

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In The Matter of)	
)	
Structure and Practices of the Video Relay Service Program)	CG Docket No. 10-51
)	
Telecommunications Relay Services and Speech- to-Speech Services for Individuals with Hearing and Speech Disabilities)	CG Docket No. 03-123
)	

REPLY COMMENTS OF SORENSON COMMUNICATIONS, INC.

Michael D. Maddix
 Director of Government and
 Regulatory Affairs
 SORENSON COMMUNICATIONS, INC.
 4192 South Riverboat Road
 Salt Lake City, UT 84123

John T. Nakahata
 Christopher J. Wright
 Charles D. Breckinridge
 Timothy J. Simeone
 WILTSHIRE & GRANNIS LLP
 1200 Eighteenth Street, N.W.
 Washington, D.C. 20036
 T: (202) 730-1300
 jnakahata@wiltshiregrannis.com

Counsel to Sorenson Communications, Inc.

November 29, 2012

TABLE OF CONTENTS

I.	INTRODUCTION AND EXECUTIVE SUMMARY	1
II.	THE COMMISSION <i>MUST</i> ADOPT RATES THAT PERMIT FUNCTIONALLY EQUIVALENT VRS SERVICE, AND THE RATES PROPOSED IN THE PN WOULD NOT COME CLOSE TO DOING SO	4
A.	The Comments Confirm that the 2004 Rate-of-Return Model is Fundamentally Flawed, and RLSA’s Resulting Rate Proposals Are Economically Infeasible and Will Harm Consumers.....	4
1.	Commenters agree that the rate-of-return methodology proposed by the PN is irredeemably flawed.....	4
2.	The rate proposals would deeply harm VRS consumers and video interpreters, and those harms will only be exacerbated if VRS providers go bankrupt	11
a.	Adopting RLSA’s proposals would harm consumers and video interpreters	11
b.	Bankrupting providers providing substantial portions of VRS would exacerbate the harm to consumers and video interpreters	15
B.	The Record Does not Support the Use of Tiers, and Using Tiers to Drive the Lowest Cost Provider into Bankruptcy While Protecting Higher Cost Providers is Arbitrary and Capricious.....	22
1.	Claims of Substantial Economies of Scale are Unfounded	22
a.	Sorenson’s Competitors Provide No Evidence Demonstrating Substantial Economies of Scale	24
2.	The Commission Cannot Rationally Justify Using Tiers to Drive the Lowest-Cost Provider into Bankruptcy While Protecting Higher-Cost Providers	29
C.	Transitioning to a Unified Rate Set at the Lower of 1) the Level that a Two-Winner Competitive Bid Would Produce; or 2) the Current \$5.14 Blended Rate that Sorenson Receives is the Only Economically Feasible and Rational Alternative on the Record that Preserves Functional Equivalence	33
D.	If the Commission Adopts any Rate Level Substantially Below the Current Tier III Rate, It Must Provide an Appropriate Transition Period	36

III. ZVRS’S SINGLE-APPLICATION PROPOSAL IS DESIGNED SOLELY TO GRAB MARKET SHARE AT THE EXPENSE OF INNOVATION AND CONSUMER CHOICE, AND COMMENTERS HAVE OVERWHELMINGLY OPPOSED IT.....38

A. Commenters Recognize the Substantial Benefits of VRS-Endpoint Competition and Reject the Idea of a Single Application.....40

B. Commenters Confirm That an Off-Shelf-Equipment Mandate Would Not Advance Interoperability and Would Only Deprive Consumers of Specialized Features Upon Which They Have Come to Depend.....44

1. A Mandated Single-Application, Off-the-Shelf-Equipment Environment Will Not Resolve Interoperability.....47

2. Industry-Wide Standards, not Central Planning, Will Promote Interoperability, and the Development Process is Underway.....48

3. A Reference Platform May Be Effective in Making Interoperability a Reality, but It Should Be Chosen Carefully and Should Not Impede Innovation50

4. Although Portability of Speed-Dial Lists and Address Books Can Benefit Consumers, Requiring Full Portability of All Enhanced Features Will Kill Innovation51

5. Third-Party Interoperability Testing Can Add Value to the Process, As Long as the Initiative Is Adopted by Industry Consensus, Not Imposed by Regulatory Fiat.....53

C. ZVRS and Its Allies Fail to Address the Enormous Cost and Customer-Service Nightmare That ZVRS’s Proposal Would Cause54

IV. COMMENTERS AGREE THAT DISAGGREGATING VRS NETWORK FUNCTIONS WOULD DISSERVE CONSUMERS AND POSE HEIGHTENED RISKS TO PRIVACY— AT A HIGHER COST TO THE FUND AND WITHOUT COMBATTING FRAUD.....56

