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List of Subjects in 40 CFR Chapter I

Environmental protection, Flame retardants, Hazardous substances, chlorinated phosphate ester cluster.

Dated: April 6, 2017.

Wendy Cleland-Hamnett, Acting,

Assistant Administrator, Office of Chemical Safety and Pollution Prevention.

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 64

[CG Docket Nos. 10–51 and 03–123; FCC 17–26]

Structure and Practices of the Video Relay Services Program

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Commission seeks comment on establishing performance goals and service quality metrics to evaluate the efficacy of the video relay service (VRS) program and on the incidence of ''phony'' VRS calls and the handling of such calls. The Commission also proposes a four-year plan for VRS compensation and rule amendments to permit server-based routing of VRS and point-to-point video calls, provide safeguards regarding who may use VRS at enterprise and public videophones, allow customer service support centers to access the Telecommunications Relay Service (TRS) Numbering Directory for direct video calling, and make a technical change to per-call validation requirements. The Commission also seeks comment on whether to continue including research and development in the TRS Fund budget, prohibit non-service related inducements to register for VRS, and prohibit the use of non-compete provisions in VRS communications assistant (CA) employment contracts.

DATES: For VRS compensation rates, server-based routing, and research and development, comments are due April 24, 2017, and reply comments are due May 4, 2017. For performance goals and service quality metrics, the incidence and handling of ''phony'' VRS calls, VRS use of enterprise and public videophones, direct video calling customer support services, per-call validation procedures, non-service related inducements, and non-compete provisions in VRS employment contracts, comments are due May 30, 2017, and reply comments are due June 26, 2017.

ADDRESSES: You may submit comments, identified by CG Docket Nos. 10–51 and 03–123, by any of the following methods:

• *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the Commission's Electronic Comment Filing System (ECFS), through the Commission's Web site *http://apps.fcc.gov/ecfs/.* Filers should follow the instructions provided on the Web

site for submitting comments. For ECFS filers, in completing the transmittal screen, filers should include their full name, U.S. Postal service mailing address, and CG Docket Nos. 10–51 and 03–123.

• *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

For detailed instructions for submitting comments and additional information on the rulemaking process, *see* the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Bob Aldrich, Consumer and Governmental Affairs Bureau (202) 418–0996, email *Robert.Aldrich@fcc.gov,* or Eliot Greenwald, Consumer and Governmental Affairs Bureau, (202) 418–2235, email *Eliot.Greenwald@fcc.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to 47 CFR 1.415 and 1.419, interested parties may file comments on or before the dates indicated in the **DATES** section. Comments may be filed using the Commission's ECFS. *See Electronic Filing of Documents in Rulemaking Proceedings,* 63 FR 24121 (1998).

• All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th Street SW., Room TW–A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of *before* entering the building.

• Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

• U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street SW., Washington DC 20554.

This is a summary of document FCC 17–26, *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities,* Notice of Inquiry and Further Notice of Proposed Rulemaking, document FCC 17–26, adopted on March 23, 2017, and released on March 23, 2017, in CG Docket Nos. 10–51 and 03–123. The Report and Order and Order, FCC 17–26, adopted on March 23, 2017, and released on March 23, 2017, will be published elsewhere in a later issue. The full text of document FCC 17–26 will be available for public inspection and copying via ECFS, and during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street SW., Room CY–A257, Washington, DC 20554. This proceeding shall be treated as a ''permit-but-disclose'' proceeding in accordance with the Commission's *ex parte* rules. 47 CFR 1.1200 *et seq.* Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with 47 CFR 1.1206(b). In proceedings governed by 47 CFR 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.,* .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

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 (voice), (844) 432–2272 (videophone), or (202) 418–0432 (TTY).

Initial Paperwork Reduction Act of 1995 Analysis

Document FCC 17–26 seeks comment on proposed rule amendments that may result in modified information collection requirements. If the Commission adopts any modified information collection requirements, the Commission will publish another notice in the **Federal Register** inviting the public to comment on the requirements, as required by the Paperwork Reduction Act. Public Law 104–13; 44 U.S.C. 3501–3520. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, the Commission seeks comment on how it might further reduce the information collection burden for small business concerns with fewer than 25 employees. Public Law 107–198; 44 U.S.C. 3506(c)(4).

Synopsis

Notice of Inquiry on Service Quality Metrics for VRS

Performance Goals

1. The Commission seeks comment on appropriate performance goals for the VRS program. 47 U.S.C. 225 requires the Commission to ensure, to the extent possible, the availability to people with disabilities of telephone services that are functionally equivalent to services used by individuals who do not need TRS. The Commission seeks comment on whether establishing performance goals that align with this requirement is appropriate for VRS. The Commission believes that the mandate for VRS to be functionally equivalent to voice telephone services requires levels of service that are equivalent to those experienced in mainstream wireless, wireline, and voice over Internet protocol (VoIP) communication calls between and among hearing persons. In this regard, the Commission notes that a policy statement submitted by various Consumer Groups in April 2011 proposes to define functional equivalence generally for all forms of TRS as follows:

> Persons receiving or making relay calls are able to participate equally in the entire conversation with the other party or parties and they experience the same activity, emotional context, purpose, operation, work, service, or role (function) within the call as

if the call is between individuals who are not using relay services on any end of the call.

The Commission seeks comment on the extent to which this is an appropriate definition of functional equivalence for the purpose of defining performance goals and service quality metrics.

2. The Commission also seeks comment on whether other goals are appropriate for assessing the VRS program and VRS provider performance. For example, should VRS performance goals also mirror the Commission's statutory obligations to ensure that TRS is provided ''in the most efficient manner,'' and to encourage ''the use of existing technology and . . . not discourage or impair the development of improved technology?'' Should the cost-effective provision of VRS be included in VRS performance goals, either as a component of the efficient provision of VRS or as a separate goal?

3. The Commission seeks comment on how the use of mainstream and off-the-shelf technologies that do not rely on VRS can serve the communications needs of individuals who are deaf, hard of hearing, deaf-blind, or have speech disabilities. For example, people who use sign language are now able to communicate directly with each other via video over broadband and cellular networks; and electronic messaging services, such as email, short messaging service (SMS), instant messaging (IM), and chat, allow people to use these networks to communicate in text. In addition, the Commission expects some wireless providers to be rolling out real-time text (RTT) by the end of this calendar year. The Commission asks commenters to address the types of circumstances when such services can be used to provide effective communication for these individuals. What steps, if any, should the Commission be taking to provide such direct communication solutions? Alternatively, are there certain situations where such services would fall short of functional equivalency for the signing population? To what extent can these direct video or text alternatives be used for calls made to businesses and other parties, such as doctors' offices, schools, stores, family members, and colleagues? What are the potential cost-savings to the TRS Fund resulting from the use of such non-VRS technologies?

Performance Measures

4. The Commission seeks comment on whether the derivation of data used to measure VRS service quality should be overseen by the TRS Fund administrator or otherwise developed through contractual or similar arrangements with independent third parties selected by the Commission. The Commission believes that the establishment of estimates and calculations resulting from performance measures will have greater efficacy if the measurements and reports of results are conducted independently, *i.e.,* not by the regulated entities. The Commission also seeks comment on whether to publish the metrics achieved for each provider, as it appears likely that making the results of these measurements available to the public in a standard format will aid users in their selection of VRS providers. Finally, the Commission seeks comment on the merits of developing a system by which VRS users can rate the quality and performance of VRS calls, which would be based on the metrics discussed below and shared publicly to improve competition.

