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Federal Communications Commission  
Office of the Secretary

## California FCC Certification Renewal and Supporting Documents

### Introduction

The State of California, with the assistance of Sprint Relay, has prepared this narrative and attached appendices to comply with the FCC TRS Certification Renewal Application, particularly in response to the **FCC Public Notice DA 07-2761, CG Docket No. 03-123** released on June 22, 2007. Included in the Public Notice are the minimum mandatory FCC TRS requirements under 47 C.F.R. **§64.604 and §64.605**. A copy of this Public Notice and these mandatory requirements is attached as Appendix A.

The FCC has requested that each FCC TRS Certification Renewal application responds to the minimum mandatory FCC TRS requirements for providing telecommunication relay services and that each state includes procedures and remedies for enforcing any requirements imposed by state programs. Additionally, the FCC requested that several exhibits such as outreach presentations, promotional items, consumer training materials, and consumer complaint logs be included with the information provided.

The Appendices included with this TRS Certification Renewal Application are as follows:

- A. Copy of the Public Notice DA 07-2761
- B. TRS, CapTel, STS, IP, VRS Training Outlines
- C. TRS, IP, VRS and CapTel Pledge of Confidentiality
- D. E911 Call Procedure
- E. Sprint Carrier of Choice Letter of Invitation
- F. Sprint Outage Prevention Program
- G. Sprint Disaster Recovery Plan
- H. Sprint TRS Standard Features Matrix
- I. Sprint Policy on 10 and 15 minute Rule
- J. FCC TRS Mandatory Minimum Standards & Compliance Matrix
- K. FCC CapTel Mandatory Minimum Standards & Compliance Matrix
- L. Sprint's Report to the FCC on VRS and IP Waivers
- M. Sprint Relay Fact Sheet
- N. Sprint's TSP Press Release

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## **Operational Standards**

### **A.1 Communication Assistants (CAs)**

***§64.604 (a)(1) (i) TRS Providers are responsible for requiring that all CAs be sufficiently trained to effectively meet the specialized communication needs of individuals with hearing and speech disabilities***

#### **CA Employment Standards**

Sprint has established a successful procedure to attract qualified applicants for TRS CA positions. The first step in the CA's hiring practice is a validated test that screens for typing, language skills, and other skills related to the CA position. When an applicant passes the test, a Human Resources representative screens the applicant over the phone or in person, for oral communication skills and work availability. If the applicant passes this step, he/she is interviewed in person by an Operations Supervisor for specific job dimensions that relate to the success of a CA. If the supervisor recommends the applicant for employment, the applicant undergoes a drug screen and security/reference check. This process ensures that only qualified applicants are hired to work at a relay center.

Sprint IP (Internet Relay) CAs follow the same employment and training standards as TRS CAs. In addition, Sprint provides an enhanced VCO service called Captioned Telephone (*CapTel*) Services. Sprint requires that all *CapTel* CAs have a high school graduate equivalency as a minimum qualification for the job.

All Sprint Video Relay (VRS) Interpreters are qualified and adhere to the Registry of Interpreters for the Deaf (RID) Code of Professional Conduct. For more information about VRS interpreter qualifications and training expectations, see Appendix B.

***§64.604 (a)(1)(ii) CAs must have competent skills in typing, grammar, spelling, interpretation of typewritten ASL, and familiarity with hearing and speech disability cultures, languages and etiquette. CAs must possess clear and articulate voice communications.***

#### **Communication Assistants Training Program**

Sprint trainers use adult learning theories; training is adapted to each participant's learning modality; incorporating lecture, visual graphics, flow charts, videos, role playing, and hands-on-call training, to stimulate the CA's ability to learn.

New hires receive training in Deaf Culture, ASL translation, the needs of non-signing deaf individuals, and sensitivity to the needs of persons with hearing and speech disabilities by a qualified person who, if not deaf or hard of hearing, possesses extensive knowledge in this area. During the CA's initial training, they are trained and evaluated on how to accurately reflect the TTY user's communication and on the CA's role in the relay process. CAs' performance based skills such as grammar; spelling and oral communication abilities are evaluated. Sprint works closely with local deaf and hard of hearing communities to identify knowledgeable presenters to assist with the training. Sprint utilizes videos, role-playing, group activities and discussion groups to educate employees on the different needs of their customers to ensure sensitivity towards customers.

Additionally, applicants are given written and hands-on evaluations to demonstrate their ability to spell and type accurately, process a call using live training terminals, and role-play in varying levels of ASL. CAs also receive extensive training on how to improve their interpersonal skills so that they can work effectively with difficult and stressful situations that may arise during their employment. These training mandates and skill expectations also apply to Sprint IP CAs and VRS interpreters where appropriate. Please review the Sprint TRS, Speech to Speech (STS), CapTel and Video Relay Service (VRS) Training outlines in Appendix B.

A team of ASL-Fluent Sprint employees developed the ASL Training workbooks that are utilized by CAs for ongoing training. These workbooks have been designed to provide supplemental training and to assist CAs toward the mastery of ASL translation on relay calls.

### **Captioning Assistants Training Program**

*CapTel* CA training includes comprehensive training on the *CapTel* Service Workstation equipment and other instruction including some live call handling experience. All prospective CAs are required to meet all of the CTI standards for becoming a production CA. These standards include the ability to consistently meet call handling skills such as WPM averages, accuracy averages as well as attendance and attitude standards as set by *CapTel* management. At any time if a prospective CA does not demonstrate the ability to achieve the expected standards, they may be removed from the training group and terminated from employment. See Appendix A

All *CapTel* CAs are tested and competency in typing, grammar, and spelling to ensure skills meet the FCC Guidelines. *CapTel* CA training provides familiarity with hearing, deaf, and Speech-Disabled cultures. A captioned telephone user does not type while making a call, therefore there is never an opportunity for the CA to have to interpret typewritten ASL.

*CapTel* CAs must follow certain guidelines while supporting calls. Below is a list of these guidelines.

- 1.1 The CA shall be trained to caption the words spoken by the hearing party as accurately as reasonably possible, without intervening in the communications. The CA is permitted to provide background noise identification.
- 1.2 The CA shall not maintain any records of conversation content and shall keep the existence and content of all calls confidential.
- 1.3 The CA shall be required to meet the FCC standards for TRS minimum transcription speed.
- 1.4 The CA shall not limit the length of a call and shall stay with the call for a minimum of ten minutes when answering and placing a call.
- 1.5 The CA shall pass along a *CapTel* caller's Automatic Number Identification (ANI) to the local Public Service Answering Point (PSAP) if the caller disconnects before being connected to emergency services.

- 1.6 Personnel supporting *CapTel* will have the requisite experience, expertise, skills, knowledge and training and education to perform *CapTel* Services in a professional manner.

