

79. Discussion. We find that section 222's CPNI requirements do not apply to these customer profiles. Section 222 applies to telecommunications carriers.<sup>161</sup> Whether TRS providers are telecommunications carriers under the Act depends on whether TRS is considered a telecommunications service. The Act defines a telecommunications carrier as "... any provider of telecommunications services.... A telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in telecommunications services...."<sup>162</sup> An entity is engaged in telecommunications services if it offers "telecommunications" for a fee directly to the public.<sup>163</sup> Telecommunications is defined as "... the transmission, between or among points specified by the user, of information of the user's choosing, *without change in the form or content of the information as sent and received* (emphasis added)."<sup>164</sup>

80. TRS provides individuals with hearing or speech disabilities the ability to engage in communications using the telecommunications network. The Act defines telecommunications relay services as:

... telephone transmission services that *provide the ability* for an individual who has a hearing impairment or speech impairment to *engage in communication* by wire or radio with a hearing individual in a manner that is functionally equivalent to the ability of an individual who does not have a hearing impairment or speech impairment to communicate using voice communications services by wire or radio.<sup>165</sup>

81. Although TRS provides a form of telephone transmission service, its purpose is to provide individuals with hearing or speech disabilities the ability to communicate by wire or radio with hearing individuals through a change in the form of the information or message, most commonly from text to voice, thus facilitating a desired communication. Indeed, it is the sender's need for assistance in so changing the form of the information to be communicated that underlies the purpose of the relay service. For this very reason, TRS cannot be considered "telecommunications" under the definition in section 3(43), because that section excludes transmissions that "change the form or content of the information as sent or received." Because

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<sup>161</sup> 47 U.S.C. § 222(a) ("Every telecommunications carrier has a duty.....").

<sup>162</sup> 47 U.S.C. § 153(44).

<sup>163</sup> 47 U.S.C. § 153(46).

<sup>164</sup> 47 U.S.C. § 153(43).

<sup>165</sup> 47 U.S.C. § 225(a)(3).

TRS providers do not provide telecommunications services, they are not telecommunications carriers, and section 222 does not apply.

82. We conclude that transferring this data is essential to fulfilling our statutory mandate to ensure that TRS is available "in the most efficient manner." The transfer of TRS user profile information between TRS providers does not violate TRS user privacy expectations, because the user has agreed to give the data to the TRS provider. In addition, the reason for giving this data to the TRS provider remains even if there is a change in TRS providers. Both the transferor and transferee fall under the same confidentiality requirements and thus no privacy concerns are raised. We require, therefore, that all future state contracts shall provide for a transfer of this information. When entering new contracts, states must include language that requires that TRS customer profile data be transferred from an outgoing TRS vendor to the incoming TRS vendor.<sup>166</sup> Such data must be transferred in usable form at least 60 days prior to the provider's last day of service, in order to ensure minimum disruptions to customers' calls.<sup>167</sup>

83. We find that the data may not be used for any purpose other than the provision of TRS. While we find that the profile information should be transferred during a change in vendor, we agree with commenters that argue that the confidentiality of customer profile information is of paramount importance to TRS users.<sup>168</sup> We agree that unfettered access to TRS user information would violate the reasonable privacy expectations of the TRS user. To safeguard against abuse, we adopt NAD/CAN and TDI's suggestion and require that TRS customer profile information shall not be used for any purpose other than to connect the TRS user, for whom the profile exists, with the called parties desired by that TRS user.<sup>169</sup> We require that TRS customer profile information shall not be sold, distributed, shared, or revealed in any way by the relay center or its employees, unless compelled to do so by lawful order or in compliance with our requirement regarding a change in vendor.

84. We will not adopt the recommendation of KRSI and Mr. Stoltz to require TRS providers to obtain signed approvals from customers to allow the outgoing TRS provider to transfer the customer profile information to the incoming TRS provider.<sup>170</sup> Such a requirement is not

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<sup>166</sup> The requirements in our TRS rules also apply to any carrier within a state that does not have a TRS program that has been certified by the Commission under 47 U.S.C. § 225(f) ("Certification"). See 47 U.S.C. § 225(c).

<sup>167</sup> Ex Parte Comments of the Wisconsin Department of Administration, filed November 16, 1999, at 3.

<sup>168</sup> AIM Comments at 2; COR Reply at 15; KRSI Comments at 13; NAD/CAN Comments at 22; Mr. Stoltz Comments at 5-6; TDI Comments at 18-19.

<sup>169</sup> See NAD/CAN Comments at 22; TDI Comments at 18-19.

<sup>170</sup> KRSI Comments at 13; Mr. Stoltz Comments at 6.

generally supported by TRS users and would unnecessarily disrupt customers each time the vendor is changed. Our approach maintains privacy by requiring that both the old and new vendors are similarly restricted and cannot use the information for any purpose other than as an aid in the provision of TRS.

#### 4. Capability of Handling Any Type of Call

85. Our current rules require TRS to be capable “of handling any type of call normally provided by common carriers and the burden of proving the infeasibility of handling any type of call will be placed on the carriers.”<sup>171</sup> Our rules also require that “TRS users shall pay rates no greater than the rates paid for functionally equivalent voice communication services ....”<sup>172</sup> In spite of these provisions, TRS users continue to have trouble placing relay calls when using wireless service, using their long distance carrier of choice when making relay calls, and receiving the benefits of special pricing plans for both wireless and wireline phone calls when using relay service. Some of these problems appear to be due to carriers’ failure to enter into the necessary billing and other arrangements with TRS providers.<sup>173</sup> Carriers are obligated under our rules to take the action necessary for TRS providers to handle any type of call under equal pricing plans or to demonstrate the infeasibility of handling certain calls. TRS users must be able to place all wireless and wireline calls that have not otherwise been proven infeasible, and may not be charged rates that are any greater than rates paid for functionally equivalent voice communication services for those calls. We need not create a new rule to address this situation because our rules already establish this obligation.<sup>174</sup> We remind carriers that the Commission may consider enforcement action, including forfeitures, should this obligation not be met.<sup>175</sup>

#### 5. Treatment of Enhanced Services

86. Background. Throughout this rulemaking, many commenters have requested requiring relay service to accommodate subscription features and services, such as Caller ID, as well as features and services that TRS users typically may encounter, such as interactive menu

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<sup>171</sup> 47 C.F.R. § 64.604(a)(3).

<sup>172</sup> 47 C.F.R. § 64.604(c)(3).

<sup>173</sup> See Letter from Felecia L. Greer, Executive Secretary, Maryland Public Service Commission dated Sept. 22, 1999 (directing Qwest Communications Corp. to provide access to its services through the TRS within sixty days).

<sup>174</sup> 47 C.F.R. § 64.604(a)(3).

<sup>175</sup> Common Carrier Bureau Reminds All Common Carriers of their Obligation to Provide Access to Their Telecommunications Services via Telecommunications Relay Services, *Public Notice*, DA 99-1871, rel. Sept. 14, 1999.

systems.<sup>176</sup> In the *Notice*, we tentatively concluded that our jurisdiction under section 225 does not permit us to mandate access to such services. We asked for comment on how to approach two specific services raised by commenters: interactive menu systems and pay-per-call services.<sup>177</sup>

87. We also tentatively concluded that, although we do not have jurisdiction to require access to such services, we do have authority to establish rules to govern the way in which CAs handle recorded messages that require user interaction or input.<sup>178</sup> The current rules require CAs to relay all conversation verbatim unless the relay user specifically requests summarization.<sup>179</sup> We proposed to amend our rules to allow CAs, when encountering an interactive or recorded message during a TRS call, to use a “hot key” to alert the TRS user to the presence of a recorded message.<sup>180</sup> We stated that the CA should be permitted to inquire as to whether the TRS user wishes the CA to summarize the message or to listen for specific information. We sought comment on this proposed rule.<sup>181</sup>

88. Discussion. Upon further analysis, we conclude that section 225 does not prohibit us from requiring relay services to accommodate enhanced or information services. We find that section 225 does not limit relay service to telecommunications services, but rather, to the contrary, expressly reaches enhanced or information services. In fact, section 225 specifically defines TRS as a service that “provides the ability for an individual who has a hearing impairment or speech impairment to engage in communication by wire or radio ... in a manner that is functionally equivalent to the ability of an individual who does not have [such an]... impairment to communicate using voice communication services by wire or radio.” Communication by wire and radio encompasses both telecommunications and information or enhanced services. Both “communication by wire” and “communication by radio” are broad

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<sup>176</sup> See, e.g., NAD/CAN Comments at 26-27; NCOD Comments at 1; DSDHH Reply Comments at 8.

