§ 73.5555 of this chapter concerning multiple ownership.

(h) A program originating FM booster station, when originating programming pursuant to the limits set forth in § 74.1201(f)(2), may not broadcast programming that is not permitted by its primary station's authorization (e.g., a program originating FM booster station licensed to a noncommercial educational primary station may only originate programming consistent with § 73.503 of this chapter).

■ 13. Add § 74.1290 to read as follows:

# § 74.1290 Political programming rules applicable to program originating FM booster stations.

To the extent a program originating FM booster station originates programming different than that broadcast by its FM primary station, pursuant to the limits set forth in § 74.1201(f)(2), it shall comply with the requirements in §§ 73.1212, 73.1940, 73.1941, 73.1942, 73.1943, and 73.1944 of this chapter.

[FR Doc. 2024–29290 Filed 12–12–24; 8:45 am]

## FEDERAL COMMUNICATIONS COMMISSION

#### 47 CFR Parts 14 and 64

[CG Docket Nos. 23-161, 10-213, and 03-123; FCC 24-95; FR ID 261149]

#### **Access to Video Conferencing**

**AGENCY:** Federal Communications Commission.

ACTION: Final rule.

**SUMMARY:** In this document, the Federal Communications Commission (FCC or Commission) takes steps to ensure the accessibility of interoperable video conferencing services (IVCS). The Commission provides additional clarity on how the Commission's accessibility performance objectives apply to interoperable video conferencing services (IVCS), modifies those performance objectives to ensure access to IVCS, and addresses how the Interstate telecommunications relay services (TRS) Fund will support the provision of Video Relay Service (VRS) and other forms of TRS in video conferences.

#### DATES:

Effective date: Effective January 13, 2025, except for instruction 6 (the amendments to § 64.606(g)(6)), which is delayed. The Commission will publish a document in the Federal Register

announcing the effective date for the amendments to § 64.606(g)(6).

Compliance date: The compliance date for §§ 14.21(b)(2)(iv) and (b)(4) is January 12, 2027.

# FOR FURTHER INFORMATION CONTACT: Ike Ofobike, Disability Rights Office, Consumer and Governmental Affairs Bureau, at (202) 418–1028; email: Ike.Ofobike@fcc.gov; or William Wallace, Disability Rights Office, Consumer and Governmental Affairs Bureau, at (202) 418–2716; email: William.Wallace@fcc.gov.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Second Report and Order, in CG Docket Nos. 23-161, 10-213, and 03-123, document FCC 24-95, adopted on September 26, 2024, released on September 27, 2024. The Commission previously sought comment on the issue in a Notice of Proposed Rulemaking (NPRM), published at 88 FR 52088, August 7, 2023. The full text of this document is available for public inspection and copying via the FCC's Electronic Document Management System (EDOCS) website at https:// www.fcc.gov/edocs and via the Commission's Electronic Comment Filing System (ECFS) website at https:// www.fcc.gov/ecfs. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530.

#### **Synopsis**

#### **Background**

1. Under section 716 of the Communications Act, as amended (the Act), 47 U.S.C. 617, providers of advanced communications services (ACS) and manufacturers of equipment used for ACS must make such services and equipment accessible to and usable by people with disabilities, if achievable. Service providers and manufacturers may comply with section 716 of the Act either by building accessibility features into their services and equipment or by choosing to use third-party applications, peripheral devices, software, hardware, or customer premises equipment (CPE) that are available to individuals with disabilities at nominal cost. If accessibility is not achievable through either of these means, then manufacturers and service providers must make their products and services compatible with existing peripheral devices or specialized CPE commonly used by people with disabilities to achieve access, subject to the

achievability criterion. The Commission is directed to adopt "performance objectives to ensure the accessibility, usability, and compatibility of advanced communications services and the equipment used for such services."

2. The Act defines advanced communications services as: (A) interconnected VoIP service; (B) noninterconnected VoIP service; (C) electronic messaging service; (D) interoperable video conferencing service; and (E) any audio or video communications service used by inmates for the purpose of communicating with individuals outside of the correctional facility where the inmate is held, regardless of technology used. 47 U.S.C. 153(1). Interoperable video conferencing service, in turn, is defined as: [a] service that provides real-time video communications, including audio, to enable users to share information of the user's choosing. 47 U.S.C. 153(27). 3. In 2011, when initially adopting

3. In 2011, when initially adopting rules to implement section 716 of the Act, the Commission attempted to determine what Congress meant by including the word "interoperable" as part of the term *interoperable video conferencing service*. Finding that the record before it was insufficient to decide this question, the Commission sought further comment on the issue.

4. In June 2023, after refreshing the record on the definition of "interoperable video conferencing service," the Commission resolved this definitional issue. The Commission found no persuasive reason to modify or limit the scope of the statutory definition. Therefore, the Commission concluded that its part 14 accessibility rules apply to all services and equipment that meet the statutory definition. Given the extended pendency of questions regarding the application of part 14 of the Commission's rules to video conferencing, the Commission recognized that some service providers might need additional time to comply with those rules, and therefore allowed IVCS providers until September 3, 2024, to come into compliance with its existing part 14 rules.

5. Telecommunications Relay Services and Interoperable Video Conferencing Services. Enacted in 1990, Title IV of the Americans with Disabilities Act (ADA), codified as section 225 of the Act, directs the Commission to "ensure that interstate and intrastate telecommunications relay services are available, to the extent possible and in the most efficient manner," to people in the United States with hearing or speech disabilities. TRS are defined as

"telephone transmission services" enabling such persons to communicate by wire or radio "in a manner that is functionally equivalent to the ability of [a person without hearing or speech disabilities to communicate using voice communication services." There are currently three forms of internet-based TRS: Video Relay Service (VRS) "allows people with hearing or speech disabilities who use sign language to communicate with voice telephone users through video equipment and a live communications assistant (CA); Internet Protocol Relay Service (IP Relay) allows an individual with a hearing or speech disability to communicate with voice telephone users by transmitting text via the internet; and Internet Protocol Captioned Telephone Service (IP CTS) permits a person with hearing loss to have a telephone conversation while reading captions of what the other party is saying on an internet-connected device. The provision of internet-based TRS is supported by the Interstate TRS Fund, maintained through mandatory contributions from providers of telecommunications service, interconnected VoIP service, and noninterconnected VoIP service. Three noninternet-based forms of TRS-traditional TRS using text telephony (TTY), Captioned Telephone Service (CTS), and Speech-to-Speech Relay (STS)-are also supported in part by the TRS Fund and are available through state TRS

6. The structure of the Commission's TRS program reflects the fact that, historically, most people have used wireline or wireless telephone networks to communicate remotely by voice. Thus, North American Numbering Plan (NANP) telephone numbers are used to route calls between TRS users and the people they are calling, and the provision of TRS, to date, has typically been configured to fit within the typical structure of a traditional telephone call, with a "calling party" and "called party" and originating and terminating NANP numbers. This structure has continued to be used to frame the provision of TRS even after the development of internet-based forms of TRS. As a result, even though a VRS user's connection with a CA is established via an internet video link, the Commission has been able to rely on originating and terminating telephone numbers as part of the information required to verify the user's eligibility and the minutes of service for which TRS providers are compensated.

7. Video conferencing, however, is generally accessed through the internet, without necessarily involving any

telephone numbers. While a consumer can obtain audio-only access to some video conferences by dialing a telephone number, full video access is usually achieved directly through the internet, without the use of originating or terminating telephone numbers. As a result, for a consumer to use VRS to participate in a video conference, a telephone number must be available for an audio-only connection to the video conference. The VRS consumer must establish a direct video connection to the conference—in the same way as other participants, but independently of the VRS provider—and establish a second, separate video connection to the VRS provider. The CA then establishes a separate, audio-only connection to the conference, using the dial-in number. The CA's only connection to the VRS user is via the second video connection. Thus, the CA cannot see the other video conference participants, and the VRS user can only view the CA over the second video connection, often on a separate screen.

8. To address concerns about the availability of TRS on video conferencing platforms, the Commission requested the Disability Advisory Committee (DAC) to study the matter. In its 2022 report, the DAC stated that it is impossible for users of most video conferencing platforms and most TRS providers to natively interconnect their preferred TRS provider to video conferencing platforms, and that, typically, TRS users can only interconnect their preferred TRS provider to a video conferencing platform by dialing in via the public switched telephone network.

9. Such a dial-in connection is often unavailable, and even when available, dialing into a video conference poses multiple difficulties. First, the TRS provider's CA, who is connected to the video conference via the audio-only dial-in connection, has no visual access to the other video conference participants (including visual cues to indicate who is speaking) or any documents or other visual information being shown to participants. Further, the CA's audio-only connection may result in poor audio quality, causing errors in interpretation or captioning. Second, as a commenter explains, these arrangements require a TRS user to run two separate applications or devices one to participate in the video portion of the conference, and another to communicate with the TRS provider's CA. The commenter adds that following the discussion is challenging enough with one application or one device; having to toggle between two applications or two devices makes

meaningful participation even more arduous.

10. For all these reasons, the DAC recommended that the FCC resolve these issues by: facilitating a technical mechanism for TRS providers to natively interconnect TRS services, including video, audio, captioning, and text-based relay to video conferencing platforms; ensuring that users can seamlessly initiate TRS from the provider of their choice on any video conferencing platform; addressing the integration of CAs and the overall accessibility challenges of video conferencing platforms; and, clarifying the legal ability of TRS providers to seek compensation for service provided for video conferences from the TRS Fund. Since the DAC recommendations were published, one VRS provider has reported that it now offers a means of integrating its provision of VRS with one video conferencing platform.

11. In 2023, the Commission proposed IVCS-specific amendments to the performance objectives in the part 14 rules on accessibility of ACS and amendments to the TRS rules to authorize and facilitate the provision of TRS in video conferences. Specifically, the Commission proposed to require IVCS providers to include speech-to-text (i.e., captioning of all voice communications) and text-to-speech capability, to enable the use of sign language interpreting, and to include accessibility settings in the user interface controls. The Commission also sought comment on whether technical standards are available or could be fashioned for use as safe harbors, whereby certain performance objectives for IVCS can be satisfied by providing access to relevant forms of TRS.

12. Regarding its TRS rules, the Commission proposed to clarify that the integrated provision of TRS in video conferences can be supported by the Interstate TRS Fund. The Commission also proposed additional rule amendments specific to video conferences, addressing VRS user validation and call detail supporting compensation requests; participation of VRS CAs and the use of multiple CAs and multiple VRS providers; and the ability of VRS users and CAs to turn off their cameras when not actively participating in a video conference. Regarding TRS generally, the Commission proposed to amend the confidentiality requirements for TRS CAs and providers in the context of video conferences and prohibit exclusivity agreements between TRS providers and IVCS providers. Finally, the Commission sought comment on how to avoid TRS substituting for

accommodations for individuals with disabilities that employers, educational institutions, health care organizations, and government agencies are required to provide under other applicable laws, including whether to allow TRS users to reserve a CA in advance of a video conference.

## Second Report and Order Video Conferencing Accessibility

13. Need for Improvement. The Commission finds that there is a continuing need for improvement in making video conferencing accessible. Video conferencing has become a routine facet of everyday life. Recent data from Gallup show that, as of February 2024, only 20% of U.S. employees with remote-capable jobs work exclusively on-site (compared to 60% in January 2019); 54% have hybrid work arrangements, and 27% have exclusively remote work arrangements. The Pew Research Center has found that 78% of remote workers use video or online conferencing services at least sometimes, with more than half using such services often. A TRS provider points out that video conferencing is here to stay as an important component of communications going forward. Similarly, a commenter notes that going forward, video conferencing and other technologies with accessibility features will continue to be a catalyst for post-COVID economic recovery, opening important employment opportunities for traditionally underserved and underemployed communities. In short, there is no disagreement among commenters as to the importance of video conferencing services to people's everyday lives or the need to improve the accessibility and usability of those services for individuals with disabilities.

14. The record also reflects that there are significant gaps in the accessibility of video conferencing platforms. As the Commission has previously noted, some video conferencing platforms have implemented accessibility features, such as braille display support, captioning, keyboard accessibility features, highcontrast visual elements, customizable notifications, verbosity controls, pinning and spotlighting, and support for screen readers. However, even with these advances, challenges remain. Numerous comments from consumers request that the Commission ensure the availability of features and enhancements needed to make video conferences more accessible.

15. A coalition of advocacy organizations notes that often the video windows in which speakers and

interpreters appear are too small for a viewer to be able to read lips or observe sign language interpreting. And, while some IVCS providers offer captioning, if the video conference host controls the captioning, other users may not be able to adjust the captions when the captioning appears too small and lacks adequate contrast against the background to be reasonably legible. Further, consumers can access video conferences from a wide range of internet-enabled devices, increasing the need for customizing what they see on their screens. However, each video conferencing platform uniquely arranges and identifies its controls and settings, which makes it more difficult for unfamiliar users to adjust the settings on their devices for optimal presentation as needed during a video conference.

16. Individuals who are blind or have low vision also report problems accessing video conferences. An advocacy organization points out that creating, hosting, or joining a meeting presents multiple accessibility barriers for members of these communities, regardless of which platform and device combination are utilized. Users who are blind or have low vision may encounter difficulty navigating features, controls, and settings of video conferencing platforms with their preferred assistive technology. As a commenter states, if, for example, certain controls are not operable with assistive technology or are not properly labeled, people who are blind or have low vision are not able to enter, operate, and conclude a call. Furthermore, if control and setting features of the conference platform are purely visual, they may be inaccessible to users who are blind or have low

17. A 2024 study examining the experiences of people with various disabilities when using popular video conferencing platforms reveals additional challenges, particularly for neurodivergent participants or those with physical or motor impairments. For example, some respondents with speech, motor, or cognitive disabilities described being unable to formulate questions or locate and activate a video conferencing platform's "raise your hand" function in time to contribute in calls. Other respondents described being overwhelmed by the need to learn new functions and tools on different video conferencing platforms.