5. To measure functional equivalence, the Commission seeks specific comment on whether to use the following metrics: (1) Quality and accuracy of interpretation; (2) technical voice and video quality; (3) interoperability and portability; (4) percentage and frequency of dropped or disconnected calls; and (5) service outages.

6. *Quality and Accuracy of Interpretation.* The Commission seeks comment on how interpretation quality can be effectively measured to assess functional equivalence. A key element of interpretation quality is accuracy, *i.e.,* the extent to which the information conveyed by one party to a VRS call accurately matches the communication conveyed by the CA to the other parties to that call. How should accuracy be measured? What metrics and methods are currently used to evaluate VRS interpreters, *e.g.,* for purposes of certification or evaluation during interpreter training? Are there relevant metrics and methods used by spoken language translators that could be effectively applied to evaluate the accuracy of VRS interpretation? For example, for any given call, can accuracy be measured by comparing the signs of the American Sign Language (ASL) user and words of the hearing person—as each are delivered to the CA—to the words spoken and signs made by the CA? Given that interpretation of ASL to English is often a matter of conveying concepts rather than word-for-word translation, how can an appropriate comparison between the signs produced by ASL users be effectively compared to the words relayed by the CA to produce an effective accuracy percentage? Unlike speech-to-text transcription, interpretation accuracy may be difficult to evaluate on a word-by-word basis because the grammar and word usage differ between ASL and spoken languages such as English or Spanish. How can the Commission account for such differences in taking accuracy measurements? Are there scales similar to the voice five-step mean opinion score (MOS) metrics? MOS scores are used to rate the user-perceived quality and listening effort on a five point scale, such as ''excellent-good-fair-poor-bad,'' as defined in ITU–T Recommendation P.800.

7. Should the Commission adjust accuracy measurements for certain kinds of calls, such as calls to 911 or calls where a skills-based or deaf interpreter is utilized? More broadly, what tools should the Commission use to measure the accuracy of VRS calls given that measurements may be unreliable without access to both sides of the conversation? Should test calls, *e.g.,* by independent third parties, using sample scripts, be employed to evaluate the accuracy of interpretation? Alternatively, should independent third parties be permitted to monitor unscripted calls for the purpose of measuring interpretation quality, and under what conditions to protect privacy and confidentiality? The Commission's rules presently prohibit providers from retaining records of the content of any conversation beyond the duration of a call. Are there real-time or other methods that can be used to measure the accuracy of calls consistently with this prohibition? Or should an exception be permitted for purposes of ensuring call quality? For example, should the Commission require providers to record a statistically valid sample of calls? Should the Commission use anonymous callers to make and record call interactions for later analysis by experts? How many calls would be appropriate for either of these methods? How should the Commission address the confidentiality concerns of VRS users if recordings are used in this process?

8. The Commission also seeks comment on whether and how to measure the synchronicity of interpreted communications taking place during a VRS call. Although the Commission recognizes that there is necessarily some delay during relay calls and inherent time lag involved in interpretation, these delays should be kept to a minimum and signing should begin to appear at the approximate time that the corresponding speech begins and end approximately when the speech ends. The Commission seeks comment on whether there are existing metrics, *e.g.,* for non-ASL language interpreters,

that might be used for this purpose. Are there studies that indicate what kind of delay is acceptable for fluid conversation? Does the interpretation delay vary significantly among CAs such that there is a need to determine this measurement? To what extent should this metric be measured by independent third parties?

9. Are there other metrics that the Commission should use to evaluate interpreter quality and accuracy? How effectively will such metrics assess the extent to which functional equivalence is being attained and what methods can be used to measure these?

10. *Technical Voice and Video Quality.* What metrics should be assigned to evaluate the technical quality of VRS as a component of functional equivalence? What are the key parameters of a VRS provider's audio and video communication service, and how should they be measured, evaluated, and published? Should providers disclose whether they interconnect with their telecommunication service provider in high definition (HD) audio? To what extent is this capability needed for functionally equivalent VRS communications, and what metrics can be used to measure this feature?

11. *Interoperability.* To enhance the ability of the Commission and consumers to evaluate the extent of the interoperability that is achieved by VRS providers, the Commission seeks comment on the most appropriate metrics and measurement methods for quantitatively assessing interoperability. For example, is there a means of quantifying the interoperability of various types of user-visible functions, such as the connection of calls, video mail and address books, or technical protocol features such as call setup, codecs, system configuration, end-to-end security and registration that could fail to interoperate as a result of noncompliance?

12. *Dropped or Disconnected Calls.* The Commission next seeks comment on whether it would be appropriate to track and measure the percentage and frequency of ''dropped'' or disconnected VRS calls as an indicator of service quality and functional equivalence, and how such data should be compared with dropped or disconnected telephone calls made over mainstream voice networks. Should such metrics be collected through user feedback or test calls or by analyzing provider logs? Is it possible to distinguish call drops that occur due to disruptions in the Internet connectivity of the VRS user from call drops caused by the VRS provider or deficiencies in the VRS user software or hardware? Are there metrics and measurement methodologies used in wireless or wired networks that can be used for VRS? The Commission further seeks comment on how such data should be collected.

13. *Service Outages.* In general, to achieve functional equivalence, the Commission believes that the frequency and extent of VRS service outages and interruptions should not exceed that of outages and interruptions occurring on transmission services used by hearing people. The Commission seeks comment on this assumption. The Commission seeks comment on an appropriate metric to measure functional equivalence in this regard.

14. *Other Metrics.* The Commission seeks further comment on other concrete, measurable metrics it could employ to measure the quality of service among VRS providers. Commenters should address, with specificity, what should be measured, how it should be measured, and how often it should be measured, along with any estimated costs of such measurements.

Phony VRS Calls

15. The Commission has received anecdotal evidence of calls made to VRS CAs that are not made for the purpose of communicating with a third party, but rather for the sole purpose of harassing or threatening a CA. The Commission seeks comment on the extent to which such calls occur, as well as the incidence of other types of ''phony'' VRS calls, for example, those that involve scams or spoofing. The Commission seeks comment on how such calls should be handled and on action that should be taken by the Commission to effectively address such calls.

16. On a related matter, the Commission notes that in the past, the Commission received reports that text-based Internet Protocol (IP) Relay was being used to commit ''swatting,'' *i.e.,* individuals were using IP Relay to hide their identities in order to place calls to 911, in an attempt to trick public safety answering points into dispatching emergency services based on false reports. The Commission is unaware of similar incidents of swatting through VRS, but the Commission invites commenters to share reports of any such occurrences, as well as recommendations on how to address such incidents.