Please review the Sprint TRS, STS, *CapTel* and Video Relay Service (VRS) Training outlines in Appendix B for more information on CA training requirements.

### **CA Quality Assurance Programs**

#### **Monthly Surveys**

Sprint Relay conducts monthly surveys and formal reviews to monitor and evaluate the continuing training for Sprint Relay TRS CAs as well as Sprint IP CAs. The survey process used is a product of a task force comprised of management staff. It evaluates all areas of work performance, personal effectiveness and attendance. The survey process goals are to respond to customer feedback and provide the CA with clearly defined and objective performance measures. Two surveys are completed on each CA every month and include areas such as Typing Accuracy, Spelling, Conversational English/ASL Translation, Clarity / Enunciation, Caller Control, and Etiquette/Composure.

#### **Quality Assurance Test Calls**

To ensure that all CAs are focused on FCC requirements and state contractual commitments, Sprint centers and or an independent third party quality testing firm has been retained by Sprint to perform a total of 700 test calls. Results are provided on a quarterly basis. Feedback and appropriate guiding performance measures for specific components are addressed with each CA.

Sprint Relay also conducts test calls to ensure *CapTel* quality at least once a quarter, but often conducts monthly tests of 100 test calls on *CapTel*.

#### **Relay Program Management and Trainer Test Calls**

Additionally, the Operations department and members of the Relay Program Management Team identify areas of concern based on customer feedback, state feedback, individual survey results and customer contacts. Approximately 300 test calls per month are conducted focusing on the identified monthly call-processing topic. Results are compiled and shared with Operations' management. Based on the results, the trainers and management determine if refresher training is required and what method will be used for delivery.

Sprint Relay and the Relay Program Management team also perform test calls for *CapTel* CAs.

***§64.604 (a)(1)(iii) CAs must provide a typing speed of a minimum of 60 words per minute. Technological aids may be used to reach the required typing speed. Providers must give oral-to-type tests of CA speed.***

#### **Transmission of 60 WPM**

All Sprint Relay CAs type a minimum of 60 words per minute (WPM). Sprint Relay utilizes an oral-to-type test that simulates actual working conditions. CAs are tested on an ongoing basis to ensure

that a 60 WPM performance requirement is maintained. During this test, Sprint Relay does not use technology-aided transmission to ensure the typing speed. The scores for each CA are the actual words per minute that are typed. The most recent test results were an overall 82.5 WPM with 97% accuracy for all call centers. This applies to Sprint IP and IP wireless relay CAs as well.

Sprint Relay utilizes technological aides during relaying such as pre-programmed macros and auto-correcting software, along with the CA's natural skill, to provide optimal service.

CapTel's voice recognition technology transmits above 100 WPM. While oral to type tests are waived as a result of this technology, oral to text tests are given to all CapTel CAs.

***§64.604 (a)(1)(iv) TRS providers are responsible for requiring that VRS CAs are qualified interpreters. A "qualified interpreter" is able to interpret effectively, accurately, and impartially, both receptively and expressively, using any necessary specialized vocabulary.***

#### **Qualified VRS interpreters**

All Sprint Video Relay (VRS) Interpreters are qualified and adhere to the Registry of Interpreters for the Deaf (RID) Code of Professional Conduct. For more information about VRS interpreter qualifications and training expectations, see Appendix B.

***§64.604 (a)(1) (v) CAs answering and placing a TTY-based TRS or VRS call must stay with the call for a minimum of ten minutes. CAs answering and placing an STS call must stay with the call for a minimum of fifteen minutes.***

#### **In-Call Replacement of CAs**

Sprint Relay requires all CAs, including Sprint IP and IP Wireless CAs, and VRS Interpreters, also known as Video Interpreters (VIs), to stay on the call for a minimum of 10 minutes, with the exception of Speech to Speech (STS) CAs, who must stay on the call for a minimum of 15 minutes. This is included in the CA training matrix under Appendix B, Module 4I, and the Video Relay Service Training Outline and Qualifications. CapTel CAs also stay on all calls for a minimum of 10 minutes.

***§64.604 (a)(1)(vi) TRS providers must make best efforts to accommodate a TRS user's requested CA gender when a call is initiated and, if a transfer occurs, at the time the call is transferred to another CA.***

When a Sprint relay user requests a CA of the opposite gender of the CA who initially receives the call, the relay user is switched to an appropriate CA as soon as one becomes available. If a change of CA is necessary during the call, every attempt will be made to accommodate the previous gender request. When a Sprint VRS and Sprint IP or IP Wireless user requests a specific gender, every attempt will be made to honor the request. If a change of VIs is necessary during the call, every attempt will be made to accommodate the previous gender request.

CapTel CAs are waived from this requirement. See Appendix K, FCC CapTel Mandatory Minimum Standards & Compliance Matrix.

**§64.604(a)(1)(vii) TRS shall transmit conversations between TTY and voice callers in real time.**

Sprint CAs transmit and relay all conversations between the caller and the called parties in real time.

*CapTel* is a transparent service. CAs transmit audio and captioned text conversations from the voice caller to the *CapTel* user in real time. Since the *CapTel* user utilizes their own voice to transmit, no transmission occurs from the CA to the voice caller.

## **A.2 Confidentiality and Conversation Context**

**§64.604 (2)(i) Except as authorized by section 705 of the Communications Act, 47 U.S.C. 605, CAs are prohibited from disclosing the content of any relayed conversation regardless of content, and with a limited exception for STS CAs, from keeping records of the content of any conversation beyond the duration of a call, even if to do so would be inconsistent with state or local law. STS CAs may retain information from a particular call in order to facilitate the completion of consecutive calls, at the request of the user. The caller may request the STS CA to retain such information, or the CA may ask the caller if he wants the CA to repeat the same information during subsequent calls. The CA may retain the information only for as long as it takes to complete the subsequent calls.**

### **Confidentiality Policies and Procedures**

Sprint Relay believes that measures to ensure confidentiality are crucial to the success of TRS, Sprint IP/IP Wireless and VRS operations and has implemented procedural and environmental measures to safeguard customer and call information.

In accordance with the FCC regulations, all information provided for the call set-up, including customer database records remain confidential and cannot be used for any other purpose. Once the inbound party disconnects, CAs and Video Interpreters (VI) lose the ability to view or access any information pertaining to that call. No written or taped information regarding the call is kept once the call is released from the Relay position. Billing information is transferred to billing files after the call has been terminated and is no longer available except for billing purposes.

The only exception to this policy relates to STS calls. Sprint STS Relay Agents may retain information from one inbound call for use in a subsequent outbound call, with the caller's permission. Such information will only be retained for the duration of the inbound call.

Sprint Relay's confidentiality expectations are strictly enforced and employees are expected to comply with this policy during and after their period of employment. Sprint strictly enforces confidentiality policies in the Center, which include the following:

- Prospective CAs and VIs undergo a thorough background investigation and screening.