18. As several commenters point out, these concerns are heightened because conference call participants are generally not in a position to dictate what video conferencing platform will be used for a particular conference. For example, a patient who is deaf may not

be able to obtain healthcare because the doctor's telehealth conferencing platform does not enable a connection to a sign language interpreter or VRS. Similarly, visual content shared in the video conferencing platform during a video conference is usually not accessible to people who use screen readers or braille displays because shared documents typically appear only as a flat image without perceivable elements. In these and other scenarios, a person with a disability often has no opportunity to request a different, accessible video conferencing system.

19. Compliance with Existing General Performance Objectives. As discussed above, IVCS poses a broad range of accessibility issues, which often require solutions specifically tailored to the multimedia aspect of this subcategory of ACS. Attempts to address these issues were delayed while the Commission's interpretation of the term interoperable video conferencing service remained unresolved. The result is a patchwork of different accessibility features from different video conferencing providers, causing a confusing and inconsistent landscape for people with disabilities to navigate. In addition, because IVCS is so often used for pre-scheduled, multiparty communication, consumers with disabilities often have no choice as to which service is used for a video conference—that choice is made by the person or organization hosting the video conference.

20. These accessibility gaps can be closed to a substantial extent if IVCS providers and equipment manufacturers comply with the Commission's current rules. Part 14 of those rules, initially adopted in 2011 to implement section 716(e) of the Act, includes a set of performance objectives to ensure the accessibility, usability, and compatibility of advanced communications services and the equipment used for such services. The current performance objectives define, in general terms, what providers of IVCS and manufacturers of equipment used for IVCS must accomplish to make their services, equipment, and software accessible, usable, and compatible. In general, for services, equipment, and software to be accessible: input, control, and mechanical functions must be locatable, identifiable, and operable by people with disabilities; and all information necessary to operate and use the product must be available to people with disabilities. 47 CFR 14.21(b). Within this rubric, the provision sets forth a list of performance objectives defining further what accessible means for people with specific types of disabilities. For

example, one provision states that advanced communications services, equipment, and software shall be operable without hearing, *i.e.*, shall provide at least one mode that does not require user auditory perception. 47 CFR 14.21(b)(1)(iv). Like other providers of ACS and manufacturers of ACS equipment, IVCS providers and manufacturers are required to meet each of these objectives (unless an objective is not achievable).

21. A number of the accessibility improvements sought by commenters can be addressed by IVCS providers coming into compliance with the existing rules. For example, section 14.21(b)(1) of Commissions rules states that, for services, equipment, and software to be accessible to people who are blind, input and control functions shall be provided in at least one mode that does not require user vision, and all information necessary to operate and use the product, including but not limited to, text, static or dynamic images, icons, labels shall be available through at least one mode in auditory form. Meeting these performance objectives (e.g., by providing, among other things, voice-activated control settings and screen-reader functionality or compatibility) would address a commenter's concerns that chat functions and control settings on IVCS platforms are often visual only, and thus inaccessible to blind and low-vision users. As of September 3, 2024, IVCS providers should have rolled out updates to address such deficiencies, if

22. Additionally, section 14.21(b)(2) of the Commission's rules states that in at least one mode, ACS shall permit operation by, and provide visual information to, people with visual acuity between 20/70 and 20/200, without relying on audio. Meeting this objective through, e.g., magnification, high-contrast, and color inversion options, as well as compatibility with third-party refreshable braille displays, would be important steps toward making IVCS platforms accessible to low-vision and deafblind users.

23. Similarly, compliance with the existing rules could substantially reduce accessibility gaps faced by people with cognitive and mobility disabilities. Section 14.21(b)(1) of the Commission's rules specifies that, to be accessible, advanced communications services and equipment must have modes that are operable with limited manual dexterity, and with limited reach and strength, without requiring body contact or close body proximity, and without timedependent controls, and at least one mode that minimizes the cognitive,

memory, language, and learning skills required of the user. Steps that providers could take to implement these requirements include providing voice-or gesture-based controls, one-button shortcuts, an "easy-to-use" setting, and other features. In an accompanying Further Notice of Proposed Rulemaking (FNPRM), the Commission seeks additional comment on whether the performance objectives described above need further modification to ensure the accessibility of IVCS.

24. Need for IVCS-Specific Performance Objectives. While accessibility gaps in IVCS can be addressed to some extent by implementing the performance objectives of our current rules, the record makes clear that, in a number of areas, more specific guidance is needed to promote accessibility in the IVCS context. For example, captions are an obvious means for IVCS providers to implement the existing performance objective specifying that ACS provide auditory information through at least one mode in visual form, and many IVCS platforms offer automatic speech recognition-generated captioning. However, the record indicates that captions are often inaccurate, too small, or difficult to turn on and manipulate. As a commenter explains, IVCS platforms vary considerably with respect to the ability to activate and effectively use automated captions. Users are often at a loss as to how to turn on captions and frequently are unable to position and otherwise manipulate captions, which is necessary for optimal viewing. For example, on some platforms the captions have been too small for effective reading. Other platforms fail to ensure a sufficient level of captioning quality, resulting in excessive errors that make it difficult to follow the dialogue.

25. In addition, some accessibility concerns are not directly addressed at all by the current rules. For example, none of the existing performance objectives requires IVCS platforms to facilitate the use of sign language and sign language interpretation—a key omission for a medium inherently suited to sign language communication. Therefore, the Commission amends part 14 of its rules as discussed below, to define more specifically the objectives that IVCS providers must meet to achieve accessibility and promote more consistency in their implementation, thereby enabling people with disabilities to participate in video conferences whenever accessibility is achievable.

26. These outcome-oriented performance objectives maintain

incentives and opportunities for innovative design in this rapidly developing industry sector and avoid straying into the prohibited territory of mandatory technical standards. Thus, the Commission finds inapposite a commenter's concern that the proposed performance objectives do not include reference standards or compliance procedures. This is by design, and is true of all the performance objectives in part 14 of the Commission's rules. As noted earlier, section 716 of the Act expressly requires the Commission to allow flexibility in the implementation of accessibility objectives and precludes us from imposing mandatory technical standards. 47 U.S.C. 617(a)(2), (e)(1)(D). Consistent with section 716 of the Act, these performance objectives will allow IVCS providers to choose whether to satisfy their accessibility obligations by building certain features directly into their applications or by "using third party applications, peripheral devices, software, hardware, or CPE that is available to the consumer at nominal cost and that individuals with disabilities can access."

27. A commenter recommends that the Commission makes the performance objectives optional, contending that mandatory requirements would impose significant cost burdens on businesses and impact the overall cost for the general public. The new performance objectives are subject to the achievability criterion, a criterion that is defined in terms of reasonable effort or expense, 47 CFR 14.10(b), as well as the special exemption and waiver provisions of the ACS rules. However, the statute does not grant the Commission authority to make ACS performance objectives optional. See 47 U.S.C. 617(a)(1), (b)(1), (e)(1)(A).

28. Just as the existing part 14 of the Commission's rules performance objectives apply both to advanced communications services and to equipment and software used with ACS, the performance objectives the Commission adopts for specific application for IVCS also apply to equipment and software used for IVCS. Manufacturers of equipment used for IVCS must ensure that such equipment, as well as software components of such equipment, meet these new and modified objectives, unless that is not achievable.

29. Given the critical importance of access to video conferencing for people with disabilities, the Commission finds no cause for further delay in providing specific guidance on the necessary steps to make video conferencing accessible. Where the adoption of a proposed rule is supported by the record, there is no

persuasive reason to defer its adoption, as some commenters urge, pending an assessment of what has been achieved during the extended compliance period or the outcome of potential collaboration among stakeholders. As a commenter points out, even if some issues may require additional time to resolve, implementation of new performance objectives can begin while fact-finding and deliberation over more complex policy and operational issues proceeds on a parallel track. Similarly, although the Commission encourages collaboration among stakeholders to further improve the accessibility of features and functions of video conferencing services, there is no reason to delay the adoption of more specific performance objectives while waiting for such collaboration to bear fruit. The record reflects consensus both that video conferencing has become a ubiquitous and critical part of daily life and that video conferencing accessibility remains a work in progress. The untenable result is that people with disabilities are unable to participate fully in what is now a routine mode of communication. Given the centrality of video conferencing in modern American society, and that 14 years have passed since Congress mandated the accessibility of IVCS, video conferences should be made accessible as soon as it is achievable to do so.

30. The Commission does recognize, however, that bringing accessibility to video conferencing may pose some technical challenges, especially for smaller IVCS providers. It may also require substantial interaction with other parties, including TRS providers and the disability community. Therefore, compliance with part 14 of the Commission's rules adopted in document FCC 24–95 will not be required until January 12, 2027.

#### **IVCS Performance Objectives**

31. Captions. Section 14.21(b)(2)(iv) of the Commission's rules sets forth the performance objective that ACS shall provide auditory information through at least one mode in visual form and, where appropriate, in tactile form.

32. The Commission's amendment to this performance objective directly addresses one of the most broadly impactful and persistent accessibility issues concerning video conferences, *i.e.*, the inconsistent availability of accurate captions across video conferencing providers. The record is clear that captions play a crucial role in allowing people who are deaf or hard of hearing to be fully engaged in a video conference conversation. As a commenter notes, a lack of captions can

make meaningful interaction impossible. While the existing rule already makes clear that captioning (the provision of auditory information in visual form) is necessary for accessibility, it does not address the quality of captions.

33. As modified, the performance objective states that captions must be accurate and synchronous. The Commission does not include the language proposed in the NPRM stating that caption quality must be "comparable to that provided on TRS Fund-supported captioned telephone services." As multiple commenters noted, the Commission's TRS rules do not currently provide quantitative standards to measure accuracy or latency in the IP CTS context. Pending further development of quantitative measures, this performance objective reflects a qualitative standard, similar to the qualitative standards currently applicable to IP CTS and live television programming. The amended rule defines accurate to mean that captioning matches the spoken words of a conversation, in the order spoken, verbatim, without summarizing or paraphrasing. Given that IVCS, like IP CTS or live video programming, involves real-time communication without advance scripting, 100% errorfree captioning may not always be achievable. However, captioning should be sufficiently accurate to enable a user to understand what is being said. Implementation of this performance objective will be evaluated on a case-bycase basis, considering overall understandability and accuracy, the ability of the captions to convey the aural content of the call in a manner equivalent to the aural communication, and the extent to which captioning errors made the video conference inaccessible.

34. The amended rule defines synchronous to mean that captions must coincide with the corresponding spoken words and sounds to the greatest extent possible, be delivered fast enough to keep up with the speed of those words and sounds, and remain displayed long enough to be read by the user. In other words, to the greatest extent possible, the captions should begin to appear at the time that the corresponding speech or sounds begin and end approximately when the speech or sounds end. Captions must be sufficiently synchronous to enable a user to participate in real-time in a conversation among video conference participants.

35. While a quantitative standard of caption quality may be preferable, the Commission rejects the contention that

a qualitative standard provides insufficient notice regarding the quality required, given that analogous qualitative standards are already in place for video programming and TRS. Regarding a commenter's concerns about factors outside a provider's control affecting caption quality, the Commission notes that the obligation to meet this performance objective, like all part 14 of the Commission's rules performance objectives, is qualified by the criterion of achievability.

36. As modified, the performance objective also specifies that IVCS enable users to connect with third-party captioning services and enable the display of such captions on the requesting party's video conference screen. In some instances, participants in video conferences may prefer a thirdparty captioning service, which may provide a higher degree of accuracy than can be achieved by using the IVCS provider's native captioning. Or, a video conference host may be legally obligated to provide (and pay for) captioning service for a video conference that poses specific captioning challenges. As the DAC explains, some video conferencing services struggle to integrate third-party captioning services into their conference calls. In some cases, users must open a separate web browser or application to view captions, forcing them to split their attention between two screens (if a second screen is even available to the user). If deaf and hard of hearing participants are forced to split their attention between multiple screens, or multiple devices, it often will be difficult to follow the visual conversation on one screen while simultaneously reading the captions on

37. To address these problems, the amended performance objective provides that IVCS shall enable users to connect with such third-party accommodations services, such that the captions provided by third parties are viewable on the user's video conference screen, rather than on a separate screen. In other words, to be accessible, IVCS must enable a user to view on-screen the display of captioning provided by a third party. The Commission does not prohibit IVCS providers from affording participants the option to view captions on a separate screen, which may be preferable in some instances to accommodate certain disabilities, peripheral devices, or accessibility software.

38. Although some commenters focus on a need to access human captioners, the amended rule does not limit the kinds of third-party captioning services that may be accessed by IVCS users.

Consistent with the technology-neutral, outcome-oriented nature of performance objectives, the rule does not differentiate between captioning generated with human involvement and captions created entirely with automatic speech recognition technology.

39. Additionally, the requirement to enable third-party captioning does not require an IVCS provider to ensure that third-party captioning is available to users at no or nominal cost—unless the IVCS provider is relying on a third party to fulfill its primary captioning obligation. Similarly, if an IVCS provider is not relying on a third party to fulfill its primary captioning obligation, the IVCS provider is not responsible for ensuring that captions provided by a third party are accurate and synchronous, except to the extent of its obligation to not impair or impede accessibility.

40. One commenter urges the Commission to require video conferencing providers to integrate with IP CTS providers, suggesting that IVCS providers will not be able to offer captioning services equal in quality to IP CTS. IP CTS is one type of a third-party captioning service. Accordingly, the amended performance objective requires that IVCS providers offer a mechanism for conference hosts and users to connect with an IP CTS provider, if that is their preference, unless the capability for such connection is not achievable.