<sup>177</sup> *Notice*, 13 FCC Rcd at 14205.

<sup>178</sup> See 47 U.S.C. § 225 (a)(3), (b)(1), (d)(1).

<sup>179</sup> 47 C.F.R. § 64.604(a)(2).

<sup>180</sup> A “hot key” is part of some relay software programs that allows the CA to program certain phrases (*i.e.*, “ringing” or “number busy”) into a sequence in order to transmit these phrases to the user without typing the entire phrase. Thus, a CA can type an entire phrase or message in one or two keystrokes on the TTY rather than by typing every word of each letter of an entire phrase or message. The TTY user can then respond with a request that the CA summarize – or not summarize – the message being relayed.

<sup>181</sup> *Notice*, 13 FCC Rcd at 14205-6.

terms defined in section 3 of the Communications Act.<sup>182</sup> They are not limited to telecommunications services, but include “the transmission ...of writing, signs, signals, pictures and sounds of all kinds...including all instrumentalities, facilities, apparatus, and services (among other things, the receipt, forwarding, and delivery of communications) incidental to such transmission.”<sup>183</sup> This latter definition sweeps broadly and extends to information services, as defined in section 3(2) of the Act.

89. Moreover, we find that an interpretation of TRS that fails to follow the literal meaning of the statute would be contrary to its stated purpose. As explained below, a more limited reading that excludes information services would restrict us from ensuring that TRS is provided in a manner functionally equivalent to that provided users of voice telecommunications services, as the definition requires. Thus, a narrow interpretation would curtail delivery of relay services, rather than facilitate them, as Congress has expressly directed us to do in section 225(b)(1)(requiring us to ensure that “relay services are available, to the extent possible and in the most efficient manner...”). Thus, we find that by reading the statute consistent with its literal meaning, we further the express statutory purpose.

90. Notwithstanding our initial cautionary note in the *Notice* where we questioned the plain meaning of this definitional provision because of language in a House Report, upon further review we conclude that in fact the legislative history supports our reading of the statute. As commenters have explained, an exchange on the House floor after the House Report was issued persuasively demonstrates the intent of the drafters to reach audiotext services at a later date when “future technology can make these services available utilizing a relay service.”<sup>184</sup> This colloquy was intended to clarify that the inclusion of limiting language in the House Report was only intended to preclude relay of audiotext services to the extent not then technologically

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<sup>182</sup> 47 U.S.C. § 153.

<sup>183</sup> *Id.* at § 153(33), 153 (51).

<sup>184</sup> See NAD/CAN Comments at 12 (citing 136 Cong. Rec. H2434 (May 17, 1990)); NVRC Comments at 2; the Federation Comments at 3. The colloquy in the Congressional Record from almost a decade ago is:

Mr. Hoyer: Mr. Chairman, I am concerned about a provision contained in the report filed by the Committee on Energy and Commerce which states: "It is not the function of this legislation to facilitate access to audiotext services." Is it the gentleman's understanding that this bill precludes such access?

Mr. Thomas A. Luken: The gentleman raises a good question. While the legislation does not require access to audiotext services at this time, if future technology can make these services available utilizing a relay service, it is our intent to ensure such access. 136 Cong. Rec. H2434 (May 17, 1990).

possible. We therefore disagree with the few parties who claimed, without substantiation, that the statute should be interpreted more narrowly.<sup>185</sup>

91. Not only is the definition of TRS broad, but as noted, section 225 requires the Commission to ensure that interstate and intrastate relay services are available “to the extent possible.”<sup>186</sup> This provision requires us to evaluate the state of technology available to provide relay services, and determine what is possible. As technology improves, relay service and its standard offerings should also improve. In sum, given the clear statutory language defining TRS, the purpose of the provision, and its legislative history, we reject our earlier tentative position. Below we will address several improvements consumers have requested.

92. Interactive Menus and Voice Mail. We are convinced by the record that today relay service does not provide consumers with a hearing or speech disability the ability to engage in communication by wire or radio in a manner that is functionally equivalent to those consumers without such a disability when the communication encounters an interactive menu.<sup>187</sup> We are concerned, as are many TRS users, that individuals with disabilities are being excluded from access to these ubiquitous technologies.<sup>188</sup> In order to provide TRS that is functionally equivalent to telecommunications service provided to voice users, we must interpret our duty under section 225 to include the authority to require access through TRS to interactive menus. Interactive menu systems and recorded messages are increasingly used by businesses and services. They present substantial barriers to TRS users because the speed at which information is provided is too fast to allow the TRS user to respond within the system response time. As a result, TRS users are either unable to make calls that encounter interactive menus or other recorded messages or must frequently place a succession of calls to leave a message with, or access the information provided by, such systems.<sup>189</sup>

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<sup>185</sup> Ameritech Comments at 6-7; KRSI Comments at 7; SBC Comments at 8; Sprint Comments at 11.

<sup>186</sup> 47 U.S.C. § 225(b)(1).

<sup>187</sup> See, e.g., MATP Comments at 4; Missouri Assistive Technology Council and Project Comments at 5; NAD/CAN Comments at 4; NCOD Comments at 1; President’s Committee on Employment of People with Disabilities Comments at 9; SHHH Comments at 6; DSDHH Reply Comments at 8.

<sup>188</sup> See ATAP Comments at 3; MATP Comments at 4 - 5 (“Quite simply, if accessible products are not required and the TRS does not provide access, individuals with disabilities either have no access to the service or have access to a different service [such as a live person or message call-back via TTY] that is not equitable.”)

<sup>189</sup> Notice, 13 FCC Rcd at 14205.

93. The technologies to make these calls functionally equivalent are still being developed, and are required under Section 255 of the Act.<sup>190</sup> Section 255 requires telecommunication providers and manufacturers to make their services and products accessible to people with disabilities, if readily achievable. Until we determine that such technology is fully deployed, we require that certain features be available to all relay users for the handling of these calls.

94. First, we will adopt our proposal, supported by commenters, to require CAs to alert the user to the presence of a recorded message through a "hot key" on the CA's terminal.<sup>191</sup> The hot key would send text from the CA to the consumer's TTY indicating that a recording or interactive menu has been encountered. The consumer can respond by typing back instructions on how he or she wishes to proceed. Commenters correctly point out that our current rules permit the consumer to ask the CA to summarize a message.<sup>192</sup> Because some relay facilities may be technically incapable of receiving "interrupt" messages, a caller using a TTY who does not request summarization before the CA begins typing a lengthy recorded message would have no choice but to receive the entire recorded message verbatim. Our amendment gives these TTY users an opportunity to request summarization. We encourage relay providers to consider whether a user's preference to summarize messages should be included in the user's customer profile.