- During initial training, CAs and VIs are presented with examples of potential breaches of confidentiality.
- Stress can be a factor in maintaining confidentiality. CAs and VIs receive training on healthy detachment.
- Breach of confidentiality will result in disciplinary action up to and including termination of employment.
- CAs perform their work in cubicles that are bordered by high sound-absorption acoustic tiles and wear special noise reducing headsets.
- All Sprint Relay Centers have security key access.
- Visitors are not allowed in Relay work areas.
- Supervisors are present in the work area to observe behavior.
- All Relay Center personnel are required to sign and abide by the Sprint Relay Center's Agreement Regarding Confidential Customer Information.
- All employees attend annual confidentiality meetings wherein the confidentiality agreement is reviewed and re-signed.

Sprint Relay Center's Agreement Regarding Confidential Customer Information requires CAs and VIs to:

- Keep all call information confidential.
- Not edit or omit any content from the conversation.
- Not add or interject anything into the content or spirit of the conversation.
- Assure maximum user control.
- Continuously improve their skills.

Please refer to Appendix C for the TRS Pledge of Confidentiality. This document is similar to what is used for Sprint VRS interpreters and IP/IP Wireless CAs.

*CapTel* Captioners must comply with the same rules that TRS follows regarding confidentiality. The *CapTel* confidentiality form is similar to TRS. Below is an explanation of confidentiality as it pertains to *CapTel* Captioners. A copy of the *CapTel* confidentiality form signed by *CapTel* CAs can be found under Appendix C.

Information obtained during a *CapTel* call should not be shared with any person except a member of the *CapTel* management staff who has asked for specific information. This information may be needed to clarify technical, policy, emergency, venting, consumer, or customer service issues. General call information will not be shared unless it is used to clarify, vent, or teach. Information about call content should be discussed in a private area only.

Only information critical to resolving the situation will be disclosed. This may include consumer name, name of business/agency, gender of caller, type of call (voice in, *CapTel* in), day of week, time of day, city, state, or any other details that could in some way identify a consumer.

A Captionist may have problems, complaints or stress from handling the call. The Captionist may ask to speak to a supervisor or other member of management (as long as it wasn't their call) in a private area.

The success of *CapTel* depends on quality and complete confidentiality. Since consumers will be less likely to use the service if they feel their personal and professional calls are not kept in the strictest confidence, all Captionists understand and abide by the confidentiality policy. Any Captionist who breaks this policy will be disciplined, up to and including termination.

### **STS Limited Exception of Retention of Information**

At the request of a caller, Sprint Speech-to-Speech (STS) CAs will retain information from a call in order to facilitate the completion of consecutive calls. No information is kept after the inbound call is released from the CA position.

***§64.604 (2)(ii) CAs are prohibited from intentionally altering a relayed conversation and, to the extent that it is not inconsistent with federal, state or local law regarding use of telephone company facilities for illegal purposes, must relay all conversation verbatim unless the relay user specifically requests summarization, or if the user requests interpretation of an ASL call. An STS CA may facilitate the call of an STS user with a speech disability so long as the CA does not interfere with the independence of the user, the user maintains control of the conversation, and the user does not object. Appropriate measures must be taken by relay providers to ensure that confidentiality of VRS users is maintained.***

### **Verbatim Relay and the Translation of ASL**

Sprint Relay CAs type to the TTY user or verbalize to the non-TTY user exactly what is said, verbatim, when the call is first answered, and at all times during the conversation, unless either relay user specifically requests summarization or ASL interpretation.

At the request of the relay user, Sprint Relay CAs will translate written ASL into conversational English. All Sprint Relay CAs are able to translate the typed languages of relay users whose primary language may be ASL or whose written English language skills are limited to conversational grammatically correct English. Training is provided on various levels of English/ASL during the initial training, as well as throughout a CAs' employment. In order to finish training successfully, the CA must demonstrate competent skills to translate the calls as requested.

Sprint VRS interpreters, Sprint IP/IP Wireless CAs and *CapTel* CAs are prohibited from intentionally altering a relayed conversation and will relay all conversation verbatim.

### **STS Facilitation of Communication**

Sprint Relay STS CAs receive training on how to facilitate STS communication without interfering with the independence of the user. STS CAs are evaluated on monthly on their ability to facilitate the call without altering content of the conversation or compromising the user's control. Sprint Relay users have full control of all of their relay calls.

### A.3 Types of Calls

***§64.604 (3) (i) Consistent with the obligations of telecommunications carrier operators, CAs are prohibited from refusing single or sequential calls or limiting the length of calls utilizing relay services.***

#### **Sprint Relay Services**

Sprint Relay provides 24 hour, 7 day-a-week Telecommunication Relay Service (TRS) for standard (voice), Text Telephone (TTY), wireless, or personal computers (PC) users to place local, intrastate, interstate, and international calls. Sprint Relay also processes calls to directory assistance and to toll free numbers. There are no restrictions on the duration or number of calls placed by any relay user. All relay users accessing Sprint Relay retain full control of the length and number of calls placed anytime through relay. Sprint IP/IP Wireless CAs and VRS interpreters are also prohibited from refusing single or sequential calls or limiting the length of calls using relay services.

*CapTel* CAs are currently waived for outbound calls because the *CapTel* CA is not involved in the call set up and cannot refuse the call. *CapTel* users dial sequential calls directly therefore it is not possible for a *CapTel* CA to refuse sequential calls or limit length of calls.

*CapTel* CAs are not waived by the FCC for inbound calls to a *CapTel* user made through a TRS facility. However, if a call is made directly to the captioned telephone access number no set up is involved and the *CapTel* CA cannot refuse to call. Please see Appendix K for more information on these waivers.

***§64.604 (3)(ii) Relay services shall be capable of handling any type of call normally provided by telecommunications carriers unless the Commission determines that it is not technologically feasible to do so. Relay service providers have the burden of proving the infeasibility of handling any type of call. (iii) Relay service providers are permitted to decline to complete a call because credit authorization is denied. (iv) Relay services shall be capable of handling pay-per-call calls.***

Sprint Relay works in conjunction with the Local Exchange Enhanced Services to provide additional functionality for users of TRS. Sprint processes collect and person-to-person calls and calls charged to a third-party as well as calls billed to prepaid and non-proprietary calling cards offered by the local or any other interexchange carrier. Sprint Relay will also process calls to or from restricted lines e.g. hotel rooms and pay telephones.