41. This performance objective does not dictate the specifics of any technical interface or lock in user interface designs. In particular, the Commission does not mandate that an IVCS provider make its connection interface for third parties compatible with any specific technology that may be used by a particular captioning service or IP CTS provider.

42. Sign Language Interpreting. To ensure that video conferences are accessible to users who communicate in sign language, the Commission proposed to adopt a new performance objective providing that IVCS enable the use of sign language interpretation, including the transmission of user requests for sign language interpretation to providers of video relay service and other entities and the provision of sufficient video quality to support sign language communication.

43. The Commission adopts the proposed performance objective with a few modifications. This performance objective provides that accessibility for IVCS includes enabling a video connection for sign language interpreters, so that they can view and be viewed by users of these services.

The performance objective is modified to make clear its applicability to both IVCS itself and to equipment and software used for IVCS. For additional clarity, the proposed rule is modified by inserting the words "provided by third parties" after "enable the use of sign language interpretation." This change addresses a commenter's concern as to whether a sign language interpretation function must be integrated into an IVCS platform. The performance objective does not require IVCS providers to provide sign language interpretation as part of their services; rather, it specifies that an IVCS provider shall enable users to access sign language interpretation services provided by others.

44. This performance objective does not differentiate regarding the type of sign language service that may be offered by a third party. The Commission anticipates that most sign language users who participate in video conferences will be using American Sign Language (ASL). However, this performance objective is intended to apply broadly to all forms of visual language commonly in use by people with disabilities. For example, Cued English uses hand shapes, hand placements, and non-manual signals on the mouth to provide a transliteration of spoken English for some individuals with hearing disabilities. The Commission believes that the same technology that facilitates the inclusion of ASL interpreters is equally applicable to other forms of interpretation or transliteration.

45. The Commission declines, at this time, to modify this performance objective as a commenter proposes: to require IVCS platforms to provide sign language interpretation, rather than merely enable it. Adopting this recommendation would mean that IVCS providers would need to arrange for sign language interpreting to be available to users at all times and would be responsible for the quality of the service provided. The record is insufficient for the Commission to assess this proposal, which likely would be implemented through automatic sign language interpretation software, akin to automatic speech recognition. The Commission seeks further comment on this proposal in the FNPRM.

46. The commenter contends that the rule must be crafted so that ASL interpretation and English Captioning have functional equivalency within IVCS platforms. The Commission's goal in the TRS context is to devise accessibility requirements that will allow individuals with disabilities to have a communication experience that

is functionally equivalent to the experience of those without such disabilities. The Commission does not require different accessibility tools to be equal to each other.

47. Although the Commission does not mandate a particular level of video quality, the quality must be sufficient to allow users to see and understand interpreters' signing, and for users' own sign language to be seen and understood by interpreters and others. The Commission does not anticipate—and the record does not indicate—that this criterion will pose any undue burden on video conferencing providers. Video quality is a fundamental component of a competitive video conferencing product. Providers are therefore independently motivated to provide high-quality video.

48. User Interface Controls. To implement the DAC's recommendation that the Commission ensure users' ability to control the activation and customize the appearance of captions and video interpreters, the Commission sought comment on adopting a new performance objective providing that IVCS provide user interface control functions that permit users to adjust the display of captions, speakers, and signers and other features for which user interface control is necessary for accessibility.

49. To ensure that accessibility features can be adjusted to address the specific needs of individual users and the various circumstances in which IVCS may be used, the Commission adopts the performance objective set forth in the NPRM, with modifications. The proposed performance objective is modified to ensure that individual users have the ability to activate, as well as adjust, features such as captions. In addition, the performance objective is modified to make clear its applicability to both IVCS itself and to equipment and software used for IVCS. Finally, the Commission clarifies that this performance objective includes participants' ability to edit their display names before or after joining a video conference.

50. As a commenter explains, given the wide range of IP-enabled devices that can be used for video conferences, the need for individual users to be able to customize what they see on their screens is critical. However, user controls that allow such customization are frequently unavailable or insufficient. Further, existing ACS performance objectives do not directly address this problem. Although § 14.21(b)(1) of the Commission's rules generally requires that control functions necessary for a user to operate a covered

service or product shall be accessible, that performance objective does not expressly address the need for control functions to enable a user, not only to operate the service, but to ensure its accessibility. Accessibility is not a static condition: to ensure that a video conferencing service is accessible across the wide range of devices that may be used to access it, by users with varying disability-related needs, individual users must themselves be able to manipulate accessibility-related functions. The performance objective the Commission adopts addresses this problem by providing that video conference participants be able to control the activation and settings of accessibility-related features. The text of the new provision reflects that user control is especially important in two areas: captioning and the visual display of speakers and signers.

51. In its 2022 report, the DAC states that, among the platforms that offer captions, some do not allow users to customize caption size, color, opacity, and other critical settings to ensure readability. A coalition of accessibilityfocused organizations explain that IVCS platforms vary considerably with respect to the ability to activate and effectively use automated captions, and that users are often at a loss as to how to turn on captions and frequently are unable to position and otherwise manipulate captions, which is necessary for optimal viewing. To address these concerns, the performance objective the Commission adopts requires IVCS providers to allow call participants to independently control the activation and display of captions on their individual devices. To the degree achievable, call participants must be able to alter the size, font, and on-screen location of captions and to adjust the color and opacity of both the captions and the caption background. This objective generally aligns with the Commission's requirements in other contexts, particularly with regard to the customizability of captions on digital apparatus. See 47 CFR 79.103(c)(1)-(10). The character customization requirements for digital apparatus mandate the ability to change character size between 50% and 200% of the default size. Digital apparatus covered by § 79.103 of the Commission's rules must also allow captions and caption backgrounds that can display the 64 colors and 8 fonts defined in the CEA-708 standard, as well as allow users to override the authored colors and choose from at least 8 specified colors. The Commission does not replicate those specific requirements here. However,

the CEA-708 standard may provide a useful reference point for IVCS providers and equipment manufacturers in assessing their caption customization options. Additionally, the Commission notes that limiting captions to a very small character size range may be insufficient to meet the performance objective.

52. The record reveals that additional accessibility challenges arise as the number of participants in a video conference grows. For example, when faced with numerous, undifferentiated video windows, which are automatically enlarged based only on sound cues, it can be extremely challenging to determine when an interpreter (or another sign language user) is signing. A sign language user who loses sight of the interpreter is effectively exiled from the conversation until they regain that visual connection. Ensuring that the interpreter's video window is always prominently displayed, even if another participant is sharing their screen, is therefore vital to maintaining effective communication. As a commenter explain, these issues can be partially addressed by "spotlighting" and "multi-pinning." "Spotlighting" identifies a particular window as the active speaker, making that user's window visible on all other users' screens. Spotlighting capability is generally only available to a conference call's host. "Pinning" and "multipinning" allow a user to disable the active speaker view and determine which video window (or windows) will always be visible on the user's own screen. Spotlighting interpreters ensures that these individuals are easily visible amidst multiple video streams or when displayed on small screens. While this is necessary for all individuals who rely on interpreters, it is especially important for consumers with visual impairments or close vision, who need full visibility of an interpreter to actively participate.

53. To ensure that critical visual information is accessible, users also must be able to reconfigure the layout and visibility of video windows appearing on the users' own device. Each open video window reduces the on-screen real estate available for other windows. As a result, a sign language user's window may become too small to allow for effective sign language communication. This is true even if the user's video window is pinned, because pinning, alone, does not alter the relative size of the video windows. A call participant who requires sign language must therefore be able to minimize or hide extraneous windows, expand the windows of their choice, or

relocate particular windows. For example, a participant may utilize the multi-pinning feature to pin both a presentation leader and an interpreter, move the windows so they remain side-by-side, and then expand both windows to allow the participant to clearly view the interpreter without missing out on visual cues from the speaker. As another example, a sign language user on a conference call with multiple other sign language users may want to pin all of their windows and place them together to ensure all sign language users are visible.

54. In addition, participants must be able to edit their own display names. This allows participants (including interpreters and third-party accommodation services) to quickly differentiate themselves from other call participants, helping sign language users and interpreters find each other more easily, especially in conference calls with many participants. Again, every moment a sign language user and an interpreter spend trying to connect to each other is a moment of lost communication and participation for the user. As a VRS provider notes, VRS CAs identify themselves by a CA Number, rather than their name, to protect their privacy. As discussed below, the Commission amends its TRS rules to require VRS CAs to identify their employer in the CA's display name. Compliance with this rule therefore requires that participants be able to change their display names.

55. The record indicates that, while some video conferencing providers currently offer spotlighting and multipinning capabilities, typically they are controlled by the call's host, who must either make such adjustments themselves or specifically allow that privilege to a requesting participant. A conference call host may also disable the in-call chat feature, leaving participants unable to contact the host to request access to these features. In such scenarios the host may not even be aware that accommodations are needed. As a result, individual users may be deprived of the ability to directly customize their in-call experience in a way that works best for them. Commenters therefore assert that IVCS providers should enable any participant in a video conference to customize their settings for accessibility.

56. Accordingly, the performance objective the Commission adopts specifically provides that *users* be able to activate and adjust the display of speakers and signers. As with captioning controls, the relevant or achievable settings may vary for different kinds of IVCS (*e.g.*, more

settings may be needed for a video conferencing service that is frequently used for conferences involving large groups, than for one whose target market rarely includes participants in large-group video conferences). For large-group video conferences, in particular, accessibility requires that pinning, multi-pinning, spotlighting, and window configuration functionality be available, and that those functions can be accessed in individual users' settings menus, without having to obtain permission from a call host. The Commission notes that while some IVCS calls utilize a "hosted" conference room, i.e., a single virtual location that all call participants connect to, others are designed primarily for unhosted, person-to-person video calls. The performance objective adopted here applies to all forms of IVCS.

57. A commenter raises a general concern that an overly detailed performance objective would lock in user interface designs, and urges the Commission to resist making regulatory choices that it states will necessarily limit the ability of IVCS providers and equipment manufacturers to shape and adjust their user interfaces. The Commission concludes that this performance objective strikes an appropriate balance between flexibility and specificity. As with all part 14 of the Commission's rules performance objectives, the new and amended objectives are outcome-oriented and do not mandate a technical standard. The Commission also emphasizes that the rule it adopts does not dictate how IVCS providers must organize their user controls. Individual providers may decide what layouts and configurations are appropriate for their services, as long as the results comply with Commission rules.

58. The performance objective adopted here also provides that users be able to activate and adjust other features for which user interface control is necessary for accessibility. Although some commenters argue for additional specificity, at this time, the Commission does not attempt an exhaustive catalog of all such features. However, the fact that a particular feature is not mentioned in the performance objective does not imply that it is unnecessary for accessibility. For example, a commenter recommends that the Commission include a specific requirement for IVCS platforms to include screen reader verbosity controls, and notes that some video conferencing platforms currently allow users to independently customize their verbosity settings. The Commission agrees that this functionality is an important means for

blind and low-vision users to be able to follow and participate in a video conference, and such user control may often be necessary for accessibility. To that extent, verbosity controls (as well as other features not specifically mentioned) are included in the performance objective. However, to individually address this and other user controls recommended by commenters, the Commission believes the record would benefit from additional information about the specific aspects of interface control that are most important to address in the video conference setting. The Commission seeks further comment on this issue in the FNPRM.

59. A commenter suggests that IVCS users' accessibility preferences should be stored and retained within the IVCS platform, so that users will not have to change the settings each time they use the service. However, the record is insufficient to address this proposal. In the *FNPRM*, the Commission seeks additional comment on the need for such an objective, how it would apply across devices, and the technical issues involved.

60. Text-to-Speech. To ensure that IVCS is accessible for people with speech disabilities, the Commission proposed to amend § 14.21(b)(1)(ix) of its rules, which specifies that ACS be operable in "at least one mode that does not require user speech," to specify that IVCS provide text-to-speech functionality. The existing rule specifies that, to be accessible, IVCS must be operable without user speech—for which a logical implementation would be the provision of text-to-speech functionality. However, the record indicates that an additional way of making IVCS operable by people with speech disabilities is available, in the form of speech-to-speech technology products, which automatically convert speech that is difficult to understand to speech that is more understandable. Therefore, at this time the Commission does not adopt the proposed modification. Instead, in the FNPRM, the Commission seeks additional comment on modifying § 14.21(b)(1)(ix) of its rules to encompass a broader range of solutions for people with speech disabilities.

61. Other Performance Objectives
Proposed by Commenters. In the NPRM,
the Commission sought comment on
whether additional performance
objectives should be specified for IVCS
to address other accessibility concerns.
A number of the performance objectives
suggested by commenters merit the
Commission's consideration. In many
instances, however, the current record is
insufficient to address them at this time.

In the *FNPRM*, the Commission seeks additional comment on these proposals. Other commenter proposals appear to be inconsistent with the flexible, outcomeoriented approach the statute directs the Commission to take.

62. A commenter recommends adoption of a performance objective requiring that video functionality, screen sharing, video window re-sizing, and video sharing be compatible with tablets. Another commenter objects to this proposal, contending that tablet compatibility represents a de facto technical mandate. While the Commission recognizes that people with disabilities often have particular difficulty in accessing IVCS on tablets, the record is insufficient to determine whether a performance objective specific to tablets is needed, and how it should apply. For example, an IVCS provider may choose not to make its service available on tablets, or may not design an app specifically for tablets. Further, it is unclear to what extent responsibility for tablet compatibility should be placed on tablet manufacturers, IVCS providers, or both. In the *FNPRM*, the Commission seeks additional comment on whether a tablet-specific performance objective is needed, and whether additional performance objectives should apply to manufacturers of tablets and other devices used to access IVCS.

