includes the geographically appropriate telephone number. The provider's system would automatically query the directory a second time using the local geographic number. That second query would return the NAPTR record that will provide the URI needed to complete the call. This process is normal for IP lookups, takes milliseconds and does not result in any noticeable post-dial delay.

By mapping toll free numbers to the geographically appropriate ten-digit number in the iTRS database, deaf and hard-of-hearing iTRS users will be able to use those toll free numbers to call other iTRS users directly over the Internet. Linking the toll free numbers with the geographic numbers will also facilitate the porting of service. If a user decides to change iTRS

provider, the geographically appropriate number would be ported in the usual manner and responsibility for that number in the iTRS Numbering Directory will change to the new provider. The toll free number will remain associated with the geographic ten-digit number in the directory after the port to the new provider.

If the new rules are adopted, Neustar looks forward to working with the Commission to implement the necessary changes in the iTRS Numbering Directory.

Respectfully submitted,

A handwritten signature in dark ink, reading "Richard L. Fruchterman, III". The signature is written in a cursive style with a large, stylized "R" and "F".

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December 2, 2010