When a TRS or *CapTel* call is placed through Sprint Relay, the user will be billed in the same manner that a non-relay user would be billed. The relay user will only be billed for conversation time, (which does not include call setup time, time in between calls and wrap-up time) on toll calls. Billing will occur within 60 days of the call date. Sprint gives users the option of billing their calls to a non-proprietary LEC (local) or IXC (long distance) calling cards. Sprint will process calling cards offered by the user's carrier of choice if the carrier is a participant of Sprint's Carrier of Choice (COC) program and as long as Feature Group D is at the Carrier's access tandem. Sprint works with the LECs and IXCs to compile and make available to all TTY or *CapTel* users a list of acceptable calling cards. The user's carrier of choice is responsible for providing call types and

available billing options, and will also handle the rating and invoicing of toll calls placed through the relay. Sprint was the first provider to process pay-per-calls, beginning with the state of Texas in 1996.

Sprint VRS, Sprint IP and IP Wireless are waived from these requirements. Please refer to the Sprint VRS and IP Report to the FCC, Appendix L.

***§64.604 (3)(v) TRS providers are required to provide the following types of TRS calls: (1) Text-to-voice and voice-to-text; (2) VCO, two-line VCO, VCO-to-TTY, and VCO-to-VCO; (3) HCO, two-line HCO, HCO-to-TTY, HCO-to-HCO.***

Sprint Relay provides access to all available relay call types. A complete list of all call types proved by Sprint may be found in Appendix I Sprint Standard Features Matrix. Most call types are waived by the FCC for IP and VRS users. Please refer to the Sprint VRS and IP Report to the FCC, Appendix L.

Except where waived by the FCC, *CapTel* users are able to access all types of TRS calls. The requirement to provide 711 dialing is waived for outbound calls made from a *CapTel* phone. STS and HCO calls are also waived.

***§64.604(3)(vi) TRS providers are required to provide the following features: (1) Call release functionality; (2) speed dialing functionality; and (3) three-way calling functionality.***

### **Call Release Functionality**

TTY to TTY Call Release Functionality allows the CA to connect two TTY users and then drop off the line, leaving the two TTY customers connected. This is especially useful for customers needing to use a pre-paid calling card, reach another TTY user through a switchboard or operator, or when needing to speak with a voice user first. With 2-Line *CapTel* service, a *CapTel* user can release or receive captions at any time during a call.

### **Frequently Dialed Numbers**

Frequently Dialed Numbers, sometimes referred to as Speed Dial Numbers, allow relay users to store up to 10 frequently called numbers in their customer preference database along with a name for each entry. When initiating a call the user can then provide the name to Sprint Relay CAs, instead of the entire 10-digit number. The *CapTel* Consumer Premises Equipment (CPE, or *CapTel* phone) is equipped with the ability to program in 3 speed dial numbers, and a recently dialed number.

### **Three-Way Calling**

Customers who have purchased three-way calling from their LEC can use the feature when placing a call through Relay. This feature allows a customer to add a third party to a TRS call. For example, a TTY caller places a call to the Relay and then bridges another TTY person on his or her line. The original TTY caller then requests to place a call to a voice user. The CA will make the

connection and Relay the call between the voice party and both TTY users. This process would also apply if there were two voice customers and one TTY user on the line.

Sprint *CapTel* users are also able to participate in a three way call. Although the person using the captioned phone is unable to establish the three-way call, the called party will be able to do so by utilizing the telephone switch hook (or "flash") button on his or her CPE. Thus, Sprint *CapTel* meets the requirement for three-way calling for users of One-Line *CapTel*. For Two-Line *CapTel*, either party can initiate a three- way call should the user purchased this as a LEC option. Sprint *CapTel* users are also able to participate in a conference bridge to speak to three or more individuals.

***§64.604(3)(vii) Voice mail and interactive menus. CAs must alert the TRS user to the presence of a recorded message and interactive menu through a hot key on the CA's terminal. The hot key will send text from the CA to the consumer's TTY indicating that a recording or interactive menu has been encountered. Relay providers shall electronically capture recorded messages and retain them for the length of the call. Relay providers may not impose any charges for additional calls, which must be made by the relay user in order to complete calls involving recorded or interactive messages.***

When a Sprint Relay caller reaches an answering machine, voice mail or interactive menu, the CA informs the relay caller by hitting a macro which reads (ANS MACH) or (RECORDING) to keep the caller informed of the call progress. The CA then, if necessary, presses a hot key to record the voice announcement and relay the message back to the caller. The CA utilizes Sprint's recording technology to obtain all information necessary on the first attempt. The CA relays all of the recorded information to the customer and deletes the recorded message. This technology greatly reduces the CA work time, as the CA does not need to make multiple outdials. In addition, Sprint relay callers are only charged for the first call. Subsequent redials to leave a message or enter information into an interactive menu are not charged to the customers. Sprint has developed a procedure using our Ultra WATS lines to ensure that with additional out-dials the customer does not incur toll charges.

*CapTel* users are able to hear and interact directly with the recorded message and makes the selections as requested by the interactive menu. The *CapTel* user is alerted to the presence of a recording by hearing the recording and seeing the captions of the recording as the message is played.

*CapTel* users can replay messages as required until the message is both heard and read as captions. The user can stay on the line as long as desired until the message is heard in its entirety or replayed. This is requested by the user directly. The *CapTel* user interacts with the recorded message system directly. This is treated as one call.

Callers to Sprint relay services access 900 services by dialing a free 900 number to access relay. Use of a toll-free 900 number inbound to the relay center provides functionally equivalent access to the telecommunications network while preventing unauthorized end users from circumnavigating the LEC restrictions. This process ensures that the LEC will only complete those calls into the relay service that do not have a 900 number block added to their phone lines. The 900 service

provider and the 900 number carrier(s) will rate and bill the user as if the call was dialed directly from the originating user's telephone.

(The current Sprint California relay 900 number is 900-535-2929)

**§64.604 (a) (3)(viii) TRS providers shall provide, as TRS features, answering machine and voice mail retrieval.**

Sprint Relay TRS, Sprint IP/IP Wireless and VRS VIs provide both answering machine and voice mail retrieval. Please refer to Appendix I, Standard Call Features Matrix.

**Answering Machine**

Sprint Relay CAs will inform relay users when reaching an answering machine, voice mail or interactive menu. The CA will hit a "hot key" which reads (ANS MACH) or (RECORDING) to keep the caller informed of the call progress.

When reaching a recorded message, the CA utilizes Sprint's recording technology to obtain all information necessary on the first attempt. The CA can then play back the recording at a pace that allows them to relay the entire message to the caller, after which the recorded message is deleted. This technology greatly reduces the CA's work time and accordingly, time billed to the State.

The CA will type the entire outgoing message verbatim including the option for the Relay User to leave a message, if applicable.

The CA will leave the relay user's message in the appropriate mode of communication. Sprint has the capability to leave messages in both voice, text and touch tones (pagers).