63. The current record is also insufficient to address recommendations that performance objectives specify that IVCS provide a gallery view mode, ensure that a sufficient number of videos is supported without degrading the quality of the video or audio, and include dedicated video- and text-based side channels. A commenter raises several objections to these proposals, stating variously that they are technologically infeasible, implicate variables outside of a video conferencing provider's control, exceed the Commission's authority, or are technical mandates in all but name. While the proposed features can be beneficial, the Commission is concerned that unnecessarily specific requirements could dampen incentives for entrepreneurship and innovation in this rapidly evolving market. In addition, IVCS encompasses a broad variety of video communication services, for which the recommended performance objectives may not be uniformly applicable or relevant. In the FNPRM, the Commission seeks additional comment on the need for specific performance objectives in these areas, as well as whether such objectives could be implemented without adversely

affecting the benefits of innovation in this sector.

64. For similar reasons, the Commission also concludes that the record is insufficient to address commenters' recommendations that IVCS providers be required to enable access for audio description of video and visual images, that performance objectives be adopted or amended to provide that IVCS be operable and visual information be available in tactile mode, and that shared documents be added to the list of information that must be made accessible pursuant to § 14.21(b)(2) of its rules. However, the Commission stresses that the rules prohibit IVCS providers from impeding the use of third-party services, equipment, or software to provide audio descriptions. In the FNPRM, the Commission seeks additional comment on whether to adopt a performance objective specifying these functions.

65. Relatedly, a commenter urges the Commission to expand TRS eligibility to include providers of live audio description and visual image descriptive services. Our authority under section 225 of the Act is limited to making TRS available for people who are deaf, hard of hearing, deafblind, or have a speech disability. An audio description service would not fall within this definition, and the Commission lacks authority to expand the definition beyond the boundaries dictated by Congress.

66. The Commission declines a commenter's recommendation that the Commission require IVCS providers to offer a dial-in option via a ten-digit telephone number, so that TRS-eligible IVCS users can use TRS in video conferences despite the difficulties described elsewhere in document FCC 24-95. Such a requirement would entail a major change in business practices for IVCS providers, many of whom have not designed their platforms to connect with telephone networks. Further, the rules adopted here will require IVCS providers to enable users to connect with providers of third-party captioning and sign-language interpretation services, including IP CTS and VRS Thus, developments are already under way to accomplish the goal the commenter seeks, without the need to force disruptive changes in IVCS providers' business models. The Commission may revisit whether a dialin option is needed if future developments cast doubt on these assumptions.

67. The Commission also declines to adopt a commenter's recommendation that any accessibility requirements for IVCS should apply if a video conference is recorded and subsequently shared. If

the video conference is recorded and shared by a host, participant, or third party, it is not evident why the IVCS provider should be responsible for the accessibility of such recordings. Further, many IVCS platforms may not include a feature that facilitates or delivers such recordings.

68. The Commission declines to adopt a commenter's recommendations to require that all IVCS platforms use the universal captioning symbol (CC) to identify captioning settings, and that those settings be on the first screen of the settings menu. The commenter also suggests requiring consistent accessibility language related to captioning across platforms. Performance objectives are outcomeoriented requirements that allow flexibility for providers to accomplish the objectives in the means best suited to their specific circumstances. They should not mandate what symbols IVCS providers must use, where they must put those symbols, and what terms they must use when describing their accessibility offerings.

69. Safe Harbor Technical Standards. Section 716 of the Act provides that the Commission shall not adopt mandatory technical standards for ACS accessibility. However, the Commission may adopt technical standards as a safe harbor for such compliance if necessary to facilitate the manufacturers' and service providers' compliance. 47 U.S.C. 617(e)(1)(D). The NPRM sought comment on whether there were any technical standards available or in development that could serve as safe harbors for IVCS compliance with one or more performance objectives.

70. The Commission does not adopt any safe harbor standards for IVCS accessibility at this time, as no relevant standards are identified by commenters. Indeed, some commenters express doubts as to whether safe harbor standards could be helpful in this context. For example, a commenter contends that establishing a safe harbor risks locking in de facto technical mandates, thereby inhibiting innovation. Another commenter echoes this assessment, noting that specific technical standards could stifle the development of new accessibility features.

71. One candidate for a safe harbor standard was suggested by two state regulatory agencies, who recommend the real-time text (RTT) technical standard as a safe harbor. These commenters appear to be referring to RFC 4103, a technical standard that is currently referenced by the Commission's rule governing RTT. A state agency commenter notes that RTT

allows for simultaneous transmission of text, audio, video, and data; is already supported on most modern smartphones; and has already been implemented in VRS, making it relatively easy to further incorporate into video conferencing platforms. A public utility commission commenter adds that RTT is a widely known, well understood, and user-friendly standard.

72. However, neither state agency explains which performance objectives would be implemented using RTT, or why a safe harbor is necessary to facilitate compliance with part 14 of the Commission's rules with respect to IVCS. Without a more detailed explanation of why an RTT-based safe harbor would further the Commission's goal of increasing video conferencing accessibility, the Commission is not persuaded that it is needed in this context.

73. Part 14 Compliance Dates. The Commission allows IVCS providers two years to comply with the accessibility requirements. The Commission concludes that a full product development cycle should not be needed to implement the additional rule provisions added by document FCC 24-95. The performance objectives adopted today supplement the existing performance objectives for AČS, which became effective in 2012. Pursuant to the 2023 Video Conferencing Order. published at 88 FR 50053, August 1, 2023, IVCS providers were allowed until September 3, 2024, to meet the existing performance objectives. An additional two-year period is appropriate for IVCS providers to complete any further development, testing, and deployment of modified software, to the extent needed to comply with the new provisions.

74. Although the Commission largely agrees with a commenter that, for some service providers, the proposed performance objectives should be easily achievable within a relatively short period of time, for other (perhaps smaller) providers, compliance may require additional preparation and consultation. Additionally, as noted earlier, the breadth of IVCS entities now subject to the ACS rules is expansive. Providers of small, niche, or startup conferencing services may need to prioritize software development to suit their specific circumstances. Given these dueling considerations, the most appropriate compliance date is January 12, 2027.

75. Costs and Benefits. The Commission concludes that the substantial benefits of its actions in this proceeding outweigh any costs those actions are likely to impose. The

Commission's actions in this proceeding implement Congress' directive to adopt performance objectives to ensure the accessibility of ACS, including IVCS, without unduly burdening the provision of IVCS. Like the existing performance objectives, the amended performance objectives are outcome-oriented, preserving flexibility in implementation and encouraging the development of efficient accessibility solutions. Further, the two-year compliance deadline balances the potentially significant industry-wide changes the CVAA requires with the need to ensure that people with disabilities can take advantage of the benefits of IVCS.

76. As the COVID pandemic made clear, the benefits of ensuring access to video conferencing are enormous. Indeed, video conferencing is now a practical necessity for communication, having become, for most of the country's population, a mainstay of business, education, health, and personal life. Whether talking one-on-one with friends or participating in a multi-party conference call, people with disabilities benefit enormously from having the same opportunities as other Americans to make use of this modern form of communication service. As a commenter points out, the near ubiquity of video conferencing, and the heavy reliance on it by educators, government, and business for virtual meetings and collaboration, not to mention its use for social interaction, have made accessibility to, and usability of, these services a necessity for our community if we are to aspire to full participation in modern life.

77. Although the NPRM requested comment on the potential costs that the Commission's proposals would impose, no specific cost estimates from commenters were received. Regardless, the Commission emphasizes that, as with the existing part 14 of its rules performance objectives, compliance with each of the amended performance objectives adopted here is conditioned on the objective being achievable, which means it can be achieved with reasonable effort or expense. Therefore, the rules themselves include a safeguard to ensure that the burden and cost of compliance will not be unreasonable, considering, among other factors, the technical and economic impact on the company's operation and the extent to which accessible services or equipment are already being offered by the company. As a result of this safeguard, which is applicable to certain other accessibility obligations imposed by the Act, the resulting cost burden is likely to be comparable to the cost imposed on other segments of the communications

industry by rules incorporating an analogous condition—e.g., the cost incurred by other ACS providers and manufacturers to comply with the generally applicable accessibility requirements of section 617 of the Act. To a significant extent, the rules adopted today serve to clarify preexisting obligations of IVCS providers, and for that reason as well are unlikely to be more burdensome than existing accessibility requirements.

#### **Providing TRS in Video Conferences**

78. The Commission amends its rules to facilitate the integrated provision of TRS to enable functionally equivalent participation in video conferences. By 'integrated provision of TRS'' in a video conference, the Commission means an arrangement whereby communication between the CA (or automated equivalent) and the TRS user, whether by text or video, takes place on the video conferencing platform, rather than through a separate connection. Just as the TRS Fund has long been used to support the provision of TRS with audio-only teleconferencing, the Commission finds it is necessary and appropriate that the TRS Fund be used to support the provision of TRS with video conferencing, as needed for functionally equivalent communication. At this time, the Commission does not require any TRS provider to provide TRS in video conferences on an integrated basis. Rather, the rules adopted here are intended to facilitate the provision of TRS in video conferences while protecting the TRS Fund against potential waste, fraud, and

79. A commenter contends that funding TRS users' participation in video conference calls is somehow a "profound change" that will negatively impact the deaf community in various areas such as healthcare. The TRS Fund already compensates TRS providers for their users' participation in video and audio conference calls. The obligations of various industry sectors to provide accommodations for individuals with disabilities under federal, state, and local laws remain unchanged.

80. Legal Authority. The Commission adopts its tentative conclusion that it has statutory authority to direct TRS Fund support to the provision of TRS in video conferences on an integrated basis. Specifically, the Commission concludes that the integrated provision of relay service in a video conference (i.e., without the need for the CA to have a voice-only connection to the video conference and a separate data or video connection to the TRS user) fits the statutory definition of

telecommunications relay service as a telephone transmission service enabling communication by wire or radio in a manner that is functionally equivalent to the ability of a hearing individual who does not have a speech disability to communicate using voice communication services by wire or radio. See 47 U.S.C. 225(a)(3).

81. Section 225 of the Act defines relay services in terms of their purpose—to enable people with hearing or speech disabilities to communicate by wire or radio in a manner that is functionally equivalent to how people without such disabilities use voice communication services. In turn, communication by wire and communication by radio are broadly defined by the Act, using terms that encompass, among other things, communication via the internet or internet Protocol. In addition, IVCS, which is defined to include audio communication, is appropriately characterized as a voice communication service for purposes of section 225 of

82. As for telephone transmission service, which is not defined in the Act, the Commission has given this term a broad interpretation, noting that it is constrained only by the requirement that such service provide a specific functionality, namely the ability to communicate by wire or radio in a manner functionally equivalent to *voice* communication. Further, section 225 of the Act directs the Commission to "ensure that regulations prescribed to implement this section encourage, consistent with section 7(a) of this Act, the use of existing technology and do not discourage or impair the development of improved technology." 47 U.S.C. 225(d)(2). For example, in prior decisions authorizing new forms of TRS, the Commission has repeatedly found that internet-based relay services are not limited to a specific technical configuration, and has not interpreted telephone transmission service as requiring the use of telephone numbers. Consistent with these prior decisions, the inclusion of video imaging in the underlying service to which TRS is applied does not change the fundamental character of TRS itself as a telephone transmission service. Whether TRS is used to relay ordinary voice telephone service or the voice portion of a video conferencing service, it remains essentially telephone transmission service: regardless of the additional content that may be included, along with voice, in the underlying communication, the essential purpose of TRS is to ensure that the telephonic (i.e., voice)

characteristics of a communication are rendered communicable, in a functionally equivalent manner, to people with hearing or speech disabilities.

83. Commenters addressing the issue generally agree with the Commission's analysis of section 225 of the Act. As one commenter notes, a Senate committee report in the legislative history explains that the provisions of section 225 of the Act "do not seek to entrench current technology but rather to allow for new, more advanced, and more efficient technology." The only dissenter contends, without further explanation, that providing interpretation for video calls held on privately hosted IVCS platforms falls outside the scope of the TRS fund. As explained above, the Commission has previously rejected this narrow view of section 225 of the Act.

84. Timing of Commission Action. The Commission agrees with some commenters that collaboration among stakeholders may help accelerate efforts to provide TRS in video conferences on an integrated basis. However, given the centrality of video conferencing in today's society, it is important that the Commission adopt rules addressing the provision of TRS in video conferences without undue delay. This is especially true for VRS, as alternative sign language interpretation services are not always available for video conferences. Therefore, the Commission amends its rules in a number of ways to facilitate the integrated provision of TRS, and especially VRS, in video conferences. Regarding some aspects of VRS, as well as other forms of TRS, the current record does not enable the Commission to formulate an appropriate rule, and it seeks further comment on such

85. The Commission does not see a need to authorize a pilot program for the integrated provision of VRS in video conferences, as suggested by a commenter. The Commission has conducted pilot programs, such as the at-home VRS call handling pilot program and the National Deaf-Blind Equipment Distribution Program, in the context of allowing a service or a mode of providing a service that was not previously allowed by our rules, or when a pilot program is mandated by Congress. With such a pilot program, the Commission can study what adjustments to its rules may be needed to allow a new service or new program.

unresolved issues in the FNPRM.

86. However, pilot programs, by their nature, have a sunset date, and require affirmative action by the Commission to extend the sunset date or convert the pilot program to permanent rules

allowing the new service. Given the importance and urgency of making VRS available in video conferences on an integrated basis, and the progress that has been made to date in integrating VRS with IVCS, the more tentative, pilot-program approach is not appropriate here. Indeed, the integrated provision of VRS on video conference calls has already begun on a limited scale. Instituting a pilot program could be incorrectly perceived as signaling uncertainty as to the net benefits of such integration, potentially causing unnecessary delay in the availability of integrated VRS.