Further Notice of Proposed Rulemaking

VRS Compensation Rates

17. In 2007, the Commission adopted a tiered VRS compensation rate structure in order to reflect likely cost differentials between small, mid-level, and large, dominant providers. In 2013, having determined that VRS compensation rates for all the rate tiers were substantially in excess of providers' actual costs, the Commission adopted a transitional four-year ''glide path'' of compensation rate adjustments in lieu of a more immediate reduction to cost-based levels, in order to assist providers in adjusting to cost-based rates. The Commission's four-year rate plan established gradual per-minute VRS rate reductions every six months, from July 1, 2013, through June 30, 2017. The Commission also reassessed the use of a tiered compensation structure. The Commission decided that, to encourage the provision of VRS in the most efficient manner, the gap between the highest and lowest tiered rates would be reduced over time. Upon the completion of certain structural reforms, which the Commission expected to occur before the expiration of the four-year plan, the Commission contemplated moving to a unitary compensation rate for all minutes, which the Commission hoped to set based on pricing benchmarks developed through competitive bidding for the provision of various elements of VRS. On March 1, 2016, after considering a petition by all six certified VRS providers urging an interruption of the scheduled compensation rate adjustments, the Commission adopted a temporary ''freeze'' of the compensation rates of the smallest VRS providers—those handling 500,000 or fewer monthly minutes. On December 20, 2016, Convo, Purple, and ZVRS submitted a joint VRS compensation proposal to the Commission, and on January 31, 2017, Global joined in this proposal. They propose a four-year VRS rate plan with the following per-minute rates: $5.29 for providers with 500,000 or fewer monthly minutes (''emergent rate''); $4.82 for other providers' first 1,000,000 VRS minutes (Tier I); $4.35 for a provider's monthly minutes between 1,000,001 and 2,500,000 (Tier II); and $2.83 for a provider's monthly minutes in excess of $2,500,000 (Tier III).

18. The Commission's last four-year plan was successful in lowering the cost of VRS by $35.7 million in FY2013, $86.7 million in FY2014, $131.3 million in FY2016, and $90.4 million in the first half of FY2017. This gradual reduction in rates has driven VRS providers to provision their services more efficiently. The weighted average per-minute cost for providing service has declined from $3.09 in 2012 (before the rate plan

became effective) to $2.63 today. However, the VRS market structure has seen little change, in part because the structural reforms the Commission envisioned in 2013 have been slow to arrive. Thus, the Commission believes its previous four-year plan was too optimistic in assuming that rates for all VRS providers could start to converge in FY2016, as indicated by the Commission's decision to freeze small-provider compensation rates in 2016. Indeed, Rolka Loube reports that four of the five providers continue to incur per-minute costs that are higher than the weighted average per-minute cost of providing VRS.

19. Given these circumstances, the Commission believes that maintaining a tiered rate structure continues to be necessary to allow smaller providers a reasonable opportunity to continue providing service. Having analyzed the cost data reported by Rolka, as well as recent data submissions from four of the providers, the Commission believes another four-year plan best balances the need to minimize the cost of service for ratepayers, maintain competition in the marketplace pending further structural reforms, reflect the differing costs of differing providers, and give VRS providers the long-term stability in rates to make investment decisions. The Commission proposes that this four-year period run from July 1, 2017 to June 30, 2021, and sets forth a proposed restructuring of rates and tiers for this period below. Like the Joint VRS Providers, the Commission believe three tiers plus a rate for ''emergent'' VRS providers are appropriate for this purpose.

20. The Commission seeks comment on this overall approach. To what extent are the goals of functional equivalence and efficiency served by maintaining a tiered rate approach during an additional four-year transitional rate period? For instance, is the VRS industry characterized by sufficient economies of scale to warrant tiered rates? Which components of a VRS provider's costs are and are not subject to significant economies of scale and how do such scale economies affect provider costs at various levels of demand? Do considerations other than scale economies, such as the benefits of allowing consumer choice among a diversity of providers, justify tiered rates? What marketplace distortions, if any, may be created if tiers boundaries are not closely correlated to scale economies, and how should such distortions, as well as the inefficiencies that may result from a tiered structure, be weighed against the benefits of enabling competition by multiple providers? What marketplace distortions, if any, could result from moving to a single unitary compensation rate? Is there an alternative tiered structure to that proposed below that would strike a more appropriate balance between efficiency and competition?

21. The Commission also seeks comment on the following proposals. First, given that the Commission's current rate plan sets the same rate for the first 500,000 minutes of larger providers and the next 500,000 minutes, the Commission proposes to redefine Tier I to include the first 1,000,000 minutes as suggested by the Joint VRS Providers. Second, the Commission agrees with the Joint VRS Providers that economies of scale continue to increase significantly for VRS providers with more than 1,000,000 monthly minutes. In line with the suggestion of the Joint VRS Providers, the Commission proposes to draw the line between Tiers II and III at 2,500,000 monthly minutes. Third, the Commission agrees with the Joint VRS Providers that an emergent rate for the smaller, new entrants is appropriate given the slow onset of structural reforms to encourage competition and interoperability. An emergent rate also reflects the Commission's previous decision to freeze the rates for this class of providers on a temporary basis, and generally the higher cost of service for new entrants in the market. The Commission proposes to apply this emergent rate to VRS providers with no more than 500,000 monthly minutes as of January 1, 2017, and to maintain this rate for the first 500,000 monthly minutes of such providers through the end of this four-year rate plan. Structuring the emergent rate in this way should encourage new entry into the program and give small providers appropriate incentives to grow without risking a sudden reduction in rates if they grow above the 500,000 monthly minute threshold.

22. The Commission proposes to adjust the rates for each of these tiers through several steps, at six-month intervals as in the current rate plan. First, the Commission seeks comment on rates for the initial period of the four-year rate plan. For emergent providers, the Commission seeks comment on whether to increase the rate to $5.29 as proposed by the Joint VRS Providers or to maintain the $4.82 rate that is set to be in effect in June. For Tier I, the Commission seeks comment on whether to increase the rate to $4.82, as proposed by the Joint VRS Providers, or to maintain the current $4.06 rate. For Tier II, the Commission seeks comment on whether to increase the rate to $4.35 as proposed by the Joint VRS Providers or to maintain the current $3.49 rate. For Tier III, the Commission seeks comment on whether to maintain the current $3.49 rate or decrease it to the $2.83 rate proposed by the Joint VRS Providers. The Commission also invites parties to submit other suggested rate levels for each tier, with justification and supporting data.

23. Next, the Commission seeks comment on rates for the final period in the four-year rate plan. For emergent providers, the Commission seeks comment on whether to set a $5.29 rate as proposed by the Joint VRS Providers, a $4.82 rate reflecting the rate that is set to be in effect in June, or a $4.06 rate based on the current Tier I rate. For Tier I, the Commission seeks comment on whether to set a $4.82 rate as proposed by the Joint VRS Providers, a $4.06 rate based on the current Tier I rate, or a rate of $3.74 based on the historical costs of providers achieving only some economies of scale plus an operating margin, or a rate of $3.49 based on the current Tier II rate. For Tier II, the Commission seeks comment on whether to set a $4.35 rate as proposed by the Joint VRS Providers, a rate of $3.49 based on the current Tier III rate, or a rate of $3.08 based on the historical costs of providers achieving significant economies of scale plus an operating margin. For Tier III, the Commission seeks comment on a $3.49 rate based on the current Tier III rate, a $2.83 rate as proposed by the Joint VRS Providers, and a $2.63 rate based on average historical expenses for all providers. The Commission also invites parties to submit other suggested rate levels for each tier, with justification and supporting data.