Once the CA has left the message on the answering machine or voice mail, the CA will send a pre-programmed response to the relay caller stating:

**(UR MSG LEFT) CA XXXXM/F GA**

Subsequent redials to leave a message or enter information into an interactive menu are not charged to the customers. Sprint has developed a procedure using our Ultra WATS lines to ensure that with additional outdials, the customer does not incur toll charges. Customers will only be charged for the first call. CapTel CAs are also equipped with the ability to retrieve messages stored on a local answering machine.

**Voicemail Retrieval**

Sprint has the capability to retrieve messages from answering machines by placing an outbound call to a remote location or the same location. When a user requests to retrieve messages at the same location, the CA will instruct the user when to take the handset off the hook and when to begin playing back the messages. The CA will retrieve all messages and relay verbatim. The recorded message will be automatically deleted by the system once the relay call is completed. The CapTel user both hears and interacts directly with the recorded message and makes the

selections as requested by the interactive menu. The *CapTel* user is alerted to the presence of a recording by hearing the recording and seeing the captions of the recording as the message is played.

*CapTel* users can replay messages as required until the message is both heard and read as captions. The user can stay on the line as long as desired until the message is heard in its entirety or replayed. This is requested by the user directly. The *CapTel* user interacts with the recorded message system directly. This is treated as one call.

#### **A.4 Handling of Emergency Calls**

***§64.604(a)(4) Handling of emergency calls. Providers must use a system for incoming emergency calls that, at a minimum, automatically and immediately transfers the caller to an appropriate Public Safety Answering Point (PSAP). An appropriate PSAP is either a PSAP that the caller would have reached if he had dialed 911 directly, or a PSAP that is capable of enabling the dispatch of emergency services to the caller in an expeditious manner.***

Sprint meets the requirements of emergency calls by immediately routing 911 calls to an appropriate Public Service Answering Point (PSAP) that the caller would have reached by dialing 911 directly, or a PSAP that is capable of dispatching emergency services in an expeditious manner. With one CA keystroke, Sprint's intelligent CA application utilizes the NPA/NXX information of the inbound caller to immediately cross-reference this information to a national database containing the ten-digit emergency number for every PSAP. Within seconds, this number is entered in the dial window and the call is then immediately initiated.

Sprint Relay considers an emergency call to be one in which the user of the Relay Service indicates they need the police, fire department, paramedics or ambulance. Sprint utilizes a standard E911 database that serves all of the United States and has uniform procedures, as noted below, which are followed at every Sprint Relay Center.

- The CA, when told by a TTY/ASCII user (non-voice) that an emergency exists, will hit a hot key.
- The CA terminal will post a query containing the caller's ANI to the E911 database.
- The E911 database currently responds with the telephone number of an appropriate PSAP; automatically dials the PSAP number and passes the caller's ANI to the E911 Service Center.
- The CA will remain on the line and will verbally pass the caller's ANI to the E911 Service Center Operator.

Relay users will be encouraged to dial 911 as their primary means of contacting Emergency Services. However, if a Relay user makes an emergency call through Relay, the Sprint CA will make every effort to correctly route the call to an appropriate PSAP based on the network and user-provided information. As required by the FCC, CAs will remain on the line and give the Emergency Service Provider the caller's telephone number, even if the caller is no longer on the line.

It is Sprint's opinion that in some emergencies, valuable time could be lost if the TTY call were to be transferred to the PSAP, and the results could be life threatening. Therefore, Sprint will allow direct TTY-to-TTY communication in the following scenarios, if allowed by the FCC:

- At the request of the caller,
- At the request of the PSAP Operator or PSAP Supervisor,
- The CA will remain connected and will silently monitor the call, if:
- The PSAP is not capable of receiving and conversing directly with the caller in the modality of the caller (i.e. if the caller is using a communication modality other than TTY, (i.e., VCO, HCO, STS, ASCII, VRS, or Internet Relay)), or
- The CA is having technical trouble transferring the call to the PSAP (i.e.; the caller is disconnected from the PSAP; the PSAP cannot establish a TTY connection, etc.).

The CA will assist, as necessary, to maintain communications between the PSAP and the caller. Otherwise, the Sprint CA will remain on the line to provide assistance as necessary to facilitate communication for all emergency calls and will not disconnect until the call has been completed.

911 services are currently waived for IP and VRS providers. Sprint strongly encourages Internet Relay users to dial 911 directly to receive prompt emergency services via TTY or phone.

Sprint IP via website permits manual 911 processing. If user tell operator to dial 911, operator will request supervisor assistance. User will need to provide the address and city where he/she is calling from. Supervisor will call Directory Assistance (on separate phone call) to obtain 10-digit emergency PSAP number. Then the supervisor will pass it to CA to make outbound call to 911 dispatcher (PSAP). It can take few minutes or so to get the information. Users are encouraged to enter a 10-digit emergency number on the website for more efficient call processing.

More information about Sprint's procedure for handling E911 calls, including *CapTel* calls, may be found in Appendix D.

### **Telecommunications Service Priority Program**

Sprint announced on October 31, 2005, that it had completed all milestones in enrolling its Telecommunications Relay Service (TRS) in the FCC's Telecommunications Service Priority (TSP) program. On May 11, 2005, Sprint began implementing TSP throughout its network. On October 31, Sprint successfully activated all 14 call centers under the TSP program. Sprint's participation in the TSP Program strengthens their already robust reliability.

In 1988, the TSP program was established to prioritize the restoration of telephone service to critical facilities and agencies at times when telecommunications companies are typically overburdened with service requests, such as after a natural disaster. In the event of a regional or national crisis, the program restores telephone services most critical to national and homeland security on a priority basis.

The Sprint TRS network is designed to reroute traffic to other Sprint Relay centers across the country to provide uninterrupted service. However, if a national or regional emergency causes service to be disrupted and the relay call center is unable to receive or place calls, Sprint's

participation in the TSP program means that Local Exchange Carriers (LECs) are required to restore service to the relay call center as rapidly as possible consistent with the priority status assigned to the relay call center. Unlike other TRS providers, when a disaster occurs, Sprint TRS has the ability to reroute calls immediately to unaffected relay call centers and continue processing calls with minimal customer impact.

The Sprint relay call centers participating in TSP are:

- Albuquerque Switch (Albuquerque, NM and Honolulu, HI)
- Austin Switch (Austin, TX and Lubbock, TX)
- Dayton Switch (Dayton, OH and Cayce, SC)
- Independence Switch (Independence, MO)
- Jacksonville Switch (Jacksonville, FL)
- Lemoore Switch (Lemoore, CA)
- New Jersey Switch (Vineland, New Jersey)
- Sioux Falls Switch (Sioux Falls, SD and Moorhead, MN)
- Syracuse Switch (Syracuse, NY and Holyoke, MA)

The TSP program ensures that the Sprint relay call centers are placed on a priority basis to re-establish telephone service for Relay STATE users. Sprint is proud to voluntarily comply with the FCC's TSP program. Please see Appendix N for a copy of the general press release regarding the TSP program.