87. It is clear from the comments that TRS and video conferencing service providers believe collaboration will continue for the foreseeable future. Any insights gleaned from such collaboration can inform the Commission's rulemaking process going forward, without the need to wait for a pilot program to produce results.

88. Multiple commenters also suggest that the Commission charter a DAC working group composed of representatives of video conferencing providers, TRS providers, and accessibility advocates, who would be tasked with developing recommendations for further rules. Again, the Commission believes it can make significant progress now toward improving the accessibility of video conferencing calls. As stakeholders continue to collaborate, the Commission can consider whether chartering a DAC working group with specific tasks would be useful for this effort.

89. Integrating the Provision of VRS in Video Conferencing. The Commission also adopts its tentative conclusion, with which commenting parties generally agree, that the integrated provision of VRS with video conferencing is often necessary to enable sign language users to communicate in a functionally equivalent manner. Integrated provision of VRS in a video conference means an arrangement whereby a CA is included as a participant in the video conference and all communication between the CA and the participants takes place on the video conferencing platform rather than through a separate connection. A VRS user relying on a CA who appears on a separate screen while connected to the conference audio is non-integrated provision of VRS. Non-integrated provision of VRS remains a compensable form of TRS, and is not affected by the rules adopted in this proceeding.

90. As noted previously, connecting a VRS CA to a video conference may not be possible if there is no dial-in

connection. Such a connection is often unavailable. Assuming the video conferencing platform allows a dial-in connection, in a hosted video conference it is the host who determines whether to provide such an option. Even if a dial-in connection is available, that configuration creates difficulties for the VRS user, if, for example, the user must constantly navigate between devices. In addition, the CA who, unlike other participants, is limited to an audio connection, is unable to read documents or other text that may be displayed, interpret facial expressions, or attend to other visual cues on which video conference participants often rely for effective communication.

91. A commenter objects to the Commission's approach to integrating VRS with video conferencing services, claiming that authorizing TRS Fund compensation for VRS integrated with video conferencing platforms will "nationalize" the ASL interpreting industry, putting out of business many Video Remote Interpretation (VRI) services, who currently provide translation services for conference calls. Such speculative concerns do not justify prohibiting or delaying the integrated provision of VRS in video conferences. The rules adopted here do not prohibit video conference hosts or participants from using non-VRS interpretation services. Indeed, the Commission expects that VRI will be preferred for video conferences, as VRI interpreters employed by a video conference host generally will have more opportunity to prepare, and are more likely to have expertise in the specific subject matter of a video conference. Many organizers and hosts of video conferences calls have obligations under the ADA or other laws to provide accommodations for people with disabilities, including English-to-ASL interpretation, for which the use of VRS often may not be suitable.

92. To facilitate the integration of VRS with IVCS, the Commission amends its rules, as set forth below, to ensure the appropriate use of VRS with video conferencing and to prevent waste, fraud, and abuse. The rules adopted today are designed to allow VRS providers to integrate their services with video conferencing so that VRS customers can participate in a video conference call with the presence of a VRS CA on the video platform, while protecting the TRS Fund from waste, fraud, and abuse. As video conferencing service evolves and VRS providers and the Commission gain more experience with the integrated provision of VRS in video conferences, some of the rules below may be revisited.

93. Permissive Approach. At this time, the Commission does not require VRS providers to provide VRS in video conferences on an integrated basis. VRS and video conferencing providers need to continue collaborating to ensure that VRS is available to sign language users on IVCS platforms, and the Commission generally encourages all VRS and video conferencing providers to be receptive to such collaboration. However, the Commission recognizes that integration of VRS with video conferencing services, including all necessary user verification, billing, and other requirements, may present technical issues for both VRS and video conferencing providers. The record does not provide useful information on how much time IVCS providers and TRS providers may require to develop integration solutions, nor the extent to which a solution may be applicable to multiple video conferencing platforms.

94. The Commission is concerned that mandating integration of VRS with video conferencing services at this early stage in the technological development of the service could stymie experimentation with different technologies. Allowing experimentation and innovation, including technical collaboration among stakeholders will result in better integration of VRS, and is therefore consistent with the statutory mandate that TRS services are to be provided to "the extent possible" and in

the "most efficient manner."

95. User Validation. VRS is available only to eligible users, *i.e.*, persons authorized to use VRS pursuant to a registration in the User Database. Ordinarily, a person's status as an eligible VRS user is verified by means of the NANP telephone number from which or to which a call is placed. By contrast, video conference participants typically enter a video conference via the internet (e.g., by clicking a link provided by the host of a video conference, or entering a URL in a search engine or app) without dialing from a line associated with a telephone number. In further contrast with ordinary telephone calls, the video conference format invites VRS users to connect directly, rather than through their VRS providers.

96. Consistent with the requirement for other VRS calls, the Commission requires that, when VRS is provided in video conferences, VRS providers must validate eligibility by collecting the user's assigned 10-digit NANP telephone number, even if the number is not technically used to connect to the video conference. For example, the VRS provider may request registered users to enter their VRS telephone number in an

application or plug-in that the VRS provider makes available to video conference participants to request a VRS CA. Whatever the process, the VRS provider must verify that the user's telephone number is registered in the User Database before allowing the assigned CA(s) to participate in the call. The Commission encourages video conferencing service providers and VRS providers to collaborate on development of such sign-on procedures.

97. Call Detail Requirements. To collect compensation from the TRS Fund for a particular call, a VRS provider must submit call detail records (CDRs) to the TRS Fund administrator with the information required by the Commission's rules. To take account of the distinctive characteristics of and special requirements applicable to video conferencing (including special criteria for counting CA minutes of use and limitations on the number of CAs that may be assigned to a multi-party video conference), the Commission amends the Call Data Rule to require that a VRS provider's CDRs identify each video conference in which integrated VRS is provided. IP addresses can be used, in the context of video conferences, to identify the internet location to which participants all connect, and a conference provider's URL can assist the Fund administrator's oversight of this new application of TRS by identifying which video conferencing provider is responsible for handling the underlying communication. However, to ensure flexibility in the administration of TRS, the rule the Commission adopts authorizes the TRS Fund administrator to determine, and provide specific guidance to VRS providers regarding, the specific information and format that are needed to indicate that integrated VRS was provided in a video conference and to sufficiently identify the particular video conference involved, taking account of the need to provide an auditable record, as well as any legitimate security or data protection concerns. For example, the administrator might determine that an IP address is needed to identify the specific internet location of the video conference, and that the provision of a short-form URL will sufficiently identify the IVCS provider while limiting any security or privacy risk that might result from requiring the submission of a longform URL. However, the Commission emphasizes that the rule adopted here does *not* determine the specific additional or alternative information regarding video conferences that shall be submitted in CDRs. Rather, the Commission relies on the TRS Fund

administrator to make that determination, based on its expertise and experience. In this regard, the Commission directs the administrator to collect, and by extension to use, process, store, and maintain, only information—insofar as it may qualify as personally identifiable information that is directly relevant and necessary to accomplish its specific purpose. If necessary, the administrator may also provide instructions to ensure that providers correctly identify noncompensable international video conferences and other instances where, based on the parties involved, the provision of VRS in a video conference is not eligible for TRS Fund

compensation.

98. When Compensable Time Starts. The CDRs submitted by TRS providers must record when compensable call time begins and ends. For an ordinary VRS call, compensable call time usually starts when the called party answers, because at that point the CA is already present. Identifying a start time is not so obvious for video conferences. The CA may not be present when a video conference begins. Further, the need for interpretation in a video conference does not always start as soon as two participants have logged on; for example, both of the first two participants may be signers, or hearing users; and, on some calls, participants may be placed in a "waiting room" before entering the call. In the *NPRM*, the Commission proposed that, for video conferences, a VRS provider's TRS minutes of use begin when a VRS CA is connected to a video conference and two or more participants are actively present.

99. The Commission adopts a modified version of the proposed rule to facilitate the automatic provision of conversation start times in CDRs, so that a CA does not ordinarily need to make a determination when compensable time begins. Compensable time for a video conference shall begin when a VRS CA enters the video conference, provided that the CA identifies the requesting VRS user within five minutes of entering the video conference. If, within that time, the CA cannot identify the requesting VRS user, or it becomes evident that VRS is not needed (e.g., if no hearing users log on and all participants communicate using sign language), then the call must be identified as non-compensable.

100. At this time, the Commission declines to allow compensation for periods when CAs are in a waiting room before joining a video conference. There is a significant difference between being "on hold" for a voice telephone call and

being in a "waiting room" prior to joining a video conference. When a VRS user and CA are "on hold," they are in communication with each other, and the CA is able to interpret any oral announcements or other audio information conveyed by the other party's answering device. In a video conference "waiting room," however, the CA may be the only one "waiting, and even if a registered VRS user is also "waiting," communication between them may not be possible. Further, if announcements by the conference host are conveyed by text (as appears to be the usual case), instead of orally, no VRS interpretation of such announcements is needed.

101. The Commission recognizes that the VRS user and CA may not be able to control when they are admitted to a video conference from a waiting room. However, compensation for time in a waiting room, or other pre-conference statuses where the VRS user and CA are unable, or have no need, to communicate, would expend TRS funds without even the possibility for the provision of interpretation services.

102. CA-Related Issues. As acknowledged in the NPRM, there may be a number of situations in which more than one VRS CA potentially may be asked to interpret a video conference. For example: two or more participants may request VRS from different providers in the same video conference; two or more VRS users may each request VRS from the same provider on the same video conference; or the nature of the video conference may be such that a VRS provider determines that more than one CA (i.e., team interpreting) is needed for effective communication. In the NPRM, the Commission asked whether the TRS rules should apply differently in this respect to a video conference than to a teleconference. The Commission also proposed that, in the ordinary case, if the VRS user who requested service leaves a video conference, or is disconnected, before the session ends, then the billable period has ended and the CA should leave the video conference.

103. At this time, the Commission does not prohibit multiple providers from responding to service requests from different users for the same video conference. Implementing such a rule would require logistics and coordination procedures among VRS providers, about which the record is nonexistent. However, the Commission's rules do not prohibit TRS providers from reaching agreements for the efficient use of CAs. For example, the restrictions on VRS contracting do

not preclude a VRS provider from authorizing another VRS provider to provide interpretation service to the first provider's registered users. Thus, VRS providers may arrange for their registered users participating in the same video conference to be served by a single CA as long as there is no double-billing of the TRS Fund for the services of that CA.

104. In an audio-only teleconference, where two or more registered VRS users are participating, the TRS Fund supports the provision of a CA for each registered user—with each user's connection through a CA being treated as a separate call because the VRS CAs are connected to the VRS users on separate screens. However, in a video conference with integrated VRS, unlike a teleconference, it is possible for all participants to be served by one CA from the same VRS provider. To prevent unnecessary, redundant provision of interpreting by the same VRS provider, and to limit the risk of waste, fraud, and abuse, the Commission requires that, when a VRS provider receives two requests for VRS for a single video conference, the VRS provider shall only bill the TRS Fund for VRS provided to the first requesting user. If a CA joins a video conferencing call and detects that a VRS CA from the same VRS provider is already present on the call, the laterin-time CA should terminate participation in the call, and no separate CDR shall be submitted to seek compensation for that CA's presence on the call. To facilitate implementation of this practice, the Commission requires that VRS CAs identify themselves as such in a video conference, including the name of their VRS employer. CAs may identify themselves for this purpose by indicating in their display name that they are an interpreter and identifying the VRS provider with which they are affiliated. In certain situations, the two VRS CAs may not immediately know which is the "laterin-time." Communication between the two CAs may be possible, in which case they can decide who drops off, or VRS providers may want to establish their own protocols for which CA drops off in this situation.

105. Under the Commission's rules, VRS providers are not prohibited from assigning an additional CA to a particular VRS call, if deemed necessary. However, no additional compensation is paid for the second CA. The Commission recognizes that video conferences often involve longer conversations with more complex interaction among multiple participants. The current record does not enable the formulation of a bright-line rule

defining the circumstances, if any, that warrant TRS Fund compensation for the addition of a second CA, nor an appropriate rate of compensation for team interpreting.

106. The Commission adopts its proposal that, in the ordinary case, if the VRS user who requested service leaves a video conference, or is disconnected, before the session ends, then the billable period has ended and the CA should leave the video conference. As an exception, the Commission will allow the continuation of TRS Fundsupported service to a video conference after the initiating user drops off, provided that a registered VRS user who remains in the video conference has made a request for service. (In addition, at least one non-signing user must remain on the call.) In implementing this exception, VRS providers may choose to include in their software for managing service to video conferences the capability to hold in reserve any extra service requests from video conference participants that were not fulfilled when made because another participant already requested VRS for the conference. By holding an additional request in reserve, it can be automatically fulfilled if the first-in-line requester leaves the conference early. If there are no requests held in reserve, and the CA is aware that other sign language users may remain in the video conference, the CA may delay exiting the conference for up to five minutes of additional compensable time, to allow a new (replacement) registered user to request service. Upon verification of the new registered user, the CA (or a replacement) may continue service to the video conference beyond the fiveminute grace period. The second registered VRS user's telephone number must be included in the call data submitted for compensation. The Commission directs the TRS Fund administrator to provide appropriate guidance to VRS providers on how an extension of service, in response to a remaining participant's request, should be reflected in the CDRs submitted by a provider in support of compensation requests. The Commission notes that this rule only applies when two registered VRS users initiate an invitation to the same conference call through the same VRS provider.