95. Second, we adopt the suggestion of some commenters that we require relay centers to record these recorded messages, which could be retained for the length of the call.<sup>193</sup> This will allow the CA to record the message at the relay center and rewind the message as needed to complete relaying of the message to the TRS user. Because the CA would have a recording of the lengthy message, the CA would be able to finish relaying the message to the

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<sup>190</sup> 47 U.S.C. § 255.

<sup>191</sup> See AIM Comments at 2; Bell Atlantic Comments at 6; FPSC Comments at 7; KRSI Comments at 7; MCI Comments at 5; Mr. Stoltz Comments at 3; the President's Committee Comments at 9-10; TDI Comments at 11; Texas PUC Comments at 10-11; Mr. Gregory Reply at 7; SBC Reply at 4.

<sup>192</sup> See Ms. Andrews Comments at 2 (CA, not caller, should initiate summarizing); FPSC Comments at 5 (CA should summarize all calls upon request); NAD/CAN Comments at 13 (citing 47 C.F.R. § 64.604(a)(2) to substantiate its claim that the Commission's rules already allow for such an exception); NVRC Comments at 2 (Commission should continue the current policy that TRS be verbatim unless requested by the consumer).

<sup>193</sup> See, e.g., MATP Comments at 4; COR Reply at 10 – 11; NAD/CAN Reply at 7; Mr. Nelson Reply at 3; NVRC Comments at 2; TDI Reply at 10; Texas PUC Reply at 11.

TRS user without having to redial the requested telephone number to hear the message time and again as she types it to the TRS user.<sup>194</sup>

96. Finally, oftentimes, consumers are unable to complete calls to interactive menus without repeating those calls. We agree with consumers who argue that the statute prohibits consumers from being charged for repeated calls.<sup>195</sup> The statute and our current rules state that users of telecommunications relay services should pay rates no greater than the rates paid for functionally equivalent voice communication services.<sup>196</sup> Because voice callers can expect to complete their interaction with an interactive menu system in one call, relay users shall not be charged for additional calls needed to complete their interactions with recorded messages or interactive menu systems. We anticipate that TRS providers will include these added costs of completing these interactions in their overall costs of providing relay service, for reimbursement from the state and interstate TRS Funds.

97. A few commenters suggested requiring access to a live operator in lieu of a menu or recorded message.<sup>197</sup> Section 225, however, does not give us any express authority over the entities employing menus and recorded messages. As noted above, however, we do expect that these features will become increasingly available as equipment manufacturers and service providers comply with our rules recently issued under section 255 of the Communications Act.

98. Pay-Per-Call Services. Commenters have also asked us to require that pay-per-call services be offered through TRS.<sup>198</sup> The record clearly indicates that it is technically feasible for relay centers to accommodate calls to pay-per-call services.<sup>199</sup> Pay-per-call services are services that are accessible through use of a 900 number.<sup>200</sup> The record shows that some relay

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<sup>194</sup> See MATP Comments at 4.

<sup>195</sup> See NAD/CAN Comments at 14; MCI Rely at 8. Because a charge is not associated with completing the first leg of a relay call to the TRS center, multiple charges occur only for toll calls.

<sup>196</sup> 47 U.S.C. § 225(c)(1)(D).

<sup>197</sup> See Bell Atlantic Comments at 6; Mr. LaPointe Comments at 1 (suggesting all menus should be programmed to allow a caller to access a live operator or to select a slower voice menu); Mr. Stoltz Comments at 3; SBC Reply at 4.

<sup>198</sup> NCOD at 1.

<sup>199</sup> See Maryland Comments at 8-9; NAD/CAN Comments at 12.

<sup>200</sup> Pay-per-call services cannot be accessed using a toll-free dialing sequence, such as a 1-800 number. A consumer can use a charge card to pay for the calls when they are made. See 47 U.S.C. § 228 ("Regulation of Carrier Offering of Pay-Per-Call Services"); 47 C.F.R. §§ 64.1600 et seq. ("Interstate Pay-Per-Call and Other Information

providers already offer pay-per-call services,<sup>201</sup> so we require relay service to offer pay-per-call as another component of functional equivalency.

## 6. Access to Emergency Services

99. Background. While Department of Justice regulations require state and local government entities to make emergency services directly accessible to TTY users,<sup>202</sup> some individuals with hearing and speech disabilities continue to contact emergency services via a TRS center. Our current rules provide that emergency calls should be handled in the same manner as any other TRS call.<sup>203</sup> In the *Notice*, we expressed our concern that the current handling of emergency calls may jeopardize public safety, and we noted that TRS users should be informed as to how emergency calls will be handled.<sup>204</sup> We asked TRS providers for a description of their current operating procedures for incoming emergency calls, and sought comment on whether TRS centers should be required to pass a caller's Automatic Number Identification (ANI) information to an emergency services operator, and how "emergency calls" should be defined for the purposes of TRS.<sup>205</sup>

100. Discussion. Notwithstanding the requirement that 911 operators are prepared to handle TTY calls directly, we have a separate obligation to make relay calls to 911 functionally equivalent to a direct call to 911. When a caller uses relay to call 911, the objective should be to provide the appropriate 911 operator with the information she needs to process the call as quickly as possible. Based on the record, we find there are two ways that the handling of emergency calls by relay centers can improve. First, calls must be directed as quickly as possible to the correct Public Safety Answering Point, or PSAP.<sup>206</sup> Second, the caller's telephone number, used by the PSAP to determine the location of the caller, must get to the PSAP quickly and in a format the PSAP can use. One relay provider has developed a solution that quickly connects callers to

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Services”).

<sup>201</sup> See *Notice*, 13 FCC Rcd at 14204.

<sup>202</sup> 28 C.F.R. § 35.162.

<sup>203</sup> 47 C.F.R. § 64.604(a)(3).

<sup>204</sup> See *Notice*, 13 FCC Rcd at 14203.

<sup>205</sup> *Id.*

<sup>206</sup> A “PSAP,” or Public Safety Answering Point, contacts police, fire or ambulance service when it receives calls through its emergency service number.

the appropriate PSAP by matching a caller's phone number with the appropriate PSAP electronically and transferring the call to the PSAP with two key strokes.<sup>207</sup> This solution appears to be the best solution currently available,<sup>208</sup> and appears to be possible for all relay providers to institute, as no party argued that it could not be done. Many parties supported this kind of connection for emergency calls.<sup>209</sup> We will require providers to provide this kind of immediate connection to 911. Any other resolution will unnecessarily delay the call.<sup>210</sup> When a voice caller dials 911, his phone number is automatically transmitted to the appropriate PSAP.

101. Second, as requested by commenters, we will require that CAs pass along the caller's telephone number to the PSAP orally even when the caller disconnects before being connected to emergency services.<sup>211</sup> With a voice caller, a PSAP will automatically receive the caller's telephone number even if the call is disconnected, and the PSAP will normally return the call if the caller hangs up or if the call is disconnected. We believe our requirement is necessary to ensure functionally equivalent service and will allow the PSAP to follow its normal procedures for a call that disconnects before being handled by an operator.<sup>212</sup> We would prefer to require that callers' telephone numbers automatically be relayed to the 911 operator from the relay operator, as suggested by many commenters,<sup>213</sup> but believe it would be premature to do so as no provider has demonstrated that capability and several have raised questions about its

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<sup>207</sup> AT&T Comments at 7-8. AT&T concludes the centers can receive ANI information through the telephone network, but the PBX cannot automatically pass the information to an emergency center because it is not equipped with required network signaling protocol.

<sup>208</sup> Other providers attempt to locate the correct PSAP by manually consulting directories. *See* APCO and NENA Reply Comments at 3; AT&T Comments at 7; KRSI Comments at 6-7; MCI Comments at 5; SBC Comments at 8; TX-ACSEC Comments at 3; TDI Reply at 8.