24. For each six-month period between the initial and final periods, the Commission proposes to apply transitional rates that gradually transition the rates the Commission proposes for the initial period to the final rates that will apply in the first half of 2021. By definition, the larger the difference between initial and final rates, the greater the transitional step taken every six months.

25. The Commission notes that providers have long argued that, because substantial plant investment is not necessary to provide VRS, a rate-of-return allowance based on the telephone industry model is inadequate to generate sufficient profits to attract significant long-term investment in VRS companies. As such, providers have argued that an 11.25% rate-of-return on net capital investment is insufficiently compensatory. The Commission also

notes that the Commission has recently reconsidered whether an 11.25% rate-of-return is reasonable given the current financial and economic environment and, in 2016 determined that a lower range of 7.12–9.75% is instead reasonable. The Commission seeks comment on whether to adopt that lower range of rates-of-return if the Commission maintains a rate-of-return approach to cost calculations. To respond to the VRS providers' concern, however, the Commission also seeks comment on eschewing the traditional rate-of-return calculation and instead employing an operating margin approach with that same range of 7.12–9.75%.

26. The Commission further notes that the average weighted per-minute cost for the industry is $2.63 in 2015, or $2.82–2.89 if the Commission includes an operating margin. Excluding any VRS provider with significantly more than 1,000,000 monthly minutes, average weighted per-minute costs in 2015 were more than $1.00 higher. The Commission further notes that for the VRS industry as a whole, total compensation for calendar year 2015 was $563,069,736, while the total cost of service plus an operating margin was only $360,197,998 to $369,041,545. Given the large gap between total compensation for VRS providers and the total cost of service plus an operating margin, the Commission tentatively concludes that any new rate schedule it adopts should result in a smaller gap than freezing rates in June 2017 for a four-year period. The Commission seeks comments on this analysis and this tentative conclusion, and their implications for setting rates during the four-year term. Although the Commission seeks comment on the possible substitution of an alternative approach, such as described above, for the current rate-of-return allowance, the Commission does not intend to reopen questions that would expand the types of expenses that should be included in allowable costs.

27. In setting rates, the Commission is not required to guarantee all providers that they will recover their allowable costs—the purpose of the tiered rate structure has been to set rates for providers in discrete size classes based on general differentials between large, medium-sized, and small providers, not to guarantee all providers recovery of their individual costs. Although the Commission seeks to preserve a diversity of suppliers in the market, the Commission is not required to ensure the viability of every VRS competitor, no matter how inefficient.

28. Despite the past four years of significant reductions in compensation rates, VRS providers apparently continue to give out iPads, video monitors, and state-of-the-art videophones to customers in order to secure their default VRS traffic. To the extent that a VRS provider engages in such behavior, it would appear to confirm that the marginal compensation rate for that provider continues to be well above the provider's marginal cost of serving additional customers, and remains above the marginal cost even including the per-minute cost of the giveaways offered to gain those customers' traffic. The continuation of such wasteful and disruptive marketing tactics seems to confirm the importance of bringing the rate for each tier as close as possible to the marginal per-minute cost of the affected firms. The Commission seeks comment on what proposed rates would be a step in that direction.

29. The Commission seeks comment on these proposed service tiers, the suggested alternatives for initial and final compensation rates, and the proposed schedule of rate reductions. Should the Commission collapse the tiers to reduce the possible overpayment of some providers or expand them further to reflect the differing costs of service as VRS providers scale up? What are the most appropriate initial rates to begin the further transition to cost-based levels? What are the most appropriate final rates to ensure that providers are neither over- nor under-compensated? Is the proposed transition schedule too fast or too slow? What is the likely impact of various alternative rate levels on the competitiveness of the VRS market? What is the likely impact on the quality of service to consumers?

30. The Commission also seeks comment on any other factors the Commission should consider in setting compensation rates for this four-year period. For example, what, if any, categories of costs should providers be able to recover as exogenous costs (including consideration of improved services discussed elsewhere in this proceeding), and how should the Commission ensure that such costs are adequately documented and that providers do not incur such costs imprudently? Are there marketplace benchmarks, such as rates paid for video remote interpreting (VRI), that could serve as a benchmark against which the Commission could determine the reasonableness of proposed VRS compensation rates? If so, what are such benchmarks and how should the Commission factor them into VRS rates? Further, should the Commission impose an auditing requirement on any companies that seek to qualify for the emergent provider rate? The Commission notes that some very small providers have reported costs well above compensable rates for multiyear periods, yet have continued to offer VRS—a circumstance that appears inconsistent with the behavior of a rational firm. Conditioning the emergent provider rate on an audit to determine whether improper cost allocation is occurring may be one means of ensuring that the cost data reported actually reflects the incremental costs of a business to offer VRS alongside its other marketplace offerings.

31. Further, should the Commission make any of the proposed initial rates that are higher than current rates retroactive to January 1, 2017, as proposed by the Joint VRS Providers? On a number of prior occasions, the Commission has applied adjustments, including changes in TRS compensation rates and contribution factors, retroactively to the beginning of a Fund Year. Are retroactive adjustments appropriate here? If so, for which rates and based on what specific justification? For example, in what way is such retroactive compensation relevant to providers' ability to recover their costs and attract investment on a going-forward basis?

32. Although the proposed approach contains elements of a price-cap regime—because rates are not directly tied to, and tend to lag, costs—the Commission also seeks comment on a price-cap approach. First, the Commission seeks comment on whether the Commission should initialize rates for each carrier based on its own historical costs, as the Commission did when it created price-cap regulation over two decades ago. Second, the Commission seeks comment on whether it should apply a productivity factor and an inflation factor to such price-caps over the course of the four-year term. If the Commission was to adopt this approach, would that cause greater striation in rates and costs among VRS providers? Would a price-cap regime give carriers sufficient incentive to reduce costs? Would such a regime reduce the compensation paid for the service closer to its costs? Would such a regime unfairly penalize more efficient providers? How should the Commission set a productivity factor (would it be based on industry-wide efficiencies or company-by-company)? How complicated would it be to establish and administer a price-cap regime? If the Commission declines to adopt such a regime, should the Commission nonetheless apply productivity and

inflation factors to rates the Commission adopt under the proposed approach?

33. Sorenson also suggests that the Commission set rates for individual components of VRS based on pricing benchmarks developed through competitive bidding. The Commission notes that the proposal in the *2013 VRS Reform FNPRM,* published at 78 FR 40407, July 5, 2013, was premised on developing a neutral video communications service platform. The Commission previously canceled that procurement. In light of the general lack of industry interest in the neutral video communications services platform, the Commission seeks comment on whether it would be productive for the Commission to request new bids for such a platform. Absent a showing that the Commission should request new bids, the Commission proposes to repeal the provisions of its rules relating to it. Providers and other parties that believe the Commission should proceed with its original plan to develop this platform should explain why they believe its build-out is necessary to achieve the goals of functional equivalence and efficiency under section 225 of the Act, as well as the extent to which VRS providers would commit to utilizing such a platform. If the Commission does decide to pursue a neutral platform, the Commission seeks comment on whether the use of competitive bidding to set rates for other services would make sense. What would be the impact of moving toward a piece-part system of compensation on VRS providers? Would there remain sufficient competitive bidding prospects to ensure an efficient auction given the rise of direct connections at federal agencies and other entities that have historically received a large number of VRS calls?