107. A VRS provider, raises a concern that its current system for responding to requests for integrated VRS does not allow a new request for VRS to be made until the initial CA has disconnected from the video conference. As a result, any users remaining in a video conference after the first requesting user drops off would not be able to request

service during the five-minute period allowed for that purpose. The current record is insufficient to allow the Commission to assess the nature and extent of such limitations and fully consider the possible alternatives for addressing the provider's concerns. In the *FNPRM*, the Commission seeks additional comment on this issue. In addition, the Commission notes that VRS providers may request relief pursuant to the Commission's waiver process.

108. The Commission is not persuaded that a VRS provider should continue to receive TRS Fund compensation for extended service to ASL users who are not registered VRS users, as a commenter recommends. The TRS program is premised on service to individuals who meet the eligibility criteria of section 225 of the Act and the Commission's implementing rules. Further, allowing compensation for service to users who are not confirmed as eligible by a TRS provider may result in longer wait times for relay service requested by eligible users on other calls.

109. The Commission does not modify the current rule requiring that VRS CAs stay on a call for a minimum of 10 minutes before being replaced by another CA. At this time, the Commission also declines commenters' recommendation to allow additional compensation for the presence of multiple CAs if the replacement CA enters the call early to observe or acquire background information before taking over the first CA's duties. The record does not clearly demonstrate to what extent there is a material difference between call takeovers in a video conference and call takeovers in an ordinary telephone call or teleconference of comparable duration, such that the Commission's rules should allow extra compensation for transitional observation periods. If further experience warrants, the Commission may revisit this issue in a future proceeding.

110. The Commission's rules require that call detail, including the start and end of conversation time, be recorded automatically. Given that the rules adopted here require CAs to make certain determinations—e.g., as to when they must exit a video conference because none of the remaining participants has requested VRS—the Commission amends its rules to provide that the generation of a CDR based on a CA's exit from a video conference in accordance with our rules does not violate the automatic recording rule. To assist in review and auditing of compensation payments, the

Commission requires VRS providers to include in their annual compliance reports a detailed explanation of the guidance they provide to CAs regarding when compensable time starts and stops, in the various circumstances discussed above.

111. Privacy Screen Rule. The current rules, which were adopted before video conferencing became widespread, prohibit a VRS CA from enabling a visual privacy screen or similar feature during a VRS call and require the CA to disconnect a VRS call if the caller or called party enables a visual privacy screen or similar feature for more than five minutes or is otherwise unresponsive or unengaged for more than five minutes. A visual privacy screen is defined as a screen or any other feature that is designed to prevent one party or both parties on the video leg of a VRS call from viewing the other party during a call. The rule's original purpose was to stop illicit schemes that result in calls "running" without any communication between the parties for the sole purpose of fraudulently billing the Fund. In the *NPRM*, the Commission recognized that in a multi-party video conference, participants may turn off their video cameras for various reasons wholly unrelated to the reason for the rule. Therefore, the Commission proposed to amend the rule to allow more flexibility in the activation of cameras when VRS is provided in a video conference on an integrated basis. The Commission also waived the privacy screen rule, in part, pending the outcome of this rulemaking.

112. The Commission adopts the proposed amendment to the privacy screen rule. The record supports the Commission's assumption that in multiparty video conferences, there are a variety of reasons why VRS users and CAs, like other participants, may turn off their videos without any fraudulent intent, and without thereby indicating lack of interest or engagement in the video conference. For example, in some video conferences, the host may request that all participants turn off their videos unless speaking, to make it easier for participants who are deaf to view a sign language interpreter. Further, in a video conference where one or more participants are speaking at length, participants who are deaf may (like other participants) choose to turn off their videos until it is their turn to speak.

113. The revised privacy screen rule allows VRS CAs to continue providing relay services integrated with a multiparty video conference when the VRS user who requested service has turned off his or her video connection for more

than five minutes, as long as at least one other party is continuing to speak and the VRS user is still connected to the video conference. If five minutes elapse in which no party on a multi-party video conference is responsive or engaged in conversation, the VRS CA shall follow the current procedure, *i.e.*, announce that VRS will be terminated and leave the video conference. The amended rule also allows VRS CAs to turn off their video connections when not actively relaying a conversation, e.g., with another VRS CA as a team on a multi-party video conference. (Although the TRS Fund does not currently provide additional compensation for team interpreting, the Commission's rules do not prohibit team interpreting in video conferences.) Finally, the Commission adopts its proposed definition of multi-party video conference as a video conference with three or more participants, excluding VRS CAs and any other participant providing an accommodation for a participant.

114. Integrating Other Types of TRS with Video Conferencing. In the NPRM, the Commission sought comment on the need to facilitate the integration of non-VRS types of TRS with video conferencing and on the existence and progress of any efforts to develop technology to enable such integration. Limited comments were received on this issue. At this time, the Commission adopts certain rules, discussed below, for application to non-VRS TRS, to the extent that IP CTS providers have developed methods of providing this service on an integrated basis. However, the record is insufficient to resolve some issues, and the Commission seeks additional comment on those in the FNPRM.

115. IP CTS. Currently, registered IP CTS users can use IP CTS with video conferencing on a non-integrated basis. For example, a video conferencing participant can access IP CTS captioning when a telephone connection to the video conference is available. In this configuration, IP CTS captions are only visible to the requesting user—and may require a separate screen. Further, in this configuration, a human captioner cannot see the video conference participants. However, captioning is currently available as a native feature on some IVCS platforms, with captions displayed on the same screen as the video conference. As discussed above, the Commission amends part 14 of its rules to expressly require that IVCS providers make captioning available on their video conferencing platforms (unless that is not achievable). In

addition, the part 14 of the Commission's rules amendments require IVCS providers to enable the connection of IVCS users to third-party captioning services (including IP CTS providers) and to display such captions on the user's video conference screen (unless these requirements are not achievable). Some people with hearing loss may prefer to use third-party captions produced by an IP CTS provider rather than those provided by the IVCS provider or a fee-based captioning service.

116. With multiple captioning options already available, the extent of the need for integrated provision of IP CTS (i.e., so that captions are displayed on the IP CTS user's video conference screen) is currently unclear. Consistent with its determination that the TRS Fund can support the provision of TRS in video conferences, the Commission allows IP CTS providers to seek compensation for providing video conference captioning on an integrated basis, in compliance with the current TRS rules. However, the Commission does not require IP CTS providers to do so. IP CTS providers that seek compensation for providing captioning in video conferences on an integrated basis may use the same billing and CDR guidelines discussed above for VRS. In the FNPRM, the Commission seeks further comment on whether amendments to its rules are needed to facilitate the integrated provision of IP CTS while preventing waste, fraud, and abuse.

#### Rules Applicable to All TRS

117. Confidentiality. Section 225 of the Act specifically requires the Commission to prescribe regulations that prohibit relay operators from disclosing the content of any relayed conversation and from keeping records of the content of any such conversation beyond the duration of the call. 47 U.S.C. 225(d)(1)(F). The confidentiality provision of the Commission's TRS rules thus provides that, except as authorized by section 705 of the Act, 47 U.S.C. 605, CAs are prohibited from disclosing the content of any relayed conversation regardless of content, and 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. 47 CFR 64.604(a)(2)(i). Some features of video conferences are not explicitly addressed by this rule. For example, a CA may become aware of "sidebar" conversations between two or more video conference participants (whether in speech or sign language), which the CA concludes are not intended to be communicated to other

participants. Or a CA may review the text of "chat" conversations or PowerPoints and other presentation material shared among participants, even though this information may not be orally recited or discussed and thus may not be relayed by the CA. Such content may not be covered by the current rule.

118. The Commission amends the TRS confidentiality rule to expressly prohibit CAs from disclosing nonrelayed content (as described above) communicated in a video conference or from maintaining records of such content beyond the duration of the video conference. The amended rule prohibits a TRS provider and its CAs from disclosing "sidebar" conversations, chat, presentation material, and other content that may be observed by a CA, and requires TRS providers and CAs to destroy any notes or records of such content upon termination of the call. For example, if a CA keeps notes during a call of, e.g., names, specialized vocabulary, etc., such notes must be destroyed at the end of the call. The Commission also amends the confidentiality rule to codify the Commission's prior rulings indicating that the rule expressly applies to TRS providers as well as to CAs, so that the rule explicitly covers TRS calls (including but not limited to video conferences) where TRS is provided without the involvement of a CA.

119. As with ordinary telephone calls, video conference participants typically have an expectation that, unless the circumstances indicate otherwise, the content of their communications will not be disclosed to non-participants. Further, section 225 of the Act specifically mandates that the confidentiality of relayed conversations be protected, highlighting the paramount importance of privacy for TRS users. TRS providers and their CAs are invited into the communication process for the sole purpose of enabling people with hearing and speech disabilities to participate in telephonic conversations in a functionally equivalent manner. They are not authorized to be sources of information about the conversations they facilitate, except in narrowly defined circumstances.

120. The Commission's expansion of the rule to cover non-relayed content observed by a CA reflects that, unlike an ordinary telephone call, the multimedia nature of a video conference may expose a CA to textual or other non-aural information shared among some or all participants, as to which they may have a legitimate expectation of privacy.

Although the rule that section 225 of the Act expressly *directs* the Commission to adopt only covers the content of any relayed conversation, this specific direction is part of a general direction to the Commission to "prescribe regulations to implement this section." 47 U.S.C. 225(d)(1). The Commission does not interpret section 225 of the Act as precluding the Commission from modifying its confidentiality rule to cover additional information to which TRS CAs may be exposed in the course of their work.

121. A commenter asks the Commission to clarify that VRS providers may not retain video transcripts of calls to use in training artificial intelligence (AI) programs. The Commission's TRS confidentiality rule already prohibits TRS providers from keeping records of the content of any conversation beyond the duration of a call. The Commission will investigate any alleged violation of this rule if brought to its attention through the complaint process.

122. The Commission emphasizes that the TRS confidentiality rule only applies to TRS CAs and TRS providers (i.e., entities seeking compensation from the TRS Fund). Neither IVCS providers nor the participants in a video conference (other than CAs) are subject to the rule. Therefore, there is no basis for concern that expanding the scope of the rule as described above would somehow curb the participants' ability to use common and legitimate video conferencing features such as open captioning, recording and cloud-stored transcripts. As far as the TRS rules are concerned, IVCS providers and video conference participants remain free to provide and use captioning and recording features, or disclose information to non-participants, subject to whatever restrictions may apply under other laws.

123. Exclusivity Agreements. The Commission adopts its proposal to prohibit exclusivity agreements between TRS providers and video conferencing providers. This rule was recommended by the DAC, and no party opposes it. In general, an exclusivity agreement is an express or implied agreement between a TRS provider and a video conferencing provider that has the purpose or effect of preventing other providers from offering similar services to consumers. As stated in the NPRM, exclusivity agreements may deprive consumers of the opportunity to rely on their chosen TRS provider when using video conferencing services, contrary to the Commission's policy. Similarly, such exclusivity agreements may restrict the ability of conference hosts and TRS

users to select a preferred video conferencing provider.

124. Although the NPRM also sought comment on addressing arrangements that create de facto exclusivity but do not constitute express or implied exclusivity agreements, the resulting record is insufficient. However, the Commission stresses that its part 14 rules prohibit IVCS providers from installing network features, functions, or capabilities that impede accessibility or usability. Although the application of this rule to network features, functions, and capabilities is determined on a caseby-case basis, the Commission emphasizes that software applications that are installed, e.g., to enable IVCS users to request a VRS CA, must not impede the ability of users to request service from their preferred provider.

125. Scheduling the Provision of TRS. In the NPRM, the Commission took note that video conferencing can function as a substitute for in-person meetings as well as teleconferences, and that many employers, educational institutions, health care providers, government agencies, and other entities currently provide ASL interpreting, captioning and other accommodations—either voluntarily or to fulfill obligations under the ADA or other laws. In these contexts, dedicated ASL interpreters, captioners, and others may be trained and gain experience in a specific subject matter and may have the opportunity to prepare in advance for a scheduled meeting or class. The Commission sought comment on the implications of this for the provision of TRS. The Commission also asked how the Commission can ensure that the use of TRS in video conferences does not detract from the effective implementation of ADA and other legal requirements. In particular, the Commission sought comment on a tentative conclusion that TRS providers must continue to decline requests to reserve a TRS CA in advance of a scheduled video conference.

126. The Commission adopts the tentative conclusion in the NPRM that TRS providers must continue to decline requests to reserve a TRS CA in advance of a scheduled video conference. The Commission has long held that the role of TRS is to be available for calls consumers choose to make, when they choose to make them, i.e., to be the "dial tone" for a call that requires assistance for effective communication. For this reason, the Commission requires TRS providers to handle service requests in the order in which they are received, in accordance with "speed-of-answer" standards. As a consequence, the Commission has found that the practice

of permitting TRS users to reserve in advance a time at which a CA will handle a call is inconsistent with the nature of TRS and the functional equivalency mandate. The provision of ASL interpreting, captioning, and other assistance by prior reservation is a different kind of service, which is available from other sources, such as VRI and CART service providers. Commenters urging the Commission to modify the rule against advance scheduling do not provide persuasive reasons why such a change is necessary, given the availability of non-TRS services.

127. One commenter suggests that the first-come, first-served rule for TRS will somehow interfere with language access to various services mandated by the federal government. The first-come, first-served rule only applies to TRS CAs responding to requests for TRS. The rule does not apply outside that context. The general accessibility of federal programs will not be affected in any new or comprehensive way by this determination.