<sup>209</sup> *See* TX-ACSEC Comments at 2-3; Texas PUC Comments at 10; GTE Reply at 2; NAD/CAN Reply at 10; TDI Reply at 8.

<sup>210</sup> *See* SBC Reply at 7.

<sup>211</sup> *See* AIM Comments at 1; APCO and NENA Comments at 2; Bell Atlantic Comments at 5; the Federation Comments at 3; Mr. Gregory Comments at 10-11; MATP Comments at 3; NAD/CAN Comments at 10-11; Mr. Stoltz Comments at 3; TDI Comments at 16-17; TX-ACSEC Comments at 3-4; COR Reply at 9; Mr. Nelson Reply at 3.

<sup>212</sup> Relay service has often been referred to as a provider of "dial tone." By completing the call to the PSAP, the CA is simply providing a dial tone connection equivalent to that which would occur with a voice user.

<sup>213</sup> *See* APCO and NENA Comments at 2; Sprint Comments at 10; TX-ACSEC Comments at 4; NAD/CAN Reply at 10.

feasibility.<sup>214</sup> We will address some of the technical issues that would make this possible in our *Further Notice*.

102. With respect to a definition of emergency call, parties offered numerous suggestions.<sup>215</sup> We agree, however, with those commenters who argue that no definition of emergency is necessary, and that the TRS operator should simply be instructed to refer calls to emergency services when appropriate.<sup>216</sup> We believe that this approach is reasonable and recognizes that at times there may need to be a judgment made about when the caller is in distress and in need of emergency assistance.<sup>217</sup>

## 7. Outreach

103. Our current rule states that carriers, "through publication in their directories, periodic bill inserts, placement of TRS instructions in telephone directories, through directory assistance services, and incorporation of TTY numbers in telephone directories, shall assure that callers in their service areas are aware of the availability and use of TRS."<sup>218</sup> Despite the Commission's decision in the *Notice* that we would not seek comment on outreach activities, several parties provided lengthy comments on the need for more effective outreach activities and strongly encouraged the Commission to propose rules concerning the effectiveness of information and outreach programs.<sup>219</sup>

104. We are convinced by the comments that this rule has not effectively ensured that callers are aware of TRS, and that the lack of awareness adversely affects the quality of TRS. Several parties contend that TRS users find it difficult to communicate with callers who are

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<sup>214</sup> See Sprint Comments at 10.

<sup>215</sup> See AIM Comments at 1 (where one or more persons are faced with death or injury or if there is a risk of serious property damage); APCO and NENA Comments at 3; Federation Comments at 3; NVRC Comments at 2; SBC Reply at 7 (include calls expressly requesting connection to 911 or requesting assistance from "a public agency of the type typically accessed via a 911 system by persons without hearing or speech impairments (e.g., police, fire, and ambulance or emergency squads)").

<sup>216</sup> See Bell Atlantic Comments at 5; KRSI Comments at 6; SBC Comments at 8; NAD/CAN Reply at 11; SBC Reply at 6.

<sup>217</sup> See NAD/CAN Comments at 11.

<sup>218</sup> 47 C.F.R. § 225.

<sup>219</sup> Maryland Comments at 12; TDI Comments at 20; NAD/CAN Reply Comments at 12; and NVRC Reply Comments at 3.

unaware of the existence of TRS. Callers using a relay service experience an alarming number of hang-ups by people receiving the TRS call who are not familiar with, and do not understand, the service.<sup>220</sup> Commenters state that many employment opportunities are not extended to individuals with hearing disabilities because employers are uncomfortable using, or are unwilling to use, TRS for normal business transactions.<sup>221</sup>

105. While we have not given public notice sufficient to change the rules in this Order, we will propose further changes for comment. We clarify that the current rule obligates carriers to assure that “callers” in their service areas are aware of TRS.<sup>222</sup> The term “callers” refers to the general public, not just consumers with speech and hearing disabilities. It is crucial for everyone to be aware of the availability of TRS for it to offer the functional equivalence required by the statute. As Congress has stated, TRS was designed to help bridge the gap between people with hearing and speech disabilities and people without such disabilities with respect to telecommunications services. The lack of public awareness prevents TRS from achieving this Congressionally mandated objective. We also note that, as we have determined that TRS includes services other than traditional TTY-based relay service, outreach efforts should now include information about these relay services as well.

## 8. Enforcement and Certification

### a. Substantive Changes to Certified TRS Programs

106. Background. In the *Notice*, we proposed to improve Commission oversight of certified state TRS programs. First, we tentatively concluded that states must notify the Commission of substantive changes in their state TRS program within sixty days of the effective date of the change and file documentation demonstrating that the state TRS program remains in compliance with the Commission's mandatory minimum standards.<sup>223</sup>

107. Discussion. We adopt our tentative conclusion to require that states notify the Commission, in writing, about substantive changes in their TRS programs within 60 days of when they occur, as is supported by most parties.<sup>224</sup> Such notification shall include a summary of

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<sup>220</sup> NAD/CAN Reply Comments at 12.

<sup>221</sup> NAD/CAN Reply Comments at 12; TDI Reply Comments at 15.

<sup>222</sup> 47 C.F.R. § 64.604(c)(2).

<sup>223</sup> See *Notice*, 13 FCC Rcd at 14216.

<sup>224</sup> See AIM Comments at 2; KRSI Comments at 14; MATP Comments at 5; NAD/CAN Comments at 23;

the action taken, the reason for the change, and a certification that the state TRS program continues to meet federal minimum standards after implementing the substantive change. Substantive changes include but are not limited to: change in state vendor, change in a state TRS program to allow a multiple vendor environment, and changes in state rules related to any of the federal minimum standards for TRS. We would also consider a major change in technology used by a state program to be a substantive change.<sup>225</sup>

108. The record indicates that most parties support our proposals to strengthen the Commission's oversight and enforcement of standards regarding the state TRS programs, and we disagree with commenters who say that the Commission already has adequate oversight of state TRS programs under its current rules.<sup>226</sup> States make changes to their TRS programs throughout the five year certification period. Providing the Commission notice of substantive changes will help ensure that such changes do not affect the state TRS programs' compliance with Commission rules. This minimal notification requirement will ensure that current information relating to TRS programs is available and will also ensure that state TRS programs continue to provide high quality TRS throughout the five-year certification period. In addition, informing the Commission of changes will help the Commission – and other relay administrators and consumers – be informed of developments in relay services as they occur throughout the nation.<sup>227</sup>

109. We do not believe that this notification requirement will require states to make burdensome filings, or that such filings will affect their "ability and willingness" to make such changes to their TRS programs, or modify their programs to meet specific state needs.<sup>228</sup> First, we require notification only for changes that are "substantial," which suggests that these changes will not occur often. Second, the filing should be brief because state relay administrators need only explain the change they have made and certify continued compliance with the federal minimum standards.

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SHHH Comments at 11; ; Mr. Stoltz Comments at 6; TDI Comments at 19; COR Reply Comments at 13-14; NVRC Reply Comments at 3; TRS Advisory Council Reply Comments at 5. Sprint states that it believes that the proposed rule amendment will help the Commission ensure that interstate and intrastate TRS are available to the extent possible and in the most efficient manner to people in the United States with hearing or speech disabilities. *See* Sprint Comments at 14-15.

<sup>225</sup> *See* Mr. Gregory Comments at 19.

<sup>226</sup> *See* the Board Comments at 2, 4; FPSC Comments at 11.

<sup>227</sup> Mr. Gregory Comments at 19.

<sup>228</sup> *See* the Board Comments at 3-4.