A. ZVRS’s Disaggregation Proposal Would Generate Widespread Disruption Without Any Corresponding Benefits56

B. The Commission Should Not Entrust the Database Administrator with Gathering Registration and Verification Information.....60

C. Disaggregating Network Functions from the Provision of VRS Would Jeopardize Privacy Rights, Fail to Address Fraud, Undermine Service Quality, Further Complicate the Compensation Structure for the VRS Industry, and Lead to Disastrous Customer Service Experiences64

V. OTHER ISSUES RAISED IN COMMENTS: THE COMMISSION SHOULD REJECT CALLS FOR NATIONAL CERTIFICATION, DISREGARD THE PROPOSAL TO LIMIT THE VRS INDUSTRY TO A SINGLE PROVIDER, CONSIDER SKILLS-BASED ROUTING SUBJECT TO CRITICAL SAFEGUARDS, AND PRESERVE CONFIDENTIALITY FOR SENSITIVE FINANCIAL INFORMATION70

A. While Superlative Interpreting Is Fundamental for VRS, Imposing a National Certification Requirement Would Degrade Service Quality and Raise Costs.....70

B. To Preserve Consumer Choice and Competitive Incentives, the Commission Should Reject Calls to Limit the VRS Industry to a Single Provider—Just as It Should Decline to Limit Competition by Mandating a Single Standardized VRS Endpoint or a Dramatically Expanded Role for a Centralized Administrator74

C. Sorenson Supports Calls for Skills-Based Routing, Subject to Important Safeguards.....75

D. The Commission Should Preserve Protections for Sensitive Financial Information and Other Confidential Information77

VI. CONCLUSION81

I. INTRODUCTION AND EXECUTIVE SUMMARY

The record now firmly establishes that the proposals contained in the Public Notice (“PN”) would destroy Video Relay Service (“VRS”) as we know it, depriving deaf and hard-of-hearing consumers of an extraordinary technology that has revolutionized their ability to communicate.¹ The flawed rate proposal presented by Rolka Loube Saltzer Associates (“RLSA”) and the counterproductive disaggregation proposals presented by CSDVRS, LLC (“ZVRS”) would mark an abrupt retreat from years of progress, while fully abdicating the mandate in the Americans with Disabilities Act (“ADA”) for the provision of functionally equivalent service.

Although the commenters present a variety of perspectives on VRS reform, there is one issue on which every party agrees: the RLSA rate proposal would devastate VRS. The Consumer Groups rightly state that “[t]he goal of functional equivalency must be the basis for any rate structure.”² But the RLSA proposed rates flunk that test: the comments confirm unambiguously that the Commission will fail to satisfy its statutory mandate if it adopts anything like the rates proposed by RLSA. Those rates are based on an economically infeasible rate-of-return model designed for a structurally incomparable industry and have since been repudiated even in that entirely unanalogous context. As commenters universally agree, this fundamentally flawed approach results in proposed rates that cannot support the kind of VRS to which deaf, hard-of-hearing, and speech-disabled individuals are entitled under the statute and upon which they have

¹ *Additional Comment Sought on Structure and Practices of the Video Relay Service (VRS) Program and on Proposed VRS Compensation Rates*, Public Notice, DA 12-1644, 27 FCC Rcd. 12,959 (2012) (“PN”).

² Comments of Consumer Groups at i, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) (“Consumer Groups PN Comments”).

come to rely, much less afford any funding for innovation and VRS improvements. No VRS provider today has total costs that approach the \$3.40-per-minute ultimate rate that RLSA proposes—and none claims that it could operate at that level.

Underscoring the inadequacy and infeasibility of rates based on a rate-of-return approach constrained by the arbitrary subset of costs deemed “allowable,” commenters recognize that RLSA’s “allowable” costs are wholly detached from reality and do not represent the total actual costs of any real-world VRS provider. Moreover, commenters have agreed that setting profit levels based on booked capital makes absolutely no sense in a labor-intensive, capital-light industry like VRS, which relies far more substantially on human interpreters than it does on infrastructure. The resulting miniscule VRS-provider profit margins on just the subset of costs termed “allowable” would make it nearly impossible for providers to even pay their taxes, much less attract capital, invest in developing new services and equipment, or cover other costs that the “allowable” costs rate-of-return methodology ignores.