128. At this time, the Commission also declines to authorize VRS providers to assign a specialized CA to handle a video conference, rather than assigning the first available CA, as is currently required. Based on the current record, the Commission is not persuaded that every video conference call will be so complex as to require specially trained CAs. Further, Sorenson's proposal raises substantial concerns about speed of answer and how the quality of TRS provided for ordinary telephone calls would be affected, were the Commission to adopt a rule authorizing CAs with special training—who likely would be among the most talented and experienced TRS CAs—to be assigned specifically to the provision of video conferences. The Commission seeks additional comment on this proposal in the *FNPRM*. The Commission also notes that there is precedent indicating that the Commission's rules allow the assignment of VRS calls to CAs based on the technical capability of the equipment at a CA station, as opposed to the skills of a particular CA. Document FCC 24-95 does not overrule prior precedent or alter the Commission's current rules in this regard.

## Amendment of the Commission's Rules for TRS Calls With Multiple CAs

129. Section 64.604(c)(14) of the Commission's rules states that compensation is authorized for the provision of multiple CAs to handle TRS calls between two or more users of captioned telephone service—CTS or IP

CTS—and for calls between a captioned telephone service user and a user of TTY-based TRS or VRS. Subsequently, the Commission amended the definition of telecommunications relay service to reflect the statutory definition of that term as amended by the CVAA. The amended definition provides that TRS enables functionally equivalent communication between "an individual who is deaf, hard of hearing, deaf-blind, or who has a speech disability" and "one or more individuals." Previously, TRS was defined as enabling functionally equivalent communication between "an individual who has a hearing impairment or speech impairment" and "an individual who does not have a hearing impairment or speech impairment." The Commission explained that the revised definition will allow compensation from the TRS Fund for relay calls involving two or more persons using different forms of relay services, including calls whose handling may require more than one CA. However, in adopting the amended definition of TRS, the Commission did not modify the multiple-CA rule to reflect its stated intent regarding compensation for calls handled by multiple CAs. As a result, some categories of calls that qualify as TRS under the amended statutory definition and that may warrant multiple CAs, are not currently addressed by the multiple-CA rule. For example, the current rule does not address when the use of two CAs is appropriate for calls between users of IP Relay and other forms of TRS. In the NPRM, the Commission proposed to amend this rule to address these gaps, to harmonize this rule with the current definition of TRS.

130. The Commission adopts the proposed amendment to the multiple-CA rule, which states that compensation may be paid for more than one CA to handle, among other categories, calls between users of different types of relay services where more than one CA is warranted. This amendment broadens the scope of the rule to more fully reflect the Commission's stated intent in adopting the amended definition of TRS. The Commission also clarifies that, for purposes of this rule, CA can refer to an automated CA equivalent, such as an ASR program used to provide ASRonly IP CTS.

#### Final Regulatory Flexibility Analysis

131. Need For, and Objectives of, the Report and Order. In document FCC 24–95, the Commission amends its rules to ensure that people with disabilities are able to access and use interoperable video conferencing service (IVCS), a category of advanced communication

service (ACS). As video conferencing has grown from a niche product to an essential vehicle of communication, the need for accessibility has become acute; yet, there remain significant gaps in the accessibility of video conferencing services. Therefore, the Commission amends its part 14 rules, which govern accessibility of ACS, adding performance objectives that specifically enable the accessibility of IVCS. These performance objectives include: (1) providing speech-to-text (captioning); (2) enabling access to sign language interpreting provided by third parties, including video relay service (VRS); and (3) providing user interface controls for video conferences. In addition, the Commission amends its part 64 rules governing telecommunications relay services (TRS) to reflect that the Interstate TRS Fund can support the integrated provision of relay services in video conferences—whether or not the video conferencing platform can be accessed via a dial-up telephone call. The Commission modifies the TRS rules to facilitate such integration and prevent waste, fraud, and abuse. Finally, the Commission amends the TRS rule governing use of multiple forms of TRS on the same call to ensure that individuals with differing forms of disability can communicate using their preferred form of TRS.

132. Summary of Significant Issues Raised by Public Comments in Response to the IRFA. There were no comments filed that specifically addressed the proposed rules and policies presented

133. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments. The Chief Counsel did not file any comments in response to the proposed rules in this

proceeding.

134. Description and Estimate of the Number of Small Entities to which the Rules will Apply. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same

meaning as the term "small business  $\operatorname{concern}^{\text{-}}$  under the Small Business Act. A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

135. The Commission's decisions in document FCC 24-95 will affect the obligations of providers of interoperable video conferencing services and telecommunications relay services. These services can be included within the broad economic category of All Other Telecommunications.

136. This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Providers of internet services (e.g., dial-up ISPs) or voice over internet protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry. The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small. U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year. Of those firms, 1,039 had revenue of less than \$25 million. Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

137. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements. The amendments to the Commission's rules adopted in document FCC 24-95 may modify certain reporting, recordkeeping or other compliance obligations of certain small entities that provide IVCS or TRS. Compliance with these amended rules will be required January 12, 2027. The performance objectives adopted clarifying existing obligations, and are subject to existing achievability criterion. As a result, small entities should not find compliance with these rules overly burdensome.

138. Part 14 of the Commission's rules requires that providers of ACSincluding IVCS—and manufacturers of equipment used with ACS ensure that their services and equipment (including associated software) are accessible and usable by people with disabilities,

unless these requirements are not achievable. The IVCS-specific performance objectives adopted by the Commission must be implemented by IVCS providers and manufacturers, including small entities, unless they are not achievable. The Commission establishes performance objectives to ensure flexibility in allowing entities to meet the statutory obligations of ensuring services and equipment are accessible to people with disabilities.

139. The Commission's existing rules require that each provider of ACS (including IVCS) and each manufacturer of equipment used to provide ACS maintain, in the ordinary course of business and for a reasonable period, records documenting the efforts taken by such service provider or manufacturer to implement section 716 of the Act, as amended, including: information about the manufacturer's or provider's efforts to consult with individuals with disabilities; descriptions of the accessibility features of its products and services; and information about the compatibility of such products and services with peripheral devices or specialized customer premise equipment commonly used by individuals with disabilities to achieve access. Providers of IVCS and manufacturers of equipment used for IVCS are subject to these existing requirements. In adopting additional performance objectives for IVCS, the Commission increases the amount of information that entities must retain and report under the recordkeeping. The time and resources needed to fulfill this additional recordkeeping should be minimal given the ongoing obligation to retain such records.

140. The Commission's existing rules require that an officer of each provider of ACS (including IVCS) and an officer of each manufacturer of ACS equipment must submit to the Commission an annual certificate that records are being kept in accordance with the above recordkeeping requirements, unless such manufacturer or provider has been exempted from compliance with section 716 of the Act under applicable rules. The form and content of the reporting will be unchanged, but the officer may require additional time to confirm the records for the new performance objectives are kept in accordance with the recordkeeping requirements.

141. As discussed in document FCC 24-95, the Commission received no specific cost estimates from commenters. Due to the diversity of IVCS service providers and IVCS equipment manufacturers subject to section 716 of the Act, as well as the multiple general and entity-specific

factors used in determining whether, for a given service provider or manufacturer, accessibility for a particular service item of IVCS equipment (or a particular) is achievable, it is difficult to estimate the costs of compliance for those small entities covered by the amended rules. However, the rules themselves include a safeguard to ensure that the burden and cost of compliance will not be unreasonable: compliance is conditioned on each objective being "achievable," i.e., "with reasonable effort or expense." An achievability determination must consider the nature and cost of the steps needed to meet the requirement, the technical and economic impact on the company's operation, the type of operations of the company, and the extent to which accessible services or equipment are already being offered by the company.

142. The amendments to the Commission's rules governing TRS are designed to facilitate the use of TRS Communications Assistants (CAs) in video conferences while minimizing the risk of waste, fraud, and abuse of the TRS Fund. These modifications only apply to a small entity TRS provider to the extent that users of the provider's TRS participate in video conference calls. Otherwise, the TRS compliance requirements would remain unchanged. Most of the TRS rule changes are a clarification of the extent of a rule's application to provision of TRS in video conferences. For example, providers of VRS, a form of TRS, must continue to meet user validation and call detail record reporting obligations when opting to provide VRS in video conferences. Call detail records must be recorded automatically. VRS providers must also include a detailed explanation of the guidance they provide to CAs regarding when compensable time starts and stops in their annual compliance reports. To collect compensation from the TRS Fund for a particular call, a VRS provider must submit call detail record to the TRS Fund administrator identifying video conferences where VRS is provided on integrated basis. These compliance and reporting requirements are consistent with existing obligations that VRS providers must meet in providing VRS and do not change the burdens of such entities.

143. Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered. The RFA requires an agency to provide "a description of the steps the agency has taken to minimize the significant economic impact on small entities . . . including a statement of the factual, policy, and legal reasons for selecting

the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected."

144. The requirements for ACS in part 14 of the Commission's rules were adopted in 2011. When the Commission confirmed the definition of IVCS in the 2023 IVCS Definition Order, it gave all IVCS providers one year to come into compliance with the existing ACS accessibility requirements in part 14 of its rules. In document FCC 24-95, the Commission considered a number of alternatives in adopting performance objectives for achieving accessibility applicable to IVCS. The Commission provides all entities subject to the new rules until January 12, 2027 to come into compliance. This will allow for product development and implementation within typical product upgrade and development cycles and minimize development burdens on small entities. Like all performance objectives in part 14 of the Commission's rules, these modified requirements are subject to options to make a product or service accessible by incorporating accessibility features into the product or service itself, or by relying third party applications, peripheral devices, software, hardware, or CPE that are available to the consumer at nominal cost. All part 14 of the Commission's rules performance objectives are also subject to an "achievability" standard that takes into account the cost of compliance and the nature of the impact of compliance on a specific entity. In addition, the rules provide an exemption for customized services and equipment and authorize the grant of waivers for multipurpose services and equipment. These flexibility and achievability conditions apply equally to all covered entities, including small entities and are necessary to ensure video conferencing is accessible to people with disabilities.

145. The amendments to the TRS rules are designed to facilitate access to TRS on video conferencing platforms. In document FCC 24-95, the Commission determines that TRS provided on video conferences are compensable from the TRS Fund and detail the applicability of the existing TRS rules to such rules to minimize the potential for waste, fraud, and abuse from the expansion of services. In allowing a voluntary approach to integrating TRS, the Commission allows providers to opt into the provision of such services and flexibility in the method of developing such integrated services. In clarifying the extent to which existing rules are

applicable and amending such rules to account for TRS provided in video conferences the Commission ensures providers are able to receive TRS Fund compensation for their provision of TRS in video conferences, while continuing to protect the TRS Fund from potential waste, fraud, and abuse if existing protections were thought inapplicable. The Commission also determined to further develop the record and give providers the opportunity to experience providing integrated services before addressing additional proposals from the NPRM, minimizing the potential burden of implementing requirements before fully understanding the benefits and burdens of those proposals.

#### **Congressional Review Act**

146. The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs, that this rule is non-major under the Congressional Review Act, 5 U.S.C. 804(2). The Commission sent a copy of document FCC 24–95 to Congress and the Government Accountability Office pursuant to 5 U.S.C. 801(a)(1)(A).

#### Final Paperwork Reduction Act of 1995 Analysis

147. Document FCC 24–95 contains modified information collection requirements, which are not effective until approval is obtained from the Office of Management and Budget (OMB). As part of its continuing effort to reduce paperwork burdens, the Commission will invite the general public to comment on the information collection requirements as required by the PRA of 1995, Public Law 104-13. The Commission will publish a separate document in the Federal Register announcing approval of the information collection requirements. Pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, 44 U.S.C. 3506(c)(4), the Commission previously sought comment on how the Commission might "further reduce the information burden for small business concerns with fewer than 25 employees." 88 FR 52088, August 7, 2023.

#### **Ordering Clauses**

148. Pursuant to sections 1, 2, 3, 225 and 716 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 153, 225, 617, document FCC 24–95 *is adopted.* 

#### List of Subjects

47 CFR Part 14

Communications, Individuals with disabilities, Reporting and recordkeeping requirements.

47 CFR Part 64

Individuals with disabilities, Telecommunications, Telephone.

Federal Communications Commission.

#### Marlene Dortch,

Secretary, Office of the Secretary.

#### **Final Rules**

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 14 and 64 as follows:

#### PART 14—ACCESS TO ADVANCED **COMMUNICATIONS SERVICES AND EQUIPMENT BY PEOPLE WITH DISABILITIES**

■ 1. The authority citation for part 14 continues to read as follows:

Authority: 47 U.S.C. 151-154, 255, 303, 403, 503, 617, 618, 619 unless otherwise noted.

■ 2. Amend § 14.21 by revising paragraph (b)(2)(iv) and adding paragraph (b)(4) to read as follows:

#### § 14.21 Performance Objectives.

(b) \* \* \*

(2) \* \* \*

- (iv) Availability of auditory information. Provide auditory information through at least one mode in visual form and, where appropriate, in tactile form. For interoperable video conferencing services, beginning January 12, 2027, provide at least one mode with captions that accurately and synchronously display the spoken communications in a video conference, and enable users to connect with thirdparty captioning services so that captions provided by such services appear on the requesting user's video conference screen. In this paragraph (b)(2)(iv):
- (A) Accurately means that captioning matches the spoken words of a conversation, in the order spoken, verbatim, without summarizing or paraphrasing, sufficiently to enable a user to understand what is being said.
- (B) Synchronously means that, to the greatest extent possible, the captions begin to appear at the time that the corresponding speech or sounds begin and end approximately when the speech or sounds end, are delivered fast enough to keep up with the speed of those words and sounds, and remain

displayed long enough to be read by the user.