34. Alternatively, Sorenson asks that the Commission seek comment on employing a reverse auction approach to set rates based on a modified version of the electricity supply auctions authorized by the Federal Energy Regulatory Commission. Under this suggested approach, the Commission would determine how many VRS providers are needed to provide sufficient competitive choices for users and then would seek bids from each potential VRS provider on the per-minute rate of compensation each will accept for the provision of VRS. Compensation would be paid to all winning providers at the highest rate bid by the winners, *i.e.,* the rate bid by the last bidder whose bid was accepted. How many providers would be sufficient under this approach? If less than the total number of VRS providers currently in the market, how would the reduction in choice and competition affect VRS users? If equal to the total number of VRS providers currently in the market, would that be considered an auction at all? How would such an approach address the apparent economies of scale and scope within the VRS market, ensuring that no VRS provider receives an unjust windfall? Would such an approach increase—perhaps substantially—the cost of VRS service to ratepayers? Would such an approach prohibit new entry into the VRS market during the rate period? Would such an approach be less ''regulatory,'' as Sorenson suggests?

35. As another alternative, Sorenson suggests replacing the TRS Fund with a system under which telecommunications carriers would provide service themselves or by contracting with TRS providers, pursuant to the provision of section 225 of the Act that requires carriers to provide service directly or ''through designees, through a competitively selected vendor, or in concert with other carriers.'' 47 U.S.C. 225(c). This approach would thus entail revisiting the Commission's earlier determination that VRS should not be a ''mandatory'' service for common carriers. The Commission seeks comment on the feasibility, costs, and benefits of migrating to a system in which VRS—as well as, perhaps, other forms of TRS—would be provided by carriers, through private contracts or self-provisioning, rather than through the FCC-administered TRS Fund. How would such an approach be likely to affect the provision of functionally equivalent service in the most efficient manner, and could it be done consistently with the requirements of section 225 of the Act? In addition, are there any other relevant statutory provisions that would inform our consideration of Sorenson's suggestion?

Server-Based Routing

36. In August 2015, the VRS Task Group of the Session Initiation Protocol (SIP) Forum completed a technical standard, the VRS Provider Interoperability Profile, which addresses interoperability between VRS providers, as well as the interface between a VRS provider and the TRS Numbering Directory. Subsequently, the Consumer and Government Affairs Bureau incorporated the VRS Provider Interoperability Profile by reference into the Commission's VRS interoperability rule. To enable implementation of the new call routing protocol specified by the VRS Provider Interoperability Profile, the Commission proposes to amend 47 CFR 64.613 to provide that the routing information provided to the TRS numbering directory may include Uniform Resource Identifiers (URIs) that contain provider domain names rather than user IP addresses. All the current VRS providers, as well as consumer groups, support this approach. The Commission believes that this proposed amendment will advance interoperability and will otherwise serve the public interest for the following reasons.

37. First, enabling the use of domain names to route VRS and point-to-point video calls will allow the implementation of a consensus interoperability standard and will thereby advance VRS interoperability, an objective long sought by the Commission and one that is integral to achieving functional equivalence. Second, the record indicates that this rule amendment will improve the efficiency, reliability, and security of VRS and point-to-point video communications, thus advancing these important Commission objectives as well. Third, the Commission believes that amending the rule to allow routing based on domain names will promote TRS regulation that ''encourage[s] . . . the use of existing technology and do[es] not discourage or impair the development of improved technology,'' as required by 47 U.S.C. 225(c)(2). Finally, the record indicates that the proposed amendment will not impair the Commission's ability to prevent fraud, abuse, and waste in the VRS program.

The Commission seeks comment on these conclusions, and any other factors it should consider regarding this proposed amendment. The Commission believes it has authority to amend its rules to allow server based routing under 47 U.S.C. 225 and 251, and the Commission seeks comment on this assumption.

VRS Use of Enterprise and Public Videophones

38. Historically, VRS providers have handled and received compensation for VRS calls placed from both private videophones of VRS users, and from enterprise and public videophones. For the limited purposes of document FCC 17–26, the Commission uses the term ''enterprise videophones'' to refer to videophones provided by entities such as businesses, organizations and governmental agencies that are designated for use by their employees who use ASL. These phones can be situated in a variety of locations, including private or shared offices, conference rooms, or other common rooms. ''Public videophones,'' for

purposes of document FCC 17–26, are those made available in public spaces, such as schools, hospitals, libraries, airports, and governmental agencies, for use by any individuals who communicate through ASL.

39. The TRS user registration database (TRS–URD) and associated TRS Numbering Directory have been set up to enable validation of individual VRS users by transmitting either the originating or terminating Internet-based TRS telephone number (iTRS number) for each call. For enterprise or public videophones, each of which permit use by more than one individual, however, the identity of all users of the videophone cannot be known in advance and thus is not retrievable from registration information associated with the videophone's iTRS number. For this reason, at present, there is no means of validating the eligibility of registered VRS users wishing to use these phones. The Commission proposes procedures to achieve this, along with safeguards for the use of these phones to protect against fraud, waste and abuse.

40. For all public videophones, and for enterprise videophones that are not located in private workspaces, the Commission proposes to require that VRS providers establish log-in procedures for VRS users. For example, for VRS users who already have registered a personal videophone, the VRS provider can require the user to electronically enter the user's iTRS number plus a personal identification number (PIN) before making or receiving a VRS or point-to-point call. Individuals who are not registered for VRS would first be required to complete such registration with the provider in accordance with the requirements of 47 CFR 64.611(a) and receive a personal identifier (ID) and PIN number from the provider in order to begin using the public or enterprise videophone with such log-in information. The Commission also proposes that when VRS providers submit the call data records (CDRs) for calls made from public and enterprise phones, in addition to the registered telephone number, the CDR should include the telephone or ID number of the person using the public or enterprise videophone. The Commission seeks comment on this proposal or any other alternative suggestions to ensure the eligibility and verification of users of enterprise and public phones. The Commission asks commenters whether these precautionary measures will further the Commission's efforts to reduce waste, fraud, and abuse and improve its ability to efficiently manage the VRS program.

41. For enterprise videophones that are located in private workspaces, defined as workspaces where access is limited to one individual, the Commission proposes to permit the registered VRS user of the enterprise videophone to log in a single time, without having to again log in each time the phone is used. The Commission seeks comment on this proposal.

42. In addition, the Commission proposes that VRS providers be required to submit the registration information specified below to the TRS–URD administrator for each new public or enterprise videophone prior to initiating service, and for each such videophone already in service, within 60 days of notice from the Commission that the TRS–URD is ready to accept such information.