**b. Information on Complaint Procedures**

110. Background. In the *Notice*, we tentatively concluded that we should amend our rules to require that, as a condition of certification, a state TRS program must demonstrate that its program makes available to TRS users informational materials on state and Commission complaint procedures sufficient for users to know the proper procedures for filing complaints.<sup>229</sup>

111. Discussion. We will adopt our tentative conclusion, supported by commenters, that state TRS programs must make available to TRS users information on state and Commission complaint procedures.<sup>230</sup> We will adopt a rule to require such efforts as a minimum standard.

112. We will also require, as suggested by several parties, that states provide contact information to the Commission, which will be posted on the Commission's web site.<sup>231</sup> We agree that providing an Internet reference would enable customers to easily find the appropriate forum for filing their complaints.<sup>232</sup> We, therefore, require that state TRS administrators, by June 30, 2000, submit the name and address of a contact person or office for filing consumer complaints about intrastate TRS service to the Consumer Information Bureau, Disability Rights Office, 445 12<sup>th</sup> Street SW, Suite 6-A207, Washington, DC, 20554. The state complaint contacts will be on file at our reference center located at Commission headquarters and will be posted on the Internet at the Commission's web site at <http://www.fcc.gov>. Each state's contact information shall include, at a minimum: the name and address of the state office that receives complaints, grievances, inquiries and suggestions, along with the relevant voice and TTY telephone number(s), fax number, e-mail address, and physical address to which correspondence should be sent. It should also include information on the relay provider and how to contact the provider directly.

113. We also require that interstate relay providers submit to the Commission, by June 30, 2000, the name and address of a contact person or office to receive input and inquiries regarding interstate TRS service. The Commission also will post this information on the

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<sup>229</sup> See *Notice*, 13 FCC Rcd 14216-7.

<sup>230</sup> See AIM Comments at 2; KRSI Comments at 14; MATP Comments at 5; NAD/CAN Comments at 23; SHHH Comments at 11; Sprint Comments at 14; Mr. Stoltz Comments at 6; COR Reply Comments at 13-14; NVRC Reply Comments at 3.

<sup>231</sup> the Federation Comments at 5-6; NAD/CAN Comments at 23-24; NVRC Comments at 4; SHHH Comments at 11; COR Reply Comments at 14.

<sup>232</sup> NAD/CAN Comments at 23.

Internet. We require that similar information be on file for all relay providers having state TRS contracts.

114. We remind relay users that the statute requires that complaints about intrastate service be filed first with the state.<sup>233</sup> Having state contact information and state complaint procedures on file at the Commission and on the Commission's web site will help disseminate information that enables TRS users to direct their complaints or suggestions on how to improve the quality of TRS to the proper forum.

### c. Complaint Procedures

115. Background. Section 225(g) directs the Commission to refer complaints about intrastate TRS to those states which have certified TRS programs; states have 180 days to resolve the complaints, unless a shorter time is prescribed by state law.<sup>234</sup> Other complaints filed with the Commission, either about interstate TRS or about intrastate TRS in states without a certified program, must be resolved by the Commission within 180 days of their filing.<sup>235</sup> In 1991, the Commission promulgated rules prescribing the manner in which complaints will be either referred to a state as required under section 225(g) or, if exclusively within our jurisdiction, resolved by the Commission.<sup>236</sup> In the *Notice*, we requested comment on whether modifications to our complaint rules are needed to better serve the needs of TRS users.<sup>237</sup>

116. Discussion. The record indicates that there is considerable consumer dissatisfaction with the speed and effectiveness of both state and federal complaint processes.<sup>238</sup> With respect to federal complaint processes, we agree with commenters that the existing formal process is simply too unwieldy for most consumers.

117. In other areas where we experience complaints from consumers, we have adopted processes that make it easy for consumers to file complaints and for defendant companies to

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<sup>233</sup> 47 U.S.C. § 225(g).

<sup>234</sup> *Id.*

<sup>235</sup> See 47 C.F.R. § 64.604(c)(1).

<sup>236</sup> See 47 C.F.R. § 64.604(c)(5).

<sup>237</sup> *Notice*, 13 FCC Rcd at 14217.

<sup>238</sup> See, e.g., the Federation Comments at 5-6; NAD/CAN Comments at 23-24; NVRC Comments at 4; SHHH Comments at 11; COR Reply Comments at 14.

move expeditiously to resolve them. For example, our rules governing the procedures to be followed when complaints are filed pursuant to section 255 of the Act<sup>239</sup> give consumers the option of filing complaints “informally.”<sup>240</sup> The principal objective of the informal mechanism is to afford consumers and affected companies non-adversarial opportunities to resolve issues or concerns without expending the time, effort and money typically associated with our formal adjudicatory proceedings. We believe that our section 255 rules can serve as a useful model for TRS complaints. Therefore we will incorporate this “consumer friendly” model into our TRS rules. We retain our existing TRS complaint procedures as an option for consumers desiring formal adjudication of a complaint.

118. The new rules will make it easy for consumers to lodge complaints and facilitate cooperative efforts between consumers and TRS providers to resolve them quickly without extensive involvement by the Commission. At the same time, the rules position Commission staff to be pro-active in handling complaints that raise troublesome compliance questions or which otherwise may not be susceptible to informal resolution by the parties.<sup>241</sup> For example, Commission staff will have the authority to require a response to an informal complaint in less than thirty days if warranted under the circumstances of a complaint. In addition, the staff may, in its discretion, require a TRS provider to appear before it, via telephone conference or in person, to bring and give evidence relevant to a complaint. Finally, if the nature or number of complaints against a particular TRS provider evinces an underlying compliance problem, the staff may initiate on its own motion, or recommend to the Commission if appropriate, prompt and decisive enforcement actions.<sup>242</sup>

119. With respect to state complaint processes, Section 225 contemplates that intrastate complaints filed under that section will be resolved by the state within 180 days after the complaint is filed. We believe that, regardless of whether a complaint is filed with the state relay

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<sup>239</sup> 47 U.S.C. § 225.

<sup>240</sup> See 47 C.F.R. § 6.16.

<sup>241</sup> We note that in administering our rules pertaining to informal complaints against common carriers under section 208 of the Act, Commission staff works cooperatively with consumers and companies to promote meaningful solutions to problems raised by consumers and to address underlying compliance concerns. In addition, the staff routinely meets with consumer groups and company representatives to evaluate the effectiveness of the process and explore improvements that will better serve the needs of consumers and the industry. We expect the staff to use a similar approach in administering our TRS rules.

<sup>242</sup> The Act gives the Commission, and its staff pursuant to delegated authority, broad powers to inquire into or investigate the activities and practices of parties who are subject to the Act’s requirements. See, e.g., sections 4 (i) and 403 of the Act, 47 U.S.C. §§ 154(i), 403.

administrator, a state PUC, the relay provider, or with any other state entity, the consumer's complaint should be resolved within 180 days of the date it is filed with a state entity. Where a relay complaint is filed with a provider, administrator, or other entity that is not the state entity designated to handle relay complaints, the entity receiving such complaint shall forward such complaints they receive from consumers to the appropriate state entity. The state entity designated to resolve complaints should develop a means by which, regardless of which state entity receives the complaint, the complaint is resolved within 180 days. This should address consumers' comments that complaints are neither being resolved nor being forwarded to the appropriate state agency,<sup>243</sup> because the designated entity will have an interest in ensuring that the party receiving the complaint resolves it promptly.