#### **A.5 STS Called Numbers**

***§64.604 (a)(5) STS called numbers. Relay providers must offer STS users the option to maintain at the relay center a list of names and telephone numbers which the STS user calls. When the STS user requests one of these names, the CA must repeat the name and state the telephone number to the STS user. This information must be transferred to any new STS provider.***

Sprint's Relay customer database is available to Speech-to-Speech (STS) users. The database can be used to store a list of names, frequently dialed telephone numbers, and customer notes. The database automatically appears on the CA's terminal screen each time a user dials into one of the Sprint relay numbers. The customer database helps to facilitate call set up and conversing preferences for the STS user. Customer profile information contained in the Sprint Customer Database will be transferred to any new provider at the end of the contract term. Currently, STS is waived from Internet Relay, Video Relay and *CapTel* services.

#### **Technical Standards**

##### **B.1 ASCII and Baudot**

***§64.604 (b) Technical standards—(1) ASCII and Baudot. TRS shall be capable of communicating with ASCII and Baudot format, at any speed generally in use.***

Each Sprint CA position is capable of receiving and transmitting in voice, Baudot including TurboCode™ and E-TurboCode™ as well as ASCII codes. Upon a call being received at the CA position, TTY signals are automatically identified as either Baudot or ASCII; if ASCII, the baud rate is detected. Intelligent modems allow the CA to handle either voice or data lines from the same CA work station.

This automatic identification of call types for incoming calls provides a quick and efficient technique for varied customer input and reduces the average CA work time to a minimum.

ASCII rates up to and including 19,200 bps are supported by the Sprint platform. The domestic TTY baud rate of 45.5 and the international rate of 50 baud are also supported.

Sprint IP currently provides services via ASCII connection. Currently, ASCII and Baudot requirements are waived for *CapTel* services. For more information about *CapTel* waivers, see Appendix K.

## **B.2 Speed of Answer**

***§64.604 (2) Speed of answer. (i) TRS providers shall ensure adequate TRS facility staffing to provide callers with efficient access under projected calling volumes, so that the probability of a busy response due to CA unavailability shall be functionally equivalent to what a voice caller would experience in attempting to reach a party through the voice telephone network.***

Sprint Relay has developed the capability to effectively manage a human resource pool that provides unsurpassed quality. Sprint has gained valuable experience in sizing its TRS Operations to accommodate contract requirements. Historical call detail is gathered by 15-minute periods throughout the years of providing TRS service. This historical information is combined with state-specific information to establish anticipated call patterns that accurately predict the personnel needs necessary to efficiently process the relay calls.

Sprint meets the requirement of answering 85% of all calls within 10 seconds on a daily basis by a live CA. (Abandoned calls are included in this 85/10 Service Level calculation.) Sprint will ensure that no more than 30 seconds elapses between the receipt of the dialing information and the dialing of the requested number.

Sprint samples the average answer time a minimum of every 30 minutes for each 24-hour period. Sprint's Traffic Management Control Center (TMCC) and our Enhanced Services Operations Control Center (ESOCC) are staffed with professionals who understand call processes, call volumes, distribution patterns, contract requirements and call routing, thus ensuring exemplary service.

The Sprint Centers that serve California are provided with sufficient facilities to provide a Grade of Service (GOS) of P.01 or better for calls entering the California call center switch equipment. Inbound calls that may be blocked within the Public Switched Telephone Network (PSTN) will receive a voice recording stating that all circuits are busy and to try the call again within a few minutes.

Performance of inbound traffic on each toll-free number where it enters the Sprint network is measured continuously and reported both daily and monthly. These measurements, which include traffic volume and blockage data, are compiled into a monthly report available to the state. In addition, the dedicated trunk facilities that route the call from the terminating network switch to the ACD (Automatic Call Distributor) at the serving relay center are monitored daily for compliance with blockage limitations. The data is monitored for both short- and long-term trends to ensure the most cost-effective use of resources.

Sprint also meets requirements for Sprint IP/IP Wireless, VRS and *CapTel* calls. Sprint *CapTel* ensures that 85% of all calls are answered within 10 seconds and that caller's calls are immediately placed. Sprint does not put calls in a queue or on hold. Abandoned calls are included in the speed-of-answer calculation. Sprint *CapTel* system is designed to a P.01 standard or greater measured on a daily basis.

***§64.604 (b) (2) (ii) TRS facilities shall, except during network failure, answer 85% of all calls within 10 seconds by any method which results in the caller's call immediately being placed, not put in a queue or on hold. The ten seconds begins at the time the call is delivered to the TRS facility's network. A TRS facility shall ensure that adequate network facilities shall be used in conjunction with TRS so that under projected calling volume the probability of a busy response due to loop trunk congestion shall be functionally equivalent to what a voice caller would experience in attempting to reach a party through the voice telephone network.***

Sprint has met the requirement of answering 85% of all calls within 10 seconds on a daily basis by a live CA. (Abandoned calls are included in this 85/10 Service Level calculation.) Sprint samples the average answer time a minimum of every 30 minutes for each 24-hour period. Sprint currently samples every 15 minutes.

Sprint Relay is committed to providing relay users with functionally equivalent telecommunication services as that enjoyed by standard telephone users. To this end, Sprint will continue to answer 85% of all relay calls within 10 seconds. There will be no more the 30 seconds of elapsed time between receipt of dialing information and the dialing of the requested number.

Sprint begins measuring speed-of-answer at the time the call hits the Relay switch. Calls are answered by a live CA and are not to be placed in a queue or on hold after reaching the Relay switch.

#### **Sprint's Service Level calculation for TRS**

Sprint's Service Level calculation for all TRS calls, excluding *CapTel*, is described below:

Number of calls handled < 10 seconds / (total calls handled + total calls abandoned)

The SVL is the number of calls handled in 10 seconds or less divided by the total number of calls offered.

(Number of calls offered = total number of calls handled + total number of calls abandoned),

(SVL = Number of calls handled in < 10 / Number of calls offered).

### **Sprint's Service Level Calculation for CapTel**

For *CapTel* users, the number of calls that arrive at the *CapTel* call center will be the number of Calls Offered.

The number of calls that are answered by a CA is the number of Calls Answered.

The time for each call between the time the call arrives at the *CapTel* call center and the time answered by a CA until it is abandoned is the Speed of Answer.

Any time spent in the Voice-in telephone menu is time controlled by the user to enter in the phone number of the CapTel user they are calling. This time is subtracted out from the Speed of Answer time.

The total number of calls with the Speed of Answer as 10 seconds or less is the number of Qualifying Calls.

Qualifying Calls divided by Calls Offered = Service Level (x percent of calls answered within 10 seconds).