43. For enterprise videophones, the Commission proposes to require the following information:

- Name and business address of the enterprise;
- Name of the responsible person for the videophone, as well as a digital copy of a self-certification (as described below) from that person and the date this certification was obtained by the provider;
- Tax identification number of the enterprise (for non-governmental enterprises);
- Registered Location of the phone;
- VRS provider's name;
- Date of the videophone's service initiation; and
- For existing enterprise videophones, the date on which the videophone was last used to place a point-to-point or TRS call.

In addition, the Commission proposes that each VRS provider be required to obtain from the individual responsible for each enterprise videophone a certification that such responsible person (1) has authority to port the phone to a different VRS provider, (2) will, to the best of that person's ability, permit only eligible VRS users with hearing or speech disabilities to use the phone, and (3) understands that the cost of VRS calls is financed by the federally regulated Interstate TRS Fund. The Commission seeks comment on the collection of the information listed, as well any exception to the above-proposed information collection requirements that should be made for governmental entities that are restricted in their ability to provide certain information due to national security concerns. The Commission also seeks comment on whether enterprises consider any of the proposed information collection requirements described above to contain commercially sensitive information, and if so, whether it is necessary for the Commission to impose data security requirements on VRS providers in order to protect such information.

44. For public videophones, the Commission proposes to require the following information and seeks comment on such collection:

- Name and physical address of the organization, business, or agency where the public videophone is located (which will be used as the Registered Location of the videophone);
- VRS provider's name;
- Date on which the videophone was placed in that location; and
- Date on which the videophone was last used to place a point-to-point or TRS call.

45. For both enterprise and public videophones, in the event that a registered videophone is removed from service or permanently disconnected from VRS, the Commission proposes that the VRS provider be required to notify the TRS Fund administrator of such termination of use within 24 hours of such termination. In addition, for each type of phone, the Commission proposes to require each VRS provider to monitor usage and report any unusual activity to the TRS Fund administrator. Because each of these videophones are available for use by multiple individuals, the Commission believes that the collection of this information is necessary to ensure the legitimacy of calls made on these phones. The Commission seeks comment on its assumptions and on these proposals and ask commenters to describe the types of unusual activity that should trigger a report to the Commission.

Direct Video Calling Customer Support Services

46. A direct video calling (DVC) customer support service is a telephone customer assistance service provided by an organization that permits individuals who are deaf, hard of hearing, deaf-blind, or have a speech disability, using telephone numbers that are registered in the TRS numbering directory, to engage in real-time video communication in ASL without using VRS. The purpose of DVC is to provide direct telephone service to such individuals that is functionally equivalent to voice communications service provided to hearing individuals who do not have speech disabilities. Because it is a direct service, no CA is involved and there is no compensation from the TRS Fund.

47. The Commission seeks comment on whether to amend 47 CFR 64.613 to allow all providers of DVC customer

support services to access the TRS Numbering Directory. The Commission believes amending its rules to allow DVC customer support service providers access to the TRS Numbering Directory will enhance the functional equivalence of the TRS program by allowing VRS users to engage in more direct, private, and reciprocal communication with customer service agents. As the Commission has repeatedly recognized, compared to traditional TRS, point-to-point services even more directly support the purposes of 47 U.S.C. 225 because they increase the utility of the Nation's telephone system for persons with hearing and speech disabilities by providing direct communication—including all visual cues that are so important to persons with hearing and speech disabilities. The Commission also believes allowing DVC customer support service access to the TRS Numbering Directory will likely reduce the TRS costs that would otherwise be borne by the TRS Fund because using DVC involves direct, rather than interpreted, communication and does not trigger the costs involved with interpretation or unnecessary routing. The Commission seeks comment on these tentative conclusions. The Commission further seeks comment on the concerns raised by Sorenson, specifically whether any rule changes should require that ASL-capable DVC numbers be distinct from general service numbers used by hearing individuals to the same customer call center. Finally, the Commission seeks comment on any other factors it should consider regarding this proposed rule amendment, including specific costs or additional benefits from allowing DVC customer support services providers to access the TRS Numbering Directory, as well as alternative proposals for ensuring direct access to DVC customer support services.

Per-Call Validation Procedures

48. 47 CFR 64.615(a)(i) requires each VRS provider to validate the eligibility of the party on the video side of each VRS call (once the TRS–URD is up and running) by querying the TRS–URD on a per-call basis. The Commission's Managing Director has contracted with the TRS Numbering Directory administrator to validate the eligibility of the party on the video side of each VRS call by utilizing the TRS Numbering Directory to respond to the per call query. The Commission proposes to amend 47 CFR 64.615(a)(i) to require that each VRS provider query either the TRS–URD or the TRS Numbering Directory, as directed by the Commission or the TRS Fund administrator, and seeks comment on this proposal.

Research and Development

49. In 2014, the Commission set an initial budget for research and development projects to be supported by the TRS Fund. Congress, in recognizing the need for relay services for persons with hearing and speech disabilities, charged the FCC with ensuring that the services evolve with improvements in technology. To this end, the Commission seeks comment on whether to continue this important research. Specifically, it seeks comment on whether it should take action to ensure continued funding from the TRS Fund beyond the initial project's $3 million budget, as that amount was only sufficient through the 2016–2017 TRS Fund Year. Therefore, to continue to meet its statutory obligations, the Commission seeks comment on whether to direct the TRS Fund administrator, for the 2017–2018 TRS Fund Year, and as part of future annual ratemaking proceedings, to include in proposed administrative costs for the Commission's approval an appropriate amount for research and development necessary to continue to meet the Commission's charge of furthering the goals of functional equivalence and efficient availability of TRS. The Commission asks commenters to address the specific purposes of such research and whether the benefits of such research outweigh the cost to the TRS Fund.

Non-Service Related Inducements To Sign Up for VRS

50. In 2013, the Commission adopted a rule prohibiting providers from offering or providing ''to any person or entity that registers to use IP CTS any form of direct or indirect incentives, financial or otherwise, to register for or use IP CTS'' and denying compensation to providers violating the rule. 47 CFR 64.604(c)(8)(i). The Commission seeks comment on whether to adopt a similar prohibition for VRS. Specifically, should the Commission prohibit VRS providers from offering or providing non-service related inducements (*e.g.,* video game systems) to sign up for or to continue to use a VRS provider's service? Are there any circumstances in which such inducements should be permitted? Does it matter if the provider offers the same inducements to all users, regardless of call volume? Further, how should the Commission define what is a non-service related inducement?

Non-Compete Provisions in VRS CA Employment Contracts

51. In 2007, a coalition of five VRS providers petitioned the Commission for a declaratory ruling to prohibit VRS providers from using non-competition agreements in VRS CA employment contracts that limit the ability of VRS CAs to work for competing VRS providers after the VRS CAs terminate their employment with their current employer. The Commission sought and received comment on these agreements in the *2013 VRS Reform FNPRM.* The Commission seeks further comment on the impact of non-competition agreements on the provision of VRS. What are the cost and benefits or advantages and disadvantages of allowing, prohibiting or limiting the scope of these agreements? Do non-competition agreements limit the pool of VRS CAs that are available to VRS providers? If so, does any such limitation affect the ability of VRS providers to effectively compete in the marketplace? To what extent do these agreements have an impact on the level of compensation paid to VRS CAs, and consequently, the cost of providing VRS? Do the agreements affect speed of answer, accuracy or other quality of service metrics for VRS users? Commenters should support their positions with data to the extent possible.