#### **d. Improving the Monitoring of Service Quality**

120. Background. We asked commenters to discuss whether we should adopt specific guidelines to assess whether a state TRS program provides "adequate procedures and remedies for enforcing the requirements of the state program" as is required by the statute.<sup>244</sup>

121. Discussion. We agree with parties that requiring state applicants for TRS certification and interstate TRS providers to maintain a log of consumer complaints that allege a violation of the federal minimum standards would substantially help the Commission monitor the service quality of the relay programs.<sup>245</sup> We will adopt such a requirement. The logs must include all complaints alleging a breach of TRS rules, whether they were filed with the TRS provider or the State, and must be retained until the next application for certification is granted. The log shall include, at a minimum, the date that the complaint was lodged, the nature of the complaint, the date of resolution and how it was resolved. If state TRS programs and providers are in compliance with federal minimum standards, maintaining the log should not be burdensome.<sup>246</sup> In addition, we will require that summaries of these logs indicating the number of complaints received must be submitted annually to the Consumer Information Bureau, Disability Rights Office, 445 12<sup>th</sup> Street SW, Washington, DC, 20554, and at the time of certification.

122. This information will provide an early warning system to the Commission of possible service quality problems during the five-year certification period. In addition, it will

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<sup>243</sup> TDI Comments at 19.

<sup>244</sup> 47 U.S.C. § 225(f)(2)(B).

<sup>245</sup> Mr. Gregory Comments at 19-20; NAD/CAN Comments at 23; TDI Comments at 19.

<sup>246</sup> NAD/CAN Comments at 23.

allow the Commission to determine whether the state has appropriately addressed consumer complaints during the certification process.<sup>247</sup> It will also enable the Commission to spot national trends that may lend themselves to coordinated solutions. Finally, the information will be available to enable states to communicate with one another to learn how other states have resolved certain complaints.

## 9. Advisory Committee

123. Background. In the *Notice*, the Commission stated that a number of parties had recommended in their comments to the *NOI* that we consider establishing an advisory committee to monitor TRS quality issues, or expand the role of the Interstate TRS Fund Advisory Council to allow that body to consider also TRS quality issues in addition to funding issues.<sup>248</sup> We recognized the importance of efforts to ensure the quality of TRS, but specifically declined to propose creation of an advisory committee.<sup>249</sup>

124. Discussion. We recognize the importance of obtaining feedback from TRS users in order to realize our statutory obligations. We recognize the need for facilitating ongoing dialogue with consumers, state relay administrators, and relay providers. We will be exploring various possibilities for establishing such a dialogue, including the possibility of establishing an advisory committee under the Federal Advisory Committee Act.<sup>250</sup>

## II. FURTHER NOTICE OF PROPOSED RULEMAKING

### A. OVERVIEW

125. As part of our ongoing efforts to evaluate technology and the needs of the disability community, we raise additional issues here for further review. There are emerging and existing technologies that we have not yet fully evaluated for inclusion in relay service.

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<sup>247</sup> See Mr. Gregory Comments at 20.

<sup>248</sup> *Notice*, 13 FCC Rcd at 14217.

<sup>249</sup> *Id.*

<sup>250</sup> Federal Advisory Committee Act, 5 U.S.C., App. (1988).

## B. FURTHER RULES FOR TRS RELAY SERVICE

126. Some commenters have suggested that STS relay service should have its own separate national 800 number that contains as many identical digits as possible.<sup>251</sup> Commenters suggest that this is particularly important for STS relay because many people with speech disabilities have memory problems and, consequently, find it easier to say one number over again than to say different numbers. We ask for comment on whether a separate nationwide access number for STS relay service is desirable. We have set aside 711 for use with TRS, and are now moving towards implementing 711 nationwide.<sup>252</sup> We ask whether nationwide access to relay services through 711 can meet this need. We also ask parties for any other proposals that would make TRS more functionally equivalent for TRS users. We ask parties who suggest additional rules to provide specific language.

## C. AVAILABILITY OF SS7 TO TRS CENTERS

127. There are several areas where relay provider access to information normally only available to common carriers may significantly improve the quality of relay services. Information such as the presubscribed carrier and the originating number are normally passed along from carrier to carrier with the call through Signaling System 7 (SS7) technology. If relay providers had access to this information, they may be able to provide Caller ID, improved access to 911, and eliminate the need to collect some of information collected manually today through caller profiles. Currently our rules do not allow entities other than common carriers to purchase SS7 service. TRS centers, therefore, do not receive information normally transferred through the out-of-band signaling SS7 provides. Specifically, 47 C.F.R. §64.1600(f) defines SS7 service as “a *carrier to carrier* out-of-band signaling network used for call routing, billing, and management [italics added].”<sup>253</sup> We seek comment on whether 47 C.F.R. §64.1600 should be amended to include TRS providers as lawful recipients and users of SS7 data. We also seek comment on whether the Commission has jurisdiction to allow TRS centers access to SS7 technology.

128. In the accompanying *Report and Order*, we describe the process used by TRS centers to manually collect information about their callers in order to efficiently handle calls. CAs create and maintain personal profiles on TRS users so that CAs can correctly and efficiently

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<sup>251</sup> *Id.*

<sup>252</sup> The Use of N11 Codes and Abbreviated Dialing Arrangements, CC Docket No. 92-105, *First Report and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 5572 (1997).

<sup>253</sup> 47 C.F.R. § 1600.

handle the call. Some of the information regularly collected overlaps a caller's subscriber list information which is included in SS7 data.<sup>254</sup> TRS providers' current practice of building databases manually by interviewing each TRS user does not appear to be the most efficient manner of providing TRS.<sup>255</sup> Accordingly, we seek comment on making available to TRS centers SS7 technology to allow the same information that is transferred from one common carrier to another, to be transferred from common carrier to TRS provider, and from TRS provider to common carrier. In doing so, we seek to obviate the need for TRS centers to manually collect the overlapping information that normally resides in the public switched telephone network. The transmission of SS7 will not obviate the need to collect all caller information specific to making a TRS call, such as a user's preference for voice carryover, but we tentatively conclude that use of SS7 will render provision of relay service more functionally equivalent to service provided to voice users. We ask parties to provide comments on these issues.

129. We tentatively conclude that access to SS7 will resolve problems described by several commenters between relay and Caller ID service.<sup>256</sup> For TRS calls, if the called party is a Caller ID customer, the displayed Caller ID is sometimes a number for the TRS center itself, sometimes the number of the calling party, and sometimes unavailable. The called party may not recognize the incoming telephone number and decline to answer the call. If the called party knew the identity of the calling party, or knew that the call was from a TRS center, he or she may be more likely to answer the call. We seek comment on whether the problem could be addressed by allowing TRS centers to receive SS7 data.

130. Alternatively, we ask whether a signal could be devised that would indicate that an incoming call is either from a TRS user or from the TRS center. Each TRS call actually involves two telephone calls: the call from the TRS user to the TRS center, and the call from the TRS center to the party with whom the TRS user wishes to communicate. The user's telephone number is delivered to the TRS center during the first leg of the call. With existing TRS centers, for the second leg of the call, the trunk from the TRS center to the LEC switch is either a PBX-like trunk or a Feature Group D trunk. If a PBX-like trunk is used, the called party's Caller ID display will generally show the telephone number of the TRS center telephone trunk that carried the call unless the TRS center makes the number unavailable. If Feature Group D trunking is used instead, according to the Interexchange Carrier Compatibility Forum, TRS centers send information to the network that clearly indicates that the call is from a TRS center. Although the

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<sup>254</sup> 47 C.F.R. §§ 64.2003(c)(2) and (g) defines subscriber list information, and excludes it from the definition of CPNI.

<sup>255</sup> 47 U.S.C. § 225(b)(1).

