Top 10 Digit Numbering Issues

Summary of the more critical issues facing the relay industry concerning 10 digit numbering

What is the goal of this document?

This document is meant to identify and summarize the more important issues associated with 10 digit numbering facing consumers, the FCC and the industry in general.

Critical Issues:

1. End user registration difficulties with IP Text Relay
2. Clarity and education of consumers concerning 10 digit regulations
3. Lack of server based routing option
4. Prohibition of Toll Free Numbers for deaf point to point calling
5. Device & service porting
6. Availability of local geographic numbers
7. Non-deaf ASL signers ability to have iTRS numbers
8. Timing of updates to iTRS database

A list of completed registration and outreach activities Purple has conducted with respect to 10 digit numbering is also included at the end of this document.

IP Text Relay Consumer Registration

Problem: Majority of the IP Relay consumer user base has yet to register for a local 10 digit number and 911 services. These consumers are particularly confused by the need to get another phone number to be associated to their device (typically a cell phone/pager) which already has a voice phone numbers issued to it from their wireless carrier (this is not a registered relay iTRS number). Despite extensive and repeated outreach efforts, significantly less than a quarter of all IP Relay calls made on a daily basis are made by consumers who have registered for an IP Relay ten digit number.

Impact:

1. Unless drastic action is taken shortly, tens of thousands of deaf and hard of hearing users will be denied access to relay services
2. Denial of access will jeopardize customers' ability to make emergency calls.

Solution: More time is required to register these IP Text consumers with intensified outreach and communication to be done by the FCC with a clear and consistent message on what is required and why it is needed. No additional time is necessary for VRS registration.

Clarity and Education of Consumers regarding Numbering Regulations

Problem: There is wide spread confusion among both consumers and providers regarding many portions of the current 10 digit regulations and historically there has been little or no clarity provided by the regulatory authorities.

Impacts:

1. Consumers are unclear on the need to register for a local number from a relay provider and how that number is different than their current phone numbers (e.g., Sorenson fake VP numbers, Local phone numbers for their TTY, Side Kick™ pager numbers, etc)
2. Mixed messages from different providers confuse consumers, causing them to either do nothing or register with all providers
3. Providers are unclear if the registration requirement is associated with an individual (and all the services that the consumer utilizes) or associated with a device or associated with the service being provided.
    a. If a consumer selects a provider as his/her Default Provider, is this for all devices and services or only a selected device or service?
    b. Can a consumer have multiple VRS or TRS devices registered to different providers? Do all devices need specific local phone numbers?
4. Are consumers still allowed to use "dial around" providers without risk of having their Default Provider disabling or inhibiting their current services

Solution: The FCC should provide clear and prompt responses to the numerous items in the docket which have been raised by both providers and consumers.

Server Based Routing

Problem: The FCC requirement to load a video relay user's direct end point IP address in the NeuStar iTRS database prohibits providers from implementing numerous advanced service options including SIP based solutions. This specific requirement perpetuates the current non-functionally equivalent situation as it artificially limits the number and type of devices available to consumers, provides a poorer user experience and inhibits many enhanced calling features enjoyed by other telecommunications markets.

Impact:

1. Increases the number of service problems for consumers and prevents them from using video relay in many locations (home, office & public) where hearing consumers are able to easily utilize VoIP solutions based upon server based routing solutions.
2. Forces all video relay end points to operate with older H.323 signaling protocols, thus limiting the number of end point options available to consumers and providers as the general technology market has long ago migrated to more advanced protocols (e.g. SIP) and server based network designs. Typical "off-the-shelf" equipment and software do not support the current FCC requirements.
3. Inhibits the introduction of advanced features which are common in voice market and easily implemented in server based network designs; features such as, point to point video/voicemail; call forwarding; call waiting; 3-way calling.

Solution: Allow providers to populate the NeuStar iTRS database with server based URI addresses for video related services.

Prohibition of Toll Free Numbers in iTRS database

Problem: This requirement eliminates the ability for video relay consumers to receive point to point video calls via Toll Free numbers. It inhibits deaf consumers from operating a business and creates additional communication barriers. Toll free numbers are explicitly for inbound calls and not used for outbound calls or 911 services.

Impact:

1. Video users can not receive point to point calls using toll free number.
2. Inhibits business opportunities for deaf persons who rely on video phones as they can only market a toll free number to hearing customers and must market to deaf customers with a different number
3. Video consumers are restricted from obtaining toll free numbers from a single provider (their Default Provider) and not able to choose a different provider for this enhanced services.