52. The Commission also asks commenters to address possible sources of authority for the Commission to regulate VRS CA non-competition agreements. For example, does 47 U.S.C. 225(d)(1)(A), which directs the Commission to ''establish functional requirements, guidelines, and operations procedures for telecommunications relay services'' afford the Commission sufficient authority to address these agreements? Are there other provisions of 47 U.S.C. 225 that provide the Commission with such authority? The Commission seeks feedback on any other matter that might assist the Commission in determining whether and how to address these agreements.

Initial Regulatory Flexibility Analysis

53. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed document FCC 17–26. Written public comments are requested on this IRFA. Comments must be identified as

responses to the IRFA and must be filed by the deadline for comments specified in the **DATES** section. The Commission will send a copy of document FCC 17–26 to the Chief Counsel for Advocacy of the Small Business Administration (SBA).

Need for, and Objectives of, the Proposed Rules

54. Document FCC 17–26 addresses server-based routing of VRS calls; registration of VRS enterprise and public videophones in the TRS–URD; access to the TRS Numbering Directory by DVC customer support services; per-call validation procedures for VRS calls; funding for research and development; prohibiting inducements to register for VRS; and prohibiting non-compete clauses in VRS CA employment contracts.

55. The proposed changes to permit server-based routing will expand the ways that VRS calls can be routed. The Commission proposes to permit domain names to be included in the user routing information provided to the TRS numbering directory.

56. The Commission proposes to require the registration of enterprise and public videophones in the TRS–URD and to require that the users of such videophones log-in to use the videophones, so that calls from such equipment may be appropriately processed and compensated for by the TRS Fund, as they have been in the past.

57. The Commission proposes to permit providers of DVC services to have access to the TRS Numbering Directory. Such access will enhance the functional equivalence of DVC. Because the per-call query function has been built into the TRS Numbering Directory rather than the TRS–URD, the Commission proposes to amend 47 CFR 64.615(a)(1)(i) to require per-call validation using either the TRS–URD or the TRS Numbering Directory, as directed by either the Commission or the TRS Fund administrator.

58. The Commission proposes to direct the TRS Fund administrator for the 2017–2018 TRS Fund Year, and as part of future annual ratemaking proceedings to include for Commission approval proposed funding for research and development. Such funding is necessary to continue to meet the Commission's charge of furthering the goals of functional equivalence and efficient availability of TRS.

59. The Commission also proposes to adopt a rule prohibiting VRS providers from offering direct or indirect inducements to customers to register for VRS. Such rules may be necessary to ensure that VRS is available to the extent possible and in the most efficient manner and to help prevent waste, fraud, and abuse of the TRS Fund.

60. Lastly, the Commission proposes to prohibit VRS providers from preventing CAs from subsequently working for a competing VRS provider through the inclusion of non-compete provisions in VRS CA employment contracts or otherwise requiring or inducing CAs to agree to non-compete agreements. A prohibition on non-compete agreements will ensure that VRS is available to the extent possible and in the most efficient manner by increasing the CA labor pool, ensuring the availability of qualified interpreters, and removing a barrier to competition.

Legal Basis

61. The authority for this proposed rulemaking is contained in 47 U.S.C. 225, 251.

Small Entities Impacted

62. The rules proposed in document FCC 17–26 will affect obligations of VRS providers and providers of DVC services. These services can be included within the broad economic category of All Other Telecommunications.

Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

63. The proposed server-based call routing option will permit the use of domain names, and will require VRS providers to keep records of such domain names. The domain names will then be processed as call routing information, just as other call routing information is processed currently. The changes to the TRS–URD design to permit calls to be made from enterprise and public videophones will require VRS providers to register such equipment in the TRS–URD, in a manner similar to how they currently register individuals in the TRS–URD. The other proposed rule changes do not involve recordkeeping requirements.

Steps Taken To Minimize Significant Impact on Small Entities, and Significant Alternatives Considered

64. The proposed server-based call routing option using domain names will be available to all VRS providers, will not be burdensome, and will advance interoperability. Greater interoperability will foster competition, thereby benefitting the smaller providers. To the extent there are differences in operating costs resulting from economies of scale, those costs are reflected in the different compensation rate structures applicable to large and small VRS providers.

65. The provision of VRS service to enterprise and public videophones is optional for VRS providers. The proposed registration requirements for such videophones and log-in procedures for users of such videophones apply equally to all VRS providers and users, and are necessary to prevent waste, fraud, and abuse of the TRS Fund. The registration requirements for enterprise and public videophones are no more burdensome than the registration requirements for individual videophones. To the extent there are differences in operating costs resulting from economies of scale, those costs are reflected in the different rate structures applicable to large and small VRS providers. Therefore, the Commission does not adopt any of the four alternatives listed above for small entities.

66. Permitting providers of DVC call centers to access the TRS Numbering Directory is necessary for the purpose of routing calls to and from DVC call centers. Such access would subject such call center providers to call-routing rules similar to those currently applicable to Internet-based TRS providers. Such rules are not burdensome.

67. Requiring VRS providers to transmit per-call validation queries to the TRS Numbering Directory instead of the TRS–URD, as currently required, is not burdensome. The only difference is the database that must be queried.

68. Directing the TRS Fund administrator to propose an appropriate amount of funding for research and development for the 2017–2018 TRS Fund year and as a part of each future annual ratemaking proceeding extends a past Commission directive to the TRS Fund Administrator to set an initial budget for research and development projects to be supported by the TRS Fund. The Commission seeks comment on the appropriate budget for research and development and whether to continue independently funding research and development through the TRS Fund. Funding independent research and development through the TRS Fund may result in a reduction in the costs that VRS providers incur to conduct their own research and development.

69. Prohibiting VRS providers from offering customers direct or indirect inducements to register for VRS will help ensure that VRS is available to the extent possible and in the most efficient manner while helping to limit waste, fraud, and abuse. Adopting this prohibition may benefit small providers by removing competitive costs associated with offering inducements

unrelated to providing service and focusing competition on service quality.

70. Prohibiting non-compete provisions in VRS CA employment contracts and prohibiting VRS providers from otherwise requesting or requiring CAs to agree to non-compete agreements narrowly targets a concern that affects the size of the CA labor pool, restricts competition, and impedes consumers choice. Prohibiting such restrictions may benefit smaller providers through increased availability of qualified interpreters.

Federal Rules Which Duplicate, Overlap, or Conflict With, the Commission's Proposals

71. None.

List of Subjects in 47 CFR Part 64

Individuals with disabilities, Telecommunications, Telecommunications relay services, Video relay services.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend Title 47 of the Code of Federal Regulation as follows:

PART 64—MISCELLANEOUS RULES RELATING TO COMMON CARRIERS

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

Authority: 47 U.S.C. 154, 225, 254(k), 403(b)(2)(B), (c), 715, Pub. L. 104–104, 110 Stat. 56. Interpret or apply 47 U.S.C. 201, 218, 222, 225, 226, 227, 228, 254(k), 616, 620, and the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112–96, unless otherwise noted.