<sup>256</sup> NAD Comments at 26-27; TDI Comments at 21-22.

telephone number of the TRS center cannot generally be determined from the information, the call may still be identified as being a TRS call. Since the TRS center's phone number is not included, it cannot be delivered to the destination phone's Caller ID box. However, since the network is able to identify the second leg of the call as originating from a relay center, it may be possible to deliver a "dummy" telephone number to the Caller ID box. We tentatively conclude that delivery of either the TRS center's number or a standard TRS number, such as 711, for Caller ID on incoming TRS calls is technically feasible. Deaf or hard of hearing individuals rely on TRS to call people who use voice telephones. Voice telephone users who have Caller ID devices, however, frequently do not answer an incoming TRS call, because they mistake it for a telemarketing call, since the source of either type of call often is not displayed on the Caller ID display screen. Until this issue is finally resolved, we strongly encourage carriers and providers to do all that is possible to implement this solution.

131. If parties disagree with our tentative conclusion, we ask them to propose an alternative solution. We also ask parties to comment on whether moving from Feature Group D to SS7 signaling is necessary or desirable to implement this or an alternative solution. Finally, since the same ANI signaling information is frequently used by both billing systems and Caller ID systems, we ask whether it would be possible to implement this or an alternative solution.

132. In addition, we ask for comment on the impact of the Reveal and Anonymous Call Rejection (ACR) features on TTY-to-TTY calls. The Commission staff is in receipt of information that these features block TTY calls, where the called party has a TTY attached to his or her line and also subscribes to Reveal and ACR. The calling TTY signal is blocked even where the calling party's line does not block Caller ID information. In addition, we ask for comment on whether access to SS7 technology will allow relay providers to transfer emergency calls, with the originating number, to 911 operators. Finally, we ask for comment on what new services and features SS7 could make available to TRS users and TRS centers.

133. If SS7 technology is not the choice of all TRS centers, we ask for comment on the relative advantages and disadvantages of using Feature Group D Automatic Number Identification (ANI) and Private Branch Exchange (PBX) trunk signaling. We request specific comment on what new services and features Feature Group D ANI and PBX trunk signaling could make available to TRS users and TRS centers. We also ask for comment regarding the cost of implementing SS7 by TRS centers, and whether or not Local Exchange Carriers (LECs), Interexchange Carriers (IXCs) and Commercial Mobile Radio Service (CMRS) carriers would incur additional costs if they had to transmit SS7 data to TRS centers. Parties should also comment regarding the cost to TRS centers, LECs, IXCs and CMRS carriers that would be incurred if they were to interface with a TRS center using an alternative to SS7. Finally, we ask for comment on whether additional regulations in this area are necessary to provide functionally equivalent service to TRS users, or whether the goal can be achieved in a less regulatory manner.

## D. OUTREACH

134. We tentatively conclude that TRS service would be improved with a nationwide awareness campaign that would reach the groups suggested by commenters - all potential TRS users,<sup>257</sup> consumers with disabilities,<sup>258</sup> senior citizens who have lost their hearing late in life,<sup>259</sup> potential STS users,<sup>260</sup> and the general public. We seek comment on the suggestion made by a number of commenters that the outreach effort be supported by the interstate TRS Fund and that the interstate TRS Fund administrator administer the funding for educational outreach programs.<sup>261</sup> We further propose to amend the mission of the Interstate TRS Fund Advisory Council to include establishing guidelines and a procedure to fund a coordinated national outreach campaign. We base this recommendation on the success of Maryland's apparently effective advertising campaign, which included television advertisements. Maryland asserts that as a result of its campaign, public awareness is at an all-time high, telephone inquiries to the state's Maryland Relay customer service department for information regarding relay have risen dramatically, and call volumes to the relay center have increased.<sup>262</sup> We propose that the campaign address all types of relay services and be based on the experience of the Maryland Department of Management and Budget efforts.<sup>263</sup> We propose that the Advisory Council develop its plan with input from all stakeholders.

135. We believe this proposal will be more cost-effective than individual plans developed by each state, as some commenters suggest.<sup>264</sup> We would not expect this plan to be implemented in isolation from the state relay programs, however. A good plan may well have

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<sup>257</sup> See Maryland Comments at 13; NAD/CAN Reply Comments at 12; NVRC Reply Comments at 3; TDI Reply Comments at 15.

<sup>258</sup> See the President's Committee Comments at 7.

<sup>259</sup> See NAD/CAN Reply Comments at 12.

<sup>260</sup> See COR Reply Comments at 6.

<sup>261</sup> See Maryland Comments at 13; NAD/CAN Reply Comments at 12; TDI Reply Comments at 15.

<sup>262</sup> Maryland Comments at 12-13.

<sup>263</sup> See FCC Public Forum on 711 Access to Telecommunications Relay Services CC Docket No. 92-105 September 8, 1999, Comment by Gil Becker (Education Segment), Comment by Brenda Battat (Education Segment).

<sup>264</sup> See Mr. Behnke Reply Comments at 1; Ms. Curtis Reply Comments at 1; Mr. Kemp Reply Comments at 1; Ms. Moore Reply Comments at 1; and Dr. Pray Reply Comments at 1.

different emphasis in different states or regions, but we believe it can be efficiently developed and coordinated nationally.

136. Finally, we request comment on whether we should require a state's certification program to include, and budget for, outreach efforts.

## E. TECHNOLOGIES, FEATURES AND SERVICES

137. The language in section 225(d)(2) requires us to ensure that rules prescribed to implement section 225 encourage, consistent with section 7(a) of the Act, the use of existing technology and do not discourage or impair the development of improved technology.<sup>265</sup> In keeping with the statute, our rules specify that no TRS provision set forth in the Commission's rules is intended to discourage or impair the development of improved technology that fosters the availability of telecommunications to persons with disabilities. In addition, as noted above, the functionally equivalent standard is a continuing goal which requires periodic reassessment. Commenters argue strenuously that the services and features offered by the relay system must keep up with changes and improvements in technologies and service offerings available to nondisabled users.<sup>266</sup>

138. In response to the *Notice*, consumers urged the Commission to require a number of relay features as part of its minimum technical standards, asserting that they are technically feasible and would further efforts to provide functionally equivalent service.<sup>267</sup> We seek comment on these and similar features which would enable consumers with disabilities to communicate through the relay service. We seek comment on equipment configurations, the extent to which these features are available or can be offered immediately through TRS, and any other relevant technical or economic factors, including any limitations that currently exist and how to transcend them. A number of these features and services are already offered in some states. We seek comment on what services states are providing and how they are providing them. These features include two-line VCO,<sup>268</sup> voice to text (VTT),<sup>269</sup> two line HCO, reverse

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<sup>265</sup> 47 U.S.C. § 225 (d)(2).

<sup>266</sup> See AIM Comments at 2; ATAP Comments at 3; CTIA Comments at 1-2.

<sup>267</sup> We recognized in the *Notice* that, in response to our original *NOI*, commenters requested that the Commission require call release, Caller ID, conference calling through TRS, two line VCO, and automatic call forwarding. *Notice*, 13 FCC Rcd at 14218.

<sup>268</sup> See NAD/CAN Comments at 24-27; NVRC Comments at 3; TDI Comments at 21-22; NVRC Reply at 1; TDI Reply at 17. Two-line voice carryover (VCO) enables consumers to use one line for voicing and the other for receiving TTY transmissions in conference calls.