### **Sprint's Weighted Service Level for TRS**

Sprint uses a 'weighting' process to combine the results of several Call Centers into a single result:

The 'weighted' service level (SVL) is a calculation that multiplies the number of 'State' calls handled in each center by the center's daily SVL (the outcome is a factor called 'SVL points'). The resultant 'SVL points' for each center that handled that 'State' traffic is then summed. The sum of the 'SVL points' is then divided by the total number of 'State' calls to get a daily 'weighted' SVL.

Sprint will answer 85% of all calls within 10 seconds on a daily basis and will not place a caller in queue or on hold. The ten seconds begins at the time the call is delivered to the Sprint Relay Center and Sprint will ensure that adequate network facilities are available to avoid the possibility of a busy response due to loop trunk congestion.

### **Sprint's Weighted Service Level for CapTel**

While *CapTel* operates two *CapTel* call centers, all calls are directed through one Automatic Call Distributor switch. All calls are answered in the order received and is measured, unweighted, by this switch.

***§64.604 (b) (ii) (A) The call is considered delivered when the TRS facility's equipment accepts the call from the local exchange carrier (LEC) and the public switched network actually delivers the call to the TRS facility.***

Sprint considers the call delivered when the Relay Center's equipment accepts the call from the LEC, and the public switched network actually delivers the call to the TRS Center.

Sprint furnishes the necessary telecommunications equipment and facilities, system software for the complete TRS operation. Sprint is a certified Interexchange Carrier (IXC) in all 50 states. Sprint's transmission circuits meet, and in most cases, exceed the ANSI T1.506-1990 Network Performance – Transmission Specifications for Switched Exchange Access Network standards.

***§64.604 (b) (ii) (B) Abandoned calls shall be included in the speed-of-answer calculation.***

Please see (b)(2)(ii) above.

***§64.604 (b) (ii) (C) A TRS provider's compliance with this rule shall be measured on a daily basis.***

Please see (2) (b)(ii) above.

***§64.604 (b) (ii) (D) The system shall be designed to a P.01 standard.***

Sufficient transmission facilities have been provided to service all traffic levels, including busy hour peaks. Sprint utilizes trunks that are sized to provide a busy hour Grade of Service (GOS) of P.01 or a minimum of 99 out of 100 calls will have unrestricted and immediate access to the call center facilities during the busiest time of day.

Inbound calls that may be blocked within the Public Switched Telephone Network (PSTN) will receive a voice recording stating that all circuits are busy and to try the call again within a few minutes.

In addition, the dedicated trunk facilities that route the call from the terminating network switch to the ACD (Automatic Call Distributor) at the serving relay center are monitored daily for compliance with blockage limitations.

Sprint ensures no greater than 1% blockage on a daily basis. Sprint offers state Relay customers the advantages of a superior digital fiber network unsurpassed in the industry. Through use of leading switch technology and SONET network survivability techniques, Sprint's network ensures a very low level of call interruption or blockage.

The Sprint network switch architecture is non-hierarchical, that is, all switches are directly interconnected. Sprint switches are processor-controlled using advanced digital technology and are virtually non-blocking. A call across the Sprint network passes over Inter Machine Trunks (IMT) which are engineered at P.01 Grade of Service (GOS) at the busy hour to allow for maximum network call completion. The P.01 GOS requirements ensure that at least 99% of calls to the Relay Center will reach a CA. The Local Exchange Carrier (LEC) network typically utilizes a P.01 grade of service also, and similar blockage rates should apply on their facilities.

***§64.604 (b) (ii) (E) A LEC shall provide the call attempt rates and the rates of calls blocked between the LEC and the TRS facility to relay administrators and TRS providers upon request.***

Performance of inbound traffic on each toll-free number where it enters the Sprint network or relay center facility is measured continuously and reported both daily and monthly. These measurements, which include traffic volume and blockage data, are compiled into a monthly report available to the state.

***§64.604 (b) (iii) Speed of answer requirements for VRS providers are phased-in as follows: by January 1, 2006, VRS providers must answer 80% of all calls within 180 seconds, measured on a monthly basis; by July 1, 2006, VRS providers must answer 80% of all calls within 150 seconds, measured on a monthly basis; and by January 1, 2007, VRS providers must answer 80% of all calls within 120 seconds, measured on a monthly basis. Abandoned calls shall be included in the VRS speed of answer calculation.***

Sprint Relay complies with this requirement. Please refer to Sprint Relay's report to the FCC under Appendix L.

### **B.3 Equal Access to Interexchange Carriers**

***§64.604 (b) (3) Equal access to interexchange carriers. TRS users shall have access to their chosen interexchange carrier through the TRS, and to all other operator services, to the same extent that such access is provided to voice users.***

Sprint provides California callers with the ability to have their intrastate, interstate and international calls carried by any Interexchange carrier who has agreed to participate in the California Carrier of Choice (COC) program. When a caller indicates their COC preference, the CA will verify that the requested carrier is a COC participant, if they are, the call will be routed accordingly. Callers will be able to use any billing method made available by the requested carrier including collect, third party, prepaid and calling cards.

The current participating members of Sprint Carrier of Choice program are:

- AT&T Communications
- Bell South Long Distance
- Bestline
- Birch Telecom
- Broadwing Communications
- Broadwing Telecommunications
- Cox Communications
- Excel Telecommunications, Inc.
- Global Crossings Telecommunications
- MCIWorldCom
- McLeod USA
- Qwest Communications
- SBC Communications Long Distance
- Souris River Telecommunications
- Sprint
- Telecomm\*USA (MCIWorldCom)

Touch America Services, Inc.  
U.S. Link  
VarTec dba Clear Choice Communications  
VarTec Telecom, Inc.  
Verizon Long Distance  
Winstar  
Working Assets  
WorldCom  
WorldXChange

If a California caller does not indicate a COC preference to the CA either on-line or in their customer database (or if their preferred carrier is not a COC participant), the call will be carried over the Sprint network. As with calls carried by Sprint, most COC participants limit billing methods based on the type of line from which the call originates. When the requested carrier is not a COC participant, Sprint has established a procedure where the carrier will be notified, verbally and in writing, of its obligation to provide access to TRS users and encourage their participation.

Please see Appendix E for a sample of the Carrier of Choice letter sent to carriers when a customer has a preferred interexchange carrier that does not participate in the Sprint COC program.

#### **B.4 TRS Facilities**

***§64.604 (b)(4) TRS facilities. (i) TRS shall operate every day, 24 hours a day. Relay services that are not mandated by this Commission need not be provided every day, 24 hours a day, except VRS.***

Sprint TRS and Sprint Relay Customer Service are both available 24 hours a day, every day of the year. Sprint utilizes both UPS and backup power generators to ensure that the relay centers have uninterrupted power even in the event of a power outage. UPS is used only long enough for the backup power generators to come on line – a matter of minutes. The backup power generators are supplied with sufficient fuel to maintain operations for at least 24 hours. The generators can stay in service for longer periods of time as long as fuel is available. Sprint IP/IP Wireless, VRS and CapTel Relay Services are also available 24 hours a day, seven days a week.