■ 2. Amend § 64.611 by adding paragraphs (a)(6) and (7) and revising paragraph (c)(1) to read as follows:

§ 64.611 Internet-based TRS registration.

(a) * * *

(6) *Enterprise videophones.* For purposes of this section, an enterprise videophone is a videophone provided by an entity such as a business, an organization, or a governmental entity that is designated for use by its employees who use American Sign Language.

(i) A VRS provider seeking compensation from the TRS Fund for providing VRS to a registered VRS user utilizing an enterprise videophone must first obtain a written certification from the individual responsible for the enterprise videophone, attesting that:

(A) The individual will, to the best of that individual's ability permit only eligible VRS users with hearing or speech disabilities to use the enterprise videophone; and

(B) The individual understands that the cost of VRS calls is paid for by contributions from telecommunications and VoIP providers to the TRS Fund.

(ii) The certification required by paragraph (a)(6)(i) of this section must be made on a form separate from any other agreement or form, and must include a separate user signature specific to the certification. For the purposes of this rule, an electronic signature, defined by the Electronic Signatures in Global and National Commerce Act, as an electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record, has the same legal effect as a written signature. For the purposes of this rule, an electronic record, defined by the Electronic Signatures in Global and National Commerce Act as a contract or other record created, generated, sent, communicated, received, or stored by electronic means, constitutes a record.

(iii) Each VRS provider shall collect and transmit to the TRS User Registration Database, in a format prescribed by the administrator of the TRS User Registration Database, the following registration information for each of its enterprise videophones, for new enterprise videophones prior to the initiation of service, and for existing enterprise videophones within 60 days of notice from the Commission that the TRS User Registration Database is ready to accept such information:

(A) The name and business address of the enterprise;

(B) The name of the individual responsible for the videophone, a digital copy of the certification required by paragraph (a)(6)(i) of this section, and the date the certification was obtained by the provider;

(C) The last digits of the tax identification number of the enterprise, unless it is a governmental enterprise;

(D) The Registered Location of the phone;

(E) The VRS provider's name;

(F) The date of the enterprise videophone's service initiation; and

(G) For existing enterprise videophones, the date on which the videophone was last used to place a point-to-point or relay call.

(iv) Each VRS provider must obtain, from the individuals responsible for each new and existing enterprise videophone, consent to transmit the registered Internet-based TRS user's information to the TRS User Registration Database. Prior to obtaining consent, the VRS provider must describe to the individual responsible for the enterprise videophone, using clear, easily understood language, the specific information being transmitted, that the information is being transmitted to the TRS User Registration Database to ensure proper administration of the TRS program, and that failure to provide consent will result in the registered Internet-based TRS user being denied service. VRS providers must obtain and keep a record of affirmative acknowledgment of such consent for every enterprise videophone.

(v) Each VRS provider shall maintain the confidentiality of any registration and certification information obtained by the provider, and may not disclose such registration and certification information, or the content of such registration and certification information, except as required by law or regulation.

(vi) After the time period for the 60-day notice from the Commission that the TRS User Registration Database is ready to accept registration information has passed, VRS calls provided to enterprise videophones shall not be compensable from the TRS Fund unless the user of the enterprise videophone is a registered VRS user and logs in to the videophone with a user identification plus a passcode or PIN. For enterprise videophones located in private work spaces where access is limited to one individual, the user of such enterprise videophone may log in a single time, without being required to log in each time the videophone is used.

(vii) VRS providers shall require their CAs to terminate any call which does not involve an individual eligible to use VRS due to a hearing or speech disability or, pursuant to the provider's policies, the call does not appear to be a legitimate VRS call, and VRS providers may not seek compensation for such calls from the TRS Fund.

(viii) A VRS provider may be compensated from the TRS Fund for dial-around VRS provided to registered users of registered enterprise videophones.

(7) *Public videophones.* For purposes of this section, a public videophone is a videophone that is made available in a public space, such as a school, a hospital, a library, an airport, or a governmental building, for use by any individual who communicates through American Sign Language.

(i) A VRS provider seeking compensation from the TRS Fund for providing VRS to a registered VRS user utilizing a public videophone must transmit to the TRS User Registration

Database, in a format prescribed by the administrator of the TRS User Registration Database, the following information, for each of its new public videophones prior to the initiation of VRS on the videophone, and for existing public videophones, within 60 days of notice from the Commission that the TRS User Registration Database is ready to accept such information:

(A) The name and physical address of the organization, business, or agency where the public videophone is located;

(B) The VRS provider's name;

(C) The date on which the videophone was placed in that location; and

(D) The date on which the videophone was last used to place a point-to-point or TRS call.

(ii) After the time period for the 60-day notice from the Commission that the TRS User Registration Database is ready to accept registration information has passed, VRS calls provided to public videophones shall not be compensable from the TRS Fund unless the user of the public videophone is a registered VRS user and logs in to the videophone with a user identification plus a passcode or PIN.

(iii) VRS providers shall require their CAs to terminate any call which does not involve an individual eligible to use VRS due to a hearing or speech disability or, pursuant to the provider's policies, the call does not appear to be a legitimate VRS call, and VRS providers may not seek compensation for such calls from the TRS Fund.

(iv) A VRS provider may be compensated from the TRS Fund for dial-around VRS provided to registered users of registered public videophones.

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(c) *Obligations of default providers and former default providers.*

(1) Default providers must:

(i) Obtain current routing information from their Registered Internet-based TRS Users, registered enterprise videophones, and hearing point-to-point video users;

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■ 3. Amend § 64.613 by revising paragraphs (a)(1), (a)(2), and (a)(4) to read as follows:

§ 64.613 Numbering directory for Internet-based TRS users.

(a) *TRS Numbering Directory.*

(1) The TRS Numbering Directory shall contain records mapping the geographically appropriate NANP telephone number of each Registered Internet-based TRS User, registered enterprise videophone, public videophone, Direct Video Calling customer support services, and hearing point-to-point video user to a unique Uniform Resource Identifier (URI).

(2) For each record associated with a geographically appropriate NANP telephone number for a Registered Internet-based TRS User, registered enterprise videophone, public videophone, Direct Video Calling customer support services, or hearing point-to-point video user, the URI shall contain a server domain name or the IP address of the user's device. For each record associated with an IP Relay user's geographically appropriate NANP telephone number, the URI shall contain the user's user name and domain name that can be subsequently resolved to reach the user.

(3) * * *

(4) The TRS Numbering Administrator, Internet-based TRS providers, and Direct Video Calling customer support services providers may access the TRS Numbering Directory.

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■ 4. Amend § 64.615 by revising paragraph (a)(1) and adding subparagraph (a)(1)(iv) to read as follows:

§ 64.615 TRS User Registration Database and administrator.

(a) *TRS User Registration Database.*

(1) VRS providers shall validate the eligibility of the party on the video side of each call by querying the TRS User Registration Database or the TRS Numbering Directory, as directed by the Commission or the TRS Fund Administrator, on a per-call basis. Emergency 911 calls are excepted from this requirement.

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(iv) The eligibility of a party using an enterprise videophone or public VRS phone may be validated by the registration information for the enterprise phones or public VRS phones in the TRS User Registration Database.

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