



# Overview of SIP Forum Video Relay Service (VRS) Initiative

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# VRS Overview

- ❖ Relay Services enable persons with communication related disabilities to communicate with other persons using other communication modalities.
- ❖ Other forms of relay services include:
  - Deafblind relay services
  - Text relay services (e.g. TTY in North America) and IP relay service)
  - Captioned telephony relay services and
  - Speech-to-speech relay services

# VRS Industry Challenges

- ❖ VRS providers in the US and EU have developed their current solutions based on H.323 and have encountered multiple interoperability issues.
- ❖ As SIP is becoming the dominant standard for video and audio communications, a new infrastructure for the VRS industry is required based on this protocol.
- ❖ Need to be able to use mainstream off-the-shelf terminals registered with mainstream communication service providers for relay service access as well as for peer-to-peer calls.
- ❖ An additional set of requirements needs to be fulfilled for emergency service access.

# Expected Output

- ❖ The VRS project is a multi-stakeholder, consensus-driven initiative that will produce one or more SIP Forum Recommendations that define a common set of interoperability standards for relay services using SIP communication components. These recommendations will specify which standards must be supported, provide guidance in the areas where the standards leave multiple options and supplement functional gaps in existing protocols.

# Primary Work Objectives

- ❖ Develop a comprehensive requirements document that sets forth the common network elements for the relay service.
- ❖ Specify the protocols and protocols extensions that must be supported by each element in the relay service system. Specify the exact RFC or other existing standards to be used.
- ❖ Specify Mandatory to Implement video, audio and text codec's [MUST per RFC 2119], recommended optional codec's and which entities must support them.
- ❖ Integration with systems for calling by number from national and international number plans. E.g. ENUM [RFC 6116], including standards for URI registration.
- ❖ Interoperability with systems using other call control protocols.
- ❖ Emergency service calling for registered and unregistered User Agents (endpoints), including registration of device address with service provider
- ❖ Recommend minimum broadband connectivity requirements.

# Additional Areas of Investigation, con't

- ❖ Specify Mandatory to Implement [MTI] video, audio and text codec's [MUST per RFC 2119] , recommended optional codec's to support for Video/Audio/Text mail and specify which entities must support them.
- ❖ The ability of a relay service user to freely connect to any of several Relay Service providers.
- ❖ Client User Agent portability or the ability to move a Client User Agent with its assigned phone number that has been managed by one operator or relay service provider to a new operator or relay service provider
- ❖ Import and export of user phonebooks and speed dial lists
- ❖ Session quality reporting and measurement.
- ❖ Initial Client User Agent Configuration.
- ❖ Integration and support of emerging standards for IP based emergency services, e.g. specified by the ECRIT group in IETF.

# Additional References

- ❖ [1] [http://en.wikipedia.org/wiki/Video\\_relay\\_service](http://en.wikipedia.org/wiki/Video_relay_service)
- ❖ [2] <http://tap.gallaudet.edu/Conferences/NAD2012/>
- ❖ [3] [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-11-184A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-184A1.pdf)
- ❖ [4] REACH112 Platform specification. D3.2 from <http://www.reach112.eu/view/en/Downloads/deliverables.html>
- ❖ [5] ETSI ES 202 975 Harmonized Relay Services.
- ❖ [http://www.etsi.org/deliver/etsi\\_es/202900\\_202999/202975/01.02.01\\_60/es\\_202975v010201p.pdf](http://www.etsi.org/deliver/etsi_es/202900_202999/202975/01.02.01_60/es_202975v010201p.pdf)

In the United States the VRS is authorized and governed by several laws including the 1996 Communications Act, as amended, The Americans for Disabilities Act [ADA] and the Twenty-First Century Communications and Video Accessibility Act [CVAA]. Users' ten-digit numbers are managed through the iTRS Numbering Directory. Emergency service access is defined by NENA in NG9-1-1 standards.

In Europe relay services and equivalent functionality are required by the EU Directives for Electronic Communication, implemented in each member state by national law. [http://europa.eu/legislation\\_summaries/information\\_society/legislative\\_framework/l24216a\\_en.htm](http://europa.eu/legislation_summaries/information_society/legislative_framework/l24216a_en.htm)

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