<sup>269</sup> See NAD/CAN Comments at 24-27; TDI Comments at 21-22. Voice-to-text (VTT) permits relay calls to

VCO, reverse HCO, VCO to TTY, VCO to VCO, HCO to TTY, and HCO to HCO. We also seek comment on features such as call release,<sup>270</sup> automatic call forwarding,<sup>271</sup> interrupt capability,<sup>272</sup> answering machine retrieval, extended community call blocking, pay per use feature blocks, call waiting, return call and call back, three way calling, speed dialing, distinctive ring, and repeat dialing. We tentatively conclude that these various features and services are capable of being provided to relay users and that they must be provided in order for TRS to remain functionally equivalent. We seek comment on this tentative conclusion and are especially interested in hearing from relay providers. We note that our rules require that TRS be capable of handling any type of call normally provided by common carriers and that the burden of proving the infeasibility of handling any type of call will be placed on the carrier. We hope to receive specific information as to how to make these services and features available to TRS users. Parties that disagree with our tentative conclusion that these services must be made available should explain their position in detail, providing technical and specific explanations as to the infeasibility of providing any of these features. We also seek comment on improved transmission speed,<sup>273</sup> wireless messaging services,<sup>274</sup> use of the World Wide Web for voice communications, internet telephony, and any other technologies or changes to technology that may improve relay services or should be available via TRS.

139. Some parties filed comments urging the Commission to address the issue of enhanced protocol, such as the V.18 protocol standard<sup>275</sup>, suggesting that, with the standard, improved interconnectivity between TTYs and digital wireless devices is technically feasible.<sup>276</sup> Since initial guidelines for TRS were established by the Commission, new transmission

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take place between VCO users and TTY users.

<sup>270</sup> See NAD/CAN Comments at 24-27; Mr. Nelson Reply Comments at 7; TDI Comments at 21-22; TDI Reply Comments at 17. Call release prevents erroneous disconnections when a TTY caller must go through a switchboard at a hotel or hospital to reach the private room of the recipient of the TTY call.

<sup>271</sup> See Mr. Nelson Reply at 7.

<sup>272</sup> See NVRC Comments at 3; NVRC Reply Comments at 1.

<sup>273</sup> See Mr. Gregory Comments at 7.

<sup>274</sup> See Wynd Reply at 1.

<sup>275</sup> According to the International Telecommunications Union, the V.18 protocol standard "is intended for use in text telephone, in interworking units, in text relay service, in emergency centers, and in computers to be used for text telephony in the PSTN." See CTIA Comments at 5.

<sup>276</sup> CTIA Comments at 2-3; TDI Comments at 4-5; GTE Reply Comments at 5.

protocols for TTY have evolved. Although 45.45 bps Baudot is still the dominant protocol and the one present in all TTYs, Bell 103 ASCII, V-series ASCII protocols, and proprietary protocols are also used in TTY products. Many TRS centers support all of the open protocols, and some support TurboCode by Ultratec, which is a proprietary protocol.

140. In addition, international and domestic standards have been written since the initial guidelines were established. ITU-T V.18 is an interworking procedure between data communications equipment and the text telephones used throughout the world. It is intended to unify the various protocols under one standard and to provide a bridge between TTYs and digital communications equipment. We also ask parties to describe the extent that V.18 currently exists in the marketplace.

141. A draft standard for domestic FSK modems (Baudot at 45.45 bps) is now undergoing balloting within the Telecommunications Industry Association TR-30 committee.

142. All of these technologies and standards are intended for analog telecommunications environments. Telecommunications is evolving into digital technologies. In preparation for the evolution of telecommunications devices from analog to digital, standards have been written for basic text communication. For example, ITU-T T.140 specifies a plain text chat protocol with an international character set as the basis for TTY-type chat in a digital telecommunications environment. It has to date not been implemented in the nation's telecommunications marketplace.

143. To date, the Commission has left decisions about technology for relay platforms to the discretion of the relay provider, as long as both Baudot and ASCII are supported "at any speed generally in use."<sup>277</sup>

144. In order to assure that TRS is meeting the statutory obligation to use existing technology, we seek comment on V.18 and TTY protocols. Specifically, we ask whether TTY users who have digital telecommunications services and equipment can access TRS through direct digital connections, or must they use analog devices through digital telecommunications services. We seek comment on how industry is prepared to address the transition from analog to digital terminals and services. We also seek comment on how digital services will be supported and what will the implications be for relay services. We also seek comment on whether industry standards, such as T.140, are being considered or used in planning for digital service delivery.

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<sup>277</sup> 47 C.F.R. § 64.604 (b) (1).

145. We ask for input on the advantages or disadvantages to TRS users of implementing V.18 in a TRS environment. We also seek comment on the effect of V.18 implementation in such required services as VCO.

146. The Commission is also interested in comments as to the advantages and disadvantages of V.18 to TRS providers, and additionally, if there are advantages in using V.18 to other segments of the telecommunications industry, such as the wireless industry, for improving their interface to TRS.

## F. PROCEDURAL MATTERS

147. Ex Parte Presentations. This matter shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.<sup>278</sup> Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.<sup>279</sup>

148. Comment Filing Procedures: General Requirements. Pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission’s rules, 47 C.F.R. §§1.415 and 1.419, interested parties may file comments on or before May 5, 2000, and reply comments on or before July 5, 2000. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS) or by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24, 121 (1998). Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number, which in this instance is CC Docket No. 98-67. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and should include the following words in the body of the message, “get form <your e-mail address>.” A sample form and directions will be sent in reply.

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<sup>278</sup> See Amendment of 47 C.F.R. 1.1200 *et seq.* Concerning Ex Parte Presentation in Commission Proceedings, Report and Order, 12 FCC Rcd 7348, 7356-57 (citing 47 C.F.R. §1.1204(b)(1)).

<sup>279</sup> See 47 C.F.R. §1.1206(b)(2), as revised.

149. Parties who choose to file by paper must file an original and four copies of each filing. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W. Room TW A325, Washington, D.C. 20554.

150. Comment Filing Procedures: Other Requirements. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.49 and all other applicable sections of the Commission's rules.<sup>280</sup> We also direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission.

151. Parties who choose to file paper should submit their comments on diskette. These diskettes should be submitted to Arlene Alexander, Consumer Information Bureau, 445 Twelfth Street, S.W., Room 4-B452, Washington, D.C. 20554. Such a submission should be on a 3.5-inch diskette formatted in an IBM compatible format using Word for Windows or compatible Software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding (including the docket number), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette.

152. Regardless of whether parties choose to file electronically or by paper, parties should also file one copy of any documents filed in this docket with the Commission's copy contractor, International Transcription Services, Inc., 1231 20th Street, N.W., Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, 445 Twelfth Street, S.W. Washington, D.C. 20554.

### III. ORDERING CLAUSES

153. Accordingly, IT IS ORDERED that, pursuant to authority found in sections 1, 4(i) and 4(j), 201-205, 218 and 225 of the Communications Act as amended, 47 U.S.C. Sections 151, 154(i), 154(j), 201-205, 218 and 225, this Report and Order IS ADOPTED, and Part 64 of the Commission's rules ARE AMENDED as set forth in the attached Appendix B.

154. IT IS FURTHER ORDERED that the amendments to sections 64.601 through 64.605 of the Commission's rules as set forth in Appendix B ARE ADOPTED, effective thirty

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<sup>280</sup> See 47 C.F.R. § 1.49.

days from the date of publication in the Federal Register. The action contained herein has been analyzed with respect to the Paperwork Reduction Act of 1995 and found to impose new or modified reporting and/or recordkeeping requirements or burdens on the public. Implementation of these new or modified reporting and/or recordkeeping requirements will be subject to approval by the Office of Management and Budget (OMB) as prescribed by the Act, and will go into effect upon announcement in the Federal Register of OMB approval.

155. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order and Further Notice of Proposed Rulemaking*, including the Initial and Final Regulatory Flexibility Analyses, to the Chief Counsel for Advocacy of Small Business Administration.

156. IT IS FURTHER ORDERED, pursuant to sections 1, 4(i) and 4(j), 201-205, 218 and 225 of the Communications Act as amended, 47 U.S.C. sections 151, 154(i), 154(j), 201-205, 218 and 225, this NOTICE OF PROPOSED RULEMAKING IS ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas  
Secretary