- (4) Interoperable Video Conferencing Service. In addition to the other requirements of this section, beginning January 12, 2027, interoperable video conferencing services and covered equipment and software used with such services shall:
- (i) Enable the use of sign language interpretation provided by third parties, including the transmission of user requests for sign language interpretation to providers of video relay service and other entities and the provision of sufficient video quality to support sign language communication.
- (ii) Provide user interface control functions that permit users to activate and adjust the display of captions, speakers, and signers and other features for which user control is necessary for accessibility. In this paragraph (ii):
- (A) Adjust the display of captions means that a video conference participant can alter the size, font, and on-screen location of captions and adjust the color and opacity of both the captions and the caption background.
- (B) Adjust the display of speakers and signers means that video conference participants can minimize or hide extraneous windows, expand the windows of their choice, or relocate particular windows; and edit their own display names before or after joining a video conference.

#### PART 64—MISCELLANEOUS RULES **RELATING TO COMMON CARRIERS**

■ 3. The authority citation for part 64 continues to read as follows:

Authority: 47 U.S.C. 151, 152, 154, 201, 202, 217, 218, 220, 222, 225, 226, 227, 227b, 228, 251(a), 251(e), 254(k), 255, 262, 276, 403(b)(2)(B), (c), 616, 620, 716, 1401-1473, unless otherwise noted; Pub. L. 115-141, Div. P, sec. 503, 132 Stat. 348, 1091.

#### Subpart F—Telecommunications Relay **Services and Related Customer Premises Equipment for Persons With Disabilities**

- 4. Amend § 64.601(a) by:
- a. Redesignating paragraphs (23) through (26) as (24) through (27), (27) and (28) as paragraphs (29) and (30), paragraphs (29) through (52) as paragraphs (32) through (55), and paragraphs (53) through (58) as paragraphs (57) through (61); and
- **■** b. Adding new paragraphs (23), (28), (31), and (56).

The revisions and additions read as follows:

#### § 64.601 Definitions and provisions of general applicability.

(a) \* \* \*

(23) Integrated VRS. The provision of VRS in a video conference whereby the CA is included as a participant in the video conference and communication between the CA and the participants takes place on the video conferencing platform rather than through a separate connection.

(28) Interoperable video conferencing service (IVCS). Has the meaning given in part 14 of this chapter.

- (31) Multi-party video conference. A video conference call with three or more participants, excluding VRS CAs and any other participant providing an accommodation for a participant.
- (56) Video conference. A session of IVCS involving two-way real-time communication between two or more IVCS users.

- 5. Amend § 64.604 by:
- a. Revising paragraphs (a)(2)(i) and (c)(5)(iii)(D)(4)(ii);
- b. Adding paragraph (c)(5)(iii)(D)(9);
- c. Revising paragraphs (c)(5)(iii)(E)(2) and (c)(14);
- $\blacksquare$  d. Adding paragraphs (c)(15);
- e. Revising paragraphs (d)(5), and (e);
- f. Adding paragraph (f).

The revisions and additions read as follows:

#### § 64.604 Mandatory minimum standards.

(a) \* \* \*

(2) \* \* \*

(i) Except as authorized by section 705 of the Communications Act, 47 U.S.C. 605, TRS providers and CAs are prohibited from disclosing the content of any relayed conversation (and any non-relayed content communicated in a video conference) regardless of content, and with a limited exception for STS CAs, from keeping records of the content of any conversation (and any non-relayed content communicated in a video conference) 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.

(c) \* \* \* (5) \* \* \*

(iii) \* \* \* (D) \* \* \*

(4) \* \* \* (ii) Submit such data electronically, in a standardized format. For purposes of this subparagraph, an automated record keeping system is a system that captures data in a computerized and electronic format that does not allow human intervention during the call session for either conversation or session time; provided that, this subparagraph (c)(5)(iii)(D)(4) does not prohibit the submission of a CDR in which the end of conversation or session time is automatically determined by a CA's exit from a video conference prior to its termination, in accordance with the Commission's applicable rules.

(9) A VRS provider's call data shall identify each video conference in which integrated VRS is provided. For such video conferences, in lieu of the information specified in paragraphs (c)(5)(iii)(D)(1)(v) and (vi) of this section, a VRS provider may submit information, as specified in instructions issued by the administrator, that identifies the VRS user requesting service and the video conference session in which service was provided.

\* \* \* \* \* (E) \* \* \*

\*

- (2) TRS minutes of use for purposes of cost recovery from the TRS Fund are defined as the minutes of use for completed interstate or internet-based TRS calls placed through the TRS center beginning after call set-up and concluding after the last message call unit, except that for the provision of integrated VRS in a video conference, a VRS provider's TRS minutes of use are defined in paragraph (e) of this section.
- (14) TRS calls requiring the use of multiple CAs. TRS Fund compensation may be paid for more than one CA (or automated equivalent of a CA, when authorized) to handle the following types of calls:

(i) VCO-to-VCO calls between multiple captioned telephone relay service users, multiple IP CTS users, or captioned telephone relay service users and IP CTS users; and

(ii) Calls between users of different types of relay services for which more than one CA is warranted.

(15) Exclusivity Agreements. A TRS provider may not enter into an agreement with an IVCS provider if

such agreement would give the TRS provider exclusive access among TRS providers to the IVCS provider's facilities or such agreement would give the IVCS provider exclusive access among IVCS providers to the TRS provider's service via a video connection.

(d) \* \* \*

(5) Visual privacy screens/idle calls.

- (i) Except as provided in this paragraph (d)(5), a VRS CA shall not enable a visual privacy screen or similar feature during a VRS call and must disconnect a VRS call if the caller or the called party enables a privacy screen or similar feature for more than five minutes or is otherwise unresponsive or unengaged for more than five minutes, unless the call is a 9-1-1 emergency call or the caller or called party is legitimately placed on hold and is present and waiting for active communications to commence. Prior to disconnecting the call, the CA must announce to both parties the intent to terminate the call and may reverse the decision to disconnect if one of the parties indicates continued engagement with the call.
- (ii) A VRS CA providing integrated VRS in a multi-party video conference:
- (A) may temporarily turn off the CA's video camera when engaged in team interpreting, if the other CA is actively providing ASL interpretation;
- (B) may stay connected to the video conference if the VRS user who requested service has turned off the user's camera, as long as that user stays connected to the video conference; and,
- (C) if five minutes elapse in which no party is responsive or engaged in conversation, shall announce that VRS will be terminated and the CA shall disconnect from the video conference.

(e) Provision of integrated VRS in video conferences. (1) A VRS provider may provide integrated VRS in a video conference upon request by a registered VRS user (or by a person authorized by a registered enterprise VRS user).

(2) A VRS provider providing integrated VRS in a video conference shall:

- (i) Collect from the party requesting service sufficient information to confirm the requesting party's registration for VRS;
- (ii) Require CAs, when joining a video conference, to self-identify as a CA and provide the name of the VRS provider (e.g., by editing their display name); and

(iii) Treat each video conference as a single call for compensation purposes, except as specifically authorized by the Commission.

- (3) For the purpose of TRS Fund compensation for the provision of integrated VRS in a video conference, a VRS provider's TRS minutes of use begin when a CA enters the video conference, provided that the CA identifies the requesting VRS user within five minutes of entering the video conference. If, within that time, the CA cannot identify the requesting VRS user, or it is evident that VRS is not needed, then the call must be identified as non-compensable.
- (4) For the purpose of TRS Fund compensation for the provision of integrated VRS in a video conference, a VRS provider's TRS minutes of use end when the earliest of the following events occurs:
- (i) The CA disconnects from the video conference;
- (ii) All non-signing participants disconnect from the video conference;
- (iii) All signing participants disconnect from the video conference; or
- (iv) The registered VRS user who initially requested service disconnects from the video conference and five minutes elapse without a further request for service by a registered VRS user participant.
- (f) Other standards. The applicable requirements of § 9.14 of this chapter and §§ 64.611, 64.615, 64.621, 64.631, 64.632, 64.644, 64.5105, 64.5107, 64.5108, 64.5109, and 64.5110 are to be considered mandatory minimum standards.
- 6. Delayed indefinitely, amend § 64.606 by adding paragraph (g)(6) to read as follows:

## § 64.606 internet-based TRS provider and TRS program certification.

(g) \* \* \*

- (6) If a VRS provider provides integrated VRS in video conferences, its annual report shall provide a detailed explanation of the instructions and training provided to CAs on implementation of § 64.604(e), including guidance on how to make the determinations required by § 64.604(e)(3).
- 7. Amend § 64.615 by revising paragraph (a)(1)(i) to read as follows:

### § 64.615 TRS User Registration Database and administrator.

(a) \* \* \*

(1) \* \* \*

(i) Validation shall occur during the call setup process, prior to the placement of the call, except that validation of the provision of integrated VRS in a video conference shall occur prior to the connection of a VRS CA to the video conference.

[FR Doc. 2024–27479 Filed 12–12–24; 8:45 am] BILLING CODE 6712–01–P

## FEDERAL COMMUNICATIONS COMMISSION

#### 47 CFR Part 25

[IB Docket No. 21-456; FCC 24-117; FR ID 265639]

## Spectrum Sharing Rules for NGSO Fixed-Satellite Service Systems

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule; denial of reconsideration.

**SUMMARY:** In this document, the Federal Communications Commission (FCC or Commission) clarifies the methodology to be used in compatibility analyses by non-geostationary satellite orbit (NGSO) fixed-satellite service (FSS) system licensees. The Second Report and Order adopts specific degraded throughput methodology criteria that NGSO FSS systems licensed in a later processing round must include in compatibility analyses, in absence of a coordination agreement, to demonstrate that they can operate compatibly with and protect NGSO FSS systems authorized in earlier processing rounds. The Second Report and Order clarifies these methodologies to promote market entry, regulatory certainty, and spectrum efficiency through good-faith coordination. The Commission also adopts an Order on Reconsideration dismissing in part and, on alternative and independent grounds, denying a petition for reconsideration.

DATES: Effective on January 13, 2025.

FOR FURTHER INFORMATION CONTACT: For additional information on this proceeding, contact Carolyn Mahoney, Satellite Programs and Policy Division, Space Bureau, at (202) 418–7168 or carolyn.mahoney@fcc.gov.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's *Second Report and Order and Order on Reconsideration*, in IB Docket No. 21–456, FCC 24–117, adopted on November 5, 2024 and released on November 15, 2024. The full text of this document is available at <a href="https://docs.fcc.gov/public/attachments/FCC-24-117A1.pdf">https://docs.fcc.gov/public/attachments/FCC-24-117A1.pdf</a>.

#### Final Regulatory Flexibility Analysis

The Regulatory Flexibility Act of 1980, as amended (RFA), requires that an agency prepare a regulatory flexibility analysis for notice and

comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." Accordingly, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the potential impact of the rule changes contained in the Second Report and Order and Order on Reconsideration. The FRFA is set forth in the appendix of the document available at https://docs.fcc.gov/public/ attachments/FCC-24-117A1.pdf and a summary is included in the Procedural Matters section below.

#### **Paperwork Reduction Act Analysis**

The Second Report and Order contains modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104–13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, other Federal agencies, and the general public will be invited to comment on the modified information collection requirements contained in this document.

The Commission assessed the effects of requiring later-round NGSO FSS grantees to submit compatibility showings with respect to earlier-round grantees with whom coordination has not yet been reached. The Commission finds that doing so will serve the public interest and is unlikely to directly affect businesses with fewer than 25 employees.

#### **Congressional Review Act**

The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs that this rule is non-major under the Congressional Review Act, 5 U.S.C. 804(2). The Commission will send a copy of the Second Report and Order and Order on Reconsideration to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

#### **Synposis**

#### I. Introduction

In the Second Report and Order, the Commission continues to refine the Commission's rules governing spectrum sharing among a new generation of broadband satellite constellations to promote market entry, regulatory certainty, and spectrum efficiency through good-faith coordination. Specifically, the Commission clarifies certain details of the degraded

throughput methodology that, in the absence of a coordination agreement, must be used in compatibility analyses by non-geostationary satellite orbit, fixed-satellite service (NGSO FSS) system licensees authorized through later processing rounds to show they can operate compatibly with, and protect, NGSO FSS systems authorized through earlier processing rounds. The Commission adopts a 3 percent timeweighted average throughput degradation as a long-term interference protection criterion, a 0.4 percent absolute increase in link unavailability as a short-term interference protection criterion, and declines to adopt additional protection metrics or to adopt an aggregate limit on interference from later-round NGSO FSS systems into earlier-round NGSO FSS systems. In an accompanying Order on Reconsideration, the Commission denies a Petition for Reconsideration (88 FR 58540, August 28, 2023) of the Report and Order (88 FR 39783, June 30, 2023). These actions continue the Commission's efforts to promote development and competition in broadband NGSO satellite services.

#### II. Background

The Commission is committed to updating and refining its rules governing NGSO FSS systems, at a time when these systems are being deployed at unprecedented scale. NGSO FSS satellites traveling in low- and medium-Earth orbit provide broadband services to industry, enterprise, and residential customers with lower latency and wider coverage than previously available by satellite.

Processing Round Procedure Overview. Applications for NGSO FSS system licenses and petitions for declaratory ruling seeking U.S. market access for non-U.S.-licensed NGSO FSS systems are considered in groups based on filing date, under a processing round procedure. Pursuant to the Commission's rules, a license application for "NGSO-like" satellite operation, including operation of an NGSO FSS system, that satisfies the acceptability for filing requirements is reviewed to determine whether it is a "competing application" or a "lead application." A competing application is one filed in response to a public notice initiating a processing round. Any other application is a lead application. The public notice for a lead application initiates a processing round and establishes a cut-off date for competing NGSO-like satellite system applications. After the close of the processing round, the Commission grants all the applications for which the