Solution: Allow toll free numbers that are associated with video phone users to be loaded into the iTRS database. Toll free numbers should be directed to the local phone number that is loaded in the iTRS database and associated with their video phone of choice, similar to how "call forwarding" works on voice telephone network. Additionally, there is no reason why the toll free number provider should be restricted to the same provider who provided their local phone number. Customers should have the right to choose a toll free number provider from any certified relay provider.

Device & Service Porting

Problem: The requirement that all video equipment distributed by VRS providers be portable to alternate providers is not technically possible due to the proprietary requirements placed upon the equipment that is used in the market today. There is no standard interface that all video equipment currently supports to ensure that video phone functions will operate correctly after a consumer has ported their device and service to a new provider.

Impact:

1. Consumers risk having their video phones effectively disabled once switching to a new provider and due to limitations on appropriate equipment consumers are effectively blocked from switching to an alternate provider.
2. Providers are hesitant to invest in appropriate equipment for consumers in the current environment.
3. The competitive environment is skewed to favor the dominant VRS provider.

Solution: Ideally require the existing stock of videophones as of December 31, 2008 to port while maintaining all features of the device. A much lesser effective alternative is to eliminate the device porting requirement, while maintaining the ability to port phone numbers between providers.

Inability to obtain local numbers in majority of Local Rate Centers

Problem: Wholesale local phone number providers are unable to obtain and provide local numbers in a majority of the rate centers across the country. This forces relay consumers and providers to use local numbers from other rate centers, similar to how VoIP providers operate today.

Impact:

1. Could block video phone and IP text users from using the relay systems and iTRS database all together
2. Eliminates consumer choice of their local phone number

Solution: Consumer should have the ability to select a local number from the available pool of numbers offered by their provider of choice, regardless of their current physical service location. Providers must provide appropriate 911 services to the consumer's physical service location regardless of the local phone numbers area code.

Blocking of Non-Deaf ASL Signers in the iTRS Database

Problem: Current FCC requirements prevent hearing persons from obtaining and listing a local video phone number in the iTRS database. This prevents point to point video calls between hearing and deaf consumers.

Impact:

1. Hearing consumers who know ASL are forced to utilize VRS to communicate with friends and family which:
    a. Increases the costs of the overall system
    b. Creates unnecessary communications hurdles
    c. Promotes the segregation of hearing and deaf populations

Solution: Allow hearing persons who can demonstrate a proficiency in ASL to obtain and register a local phone number in the iTRS database for their video phone.

Timing of Updates to the iTRS Database

Problem: Currently there is no specific requirement regarding the frequency or timing for which a provider must update the iTRS database of any change to a consumer's 10 digit number or URI address.

Impact:

1. When a provider does not load or update a consumer's number or address in the iTRS database timely that user will not be able to receive calls during the period that their number or address is either not loaded or inaccurate, causing significant confusion and frustration for consumers as well as providers who are receiving complaints.
2. Consumer trust and understanding of the 10 digit numbering system is greatly undermined each time a call does not go through. Consumers do not believe they can rely on this system to place or receive their calls.

Solution: Require that iTRS updates be affected within 30 minutes of a change in the consumer's 10 digit number and within 1 minute of a change of the consumer's URI.

Completed Registration and Outreach Activities

Despite the numerous hurdles in this effort to implement the new 10 Digit number plan, much progress has been made. Below is a list of many of the activities that Purple has implemented to date in this effort, with varying levels of success.

Education Efforts

- FCC Mandate and 10-digit number explanation on all websites with link to registration page
- "Quick Link" to registration page from all websites
- Weekly email campaigns throughout 2nd quarter 2009
- "Countdown Clock" on websites to alert customers of deadline. (Will be reinstated 45 days prior to next deadline
- V-logs
- Postal mail campaigns
- Pre-call messaging tied to individual caller's status, with specific instructions as to what they need to do to complete registration
- AIM broadcast messages, updated as deadline moved and approaches
- 24-hour "Live Chat" help available on both sites to help customers understand and complete registration
- Onsite education and registration at
    - All tradeshows
    - Local Numbering Workshops
    - Events at schools and universities
- VRS installations include education on registering for Text as well as VRS

Registrations Tools and Efforts

- Simplified, one-page "Fast Track Registration" format
- 24-hour live chat specialist will complete registration
- Outbound AIM 1:1 chat sessions to anonymous AIM users. First phase completed in June. Phase II begins September 21st
- Allow customers to enter "Universal TRS Number" to facilitate single 10-digit registration for text (an alternate 10-digit number obtained from another provider)
- Reverse look up using Neustar for all AIM names to verify and store registration information
- Offered call to registration desk upon completion of customer's relay call
- AIM bot registration offered at end of call, customer registers via AIM through series of simple questions