***§64.604 (b)(4) (ii) TRS shall have redundancy features functionally equivalent to the equipment in normal central offices, including uninterruptible power for emergency use.***

#### **Sprint Relay Network Support Plan**

##### **Service Reliability**

Sprint's service is provided through an all-fiber sophisticated management control networks that support backbone networks with digital switching architecture. These elements are combined to provide a highly reliable, proven, and redundant network. Survivability is a mandatory objective of

the Sprint network design. The Sprint network minimizes the adverse effect of service interruptions due to equipment failures or cable cuts, network overload conditions, or regional catastrophes.

A 100 percent fiber-optic network provides critical advantages over the other carriers. These advantages include:

#### Quality

Since voice and data are transmitted utilizing fiber optic technology, the problems of outdated analog and even modern microwave transmission simply do not apply. Noise, electrical interference, weather-impacting conditions, and fading are virtually eliminated.

#### Economy

The overall quality, architecture, and advanced technology of digital fiber optics make transmission so dependable that it costs us less to maintain, thereby passing the savings on to our customers.

#### Expandability

As demand for network capacity grows, the capacity of the existing single-mode fiber can grow. Due to the architecture and design of fiber optics, the capacity of the network can be upgraded to increase 2,000-fold.

#### Survivability

Network survivability is the ability of the network to cope with random disruptions of facilities and/or demand overloads. Sprint has established an objective to provide 100 percent capability to reroute backbone traffic during any single cable cut. This is a significant benefit to California, and a competitive differentiation of the Sprint network.

Network switched services are provided via 49 Northern Telecom DMS-250/300 switches at 29 locations nationwide. Three DMS-300s located at New York, NY; Fort Worth, TX; and Stockton, CA, serve as international gateways. The remaining 46 switches provide switching functions for Sprint's domestic switched services.

Interconnection of the 49 switches is provided in a non-hierarchical manner. This means that inter-machine trunk (IMT) groups connect each switch with all other switches within the network. Each of these IMT groups is split and routed through the Sprint fiber network over SONET route paths for protection and survivability. As an extra precaution to preclude any call blockage, Dynamically Controlled Routing (DCR) provides an additional layer of tandem routing options when a direct IMT is temporarily busy.

Reliability is ensured through a corporate commitment to maintain or surpass our system objectives. Beginning with the network design, reliability and efficiency are built into the system. Sprint continues to improve the network's reliability through the addition of new technologies.

The effectiveness of this highly reliable and survivable network is attributed to the redundant transmission and switching hardware configurations, SONET ring topology, and sophisticated

network management and control Centers. These factors combine to assure outstanding network performance and reliability for California.

## **Network Criteria**

### **System Capacity**

The Sprint network was built with the capacity to support every interLATA and intraLATA call available in the US. With the continuing development of network fiber transmission equipment to support higher speeds and larger bandwidth, the capacity of the Sprint network to support increasing customer requirements and technologies is assured well into the future.

### **Service Restoration**

Sprint provides for the restoration of service in the event of equipment malfunctions, isolated network overloads, major network disruptions and national/civil emergency situations. In the event of service disruption due to Sprint's equipment, service typically is restored within four hours after notification. Sprint does everything possible to prevent a total outage at its switch sites or at any of its' POPs through the use of advanced site designs. All processors, memory, and switch networks within our switches are fully redundant. All switch sites are protected by uninterruptible power supplies and halon systems planned in conjunction with local fire departments. Most of our new sites are earth sheltered to increase survivability. A multi-pronged program is used to minimize outages:

Do everything possible to minimize the impact of a "single point of failure." This includes:

- Diversification of all facilities' demands between switch sites. All switch sites are connected to the long haul network over at least two separate Sprint fiber routes; many have three paths.
- Deployment of multiple switches at large switching Centers. This prevents a single switch outage from disabling the site.
- Have systems in place allowing for the rapid redeployment of network resources in case of a catastrophic outage. Fiber cuts, which can affect thousands of calls at several locations, are sometimes unavoidable. Response to these outages is maximized through the following procedures:
  - Utilization of established plans to respond effectively to these outages.
  - The capability to rapidly deploy network transmission facilities when needed.
  - Immediate execution of alternate routing in the digital switches and cross-connect systems to assist in the handling of temporary network disruptions and forced overloads.
  - The entire spectrum of survivability needs, expectations, and requirements can be met by the proper engineering of customer and Sprint switches and facilities.

## **Fiber Backbone Loop Topology and Reconfiguration**

Fiber optic cable routes are designed to include redundant capacity to insure survivable fiber optic systems. Sprint's SONET network, using four-fiber bi-directional line switched ring capability, allows automatic switching to alternate paths to provide for traffic rerouting in the event of a route failure. The SONET fiber optic backbone topology is currently designed with more than 100 overlapping rings to ensure sufficient alternate paths for total network survivability.

Please see Appendix F for Sprint's Route Outage Prevention Programs. Also, please refer to the Disaster Recovery Plan provided in Appendix G for a complete explanation of Sprint's back-up plan.

## **B.5 Technology**

***§64.604 (b)(5) Technology. No regulation set forth in this subpart is intended to discourage or impair the development of improved technology that fosters the availability of telecommunications to person with disabilities. TRS facilities are permitted to use SS7 technology or any other type of similar technology to enhance the functional equivalency and quality of TRS. TRS facilities that utilize SS7 technology shall be subject to the Calling Party Telephone Number rules set forth at 47 CFR 64.1600 et seq.***

Sprint is in full compliance with 47 CFR §64.1600 et seq. of the FCC's Rules for providing SS7 capability.

In order to achieve functional equivalence, Sprint will continue to provide Caller ID service through SS7 signaling where the 10-digit number of the calling party is passed through to the called-party for local and long-distance calls. Sprint receives calling party identifying information including blocking information, from all Relay users. Sprint's Caller ID SS7 solution includes receiving the privacy bit information from the inbound Relay caller as well as other SS7 call information elements such as:

- Calling Party Number
- Charge Number
- Originating Line Information
- Sprint passes through the calling party information (rather than 711 or the number of the Relay Center)

Sprint meets all minimum technological standards regarding Video Relay Service. Sprint VRS is available through [www.sprintVRS.com](http://www.sprintVRS.com) and [sprintrelay.tv](http://sprintrelay.tv) (for Videophone users).

On 31 July 2006, Sprint launched **MySprintVRS number**. This **MySprintVRS Number** feature empowers Deaf and hard of hearing Video Relay Service (VRS) users with a simply means of receiving incoming calls. With MySprintVRS Number, a hearing user simply dials one toll free