Furthermore, driving VRS providers into bankruptcy is not a magic wand that can reduce costs without causing severe and lasting service disruption. Any bankruptcy—and the lead-up to a bankruptcy—would likely result in large cuts in technical support, in field staff for installation and service calls, and in research and development. To the extent interpreters fled the economic insecurity of a provider bankruptcy—which is likely—wait times would increase both for the bankrupt provider and, if the bankrupt provider was large enough, across the industry. Small VRS providers simply do not have the capacity to absorb the significant VRS traffic currently being handled by larger providers. At a minimum, RLSA’s rate proposals would result in a stripped-down, low-performance version of VRS—but they would be far more likely to end VRS

as we know it. The potential for provider bankruptcies does not render feasible an economically infeasible rate.

It is also now crystal clear that ZVRS's single-application proposal is nothing but a brazen attempt to grab market share at the expense of competition, innovation, and consumer choice. Commenters have overwhelmingly recognized the benefits that endpoint competition brings consumers and rejected the idea of a centrally planned, single-application replacement for the equipment and applications they prefer today. Commenters also agree that, to ensure interoperability, industry-wide standards development is a far superior option to forcing consumers onto mass-market equipment devoid of the specially-designed features they value highly. Adopting ZVRS's misguided proposal would ensure that each and every VRS user would be forced to use featureless applications on devices that are further removed from functional equivalence than the equipment they use today.

Finally, the record confirms that ZVRS's proposal to expand the functions of the iTRS Database Administrator into a single communications provider is simply one more effort by ZVRS to "level the playing field"—not by improving its own performance but by forcing consumers to accept a system that will be less reliable, less private, and more susceptible to fraud than the system in place today. Sorenson joins other commenters, however, in supporting a limited expansion of the database's operations to address the potential for waste, fraud and abuse. In particular, Sorenson agrees that the database could be expanded to include storage of basic registration and verification information (though not the collection of that information from end users) for use on a call-by-call basis to confirm end user validity. Implementation of any additional "expanded" operations would be a logistical nightmare, would undermine effective customer support, and would further complicate VRS-provider compensation. Commenters have

voiced strong opposition to broad expansion of the Database Administrator’s operations, and supporters have failed to articulate any justification for the harm it would inflict.

II. THE COMMISSION *MUST* ADOPT RATES THAT PERMIT FUNCTIONALLY EQUIVALENT VRS SERVICE, AND THE RATES PROPOSED IN THE PN WOULD NOT COME CLOSE TO DOING SO.

As Sorenson set forth in its comments on the PN, Section 225 imposes on the Commission the solemn responsibility to ensure, to the extent possible, nationwide availability of VRS that is “functionally equivalent” to the voice communications services enjoyed by the hearing population.³ This fundamental goal of functionally equivalent VRS must drive the Commission’s rate-setting analysis. The Consumer Groups put this point plainly and simply in their PN Comments: “[T]he goal of functional equivalency must be the basis for any rate structure.”⁴ The statutory mandate of functional equivalence is not optional. Because the ultimate rates that would be generated under RLSA’s proposal and underlying methodology are economically infeasible and thus arbitrary and capricious, its proposal—including its proposed transitional first-year rates—lack any rational basis and must be rejected.

A. The Comments Confirm that the 2004 Rate-of-Return Model is Fundamentally Flawed, and RLSA’s Resulting Rate Proposals Are Economically Infeasible and Will Harm Consumers.

1. Commenters agree that the rate-of-return methodology proposed by the PN is irredeemably flawed.

In their PN comments, the Consumer Groups identify the core reasons why the Commission should reject rate-of-return regulation for VRS. In particular, the fundamental goal of VRS rate-setting should be “functional equivalency,” which requires a “rate sufficient to keep up with technological advances that advance functional equivalency” rather than “look[ing] at

³ See 47 U.S.C. § 225(b)(1) (availability); (a)(3) (functional equivalence).

⁴ Consumer Groups PN Comments at i.

historical costs.”⁵ Rate-of-return regulation, the Consumer Groups further explain, is simply not a sensible path to functional equivalence. Instead, to “provide carriers with an incentive to innovate and provide better service more efficiently,” the Commission must “transition towards a more incentive-based form of regulation [for VRS] with better incentives for efficient operations”—just as the Commission has done in other contexts.⁶ “Imposing a rate-of-return methodology for the VRS industry alone, when the Commission has moved away from rate-of-return for communications services provided to the hearing population, would be a step backwards.”⁷ This echoes the Commission’s own conclusions more than two decades ago when it adopted price caps for AT&T:

The attractiveness of incentive regulation lies in its ability to replicate more accurately than rate of return the dynamic, consumer-oriented process that characterizes a competitive market. In general, such regulation operates by placing limits on the rates carriers may charge for services. In the face of such constraints, a carrier’s primary means of increasing earnings are to enhance its efficiency and innovate in the provision of service. . . . The system also is less complex than rate of return regulation and easier to administer in the long run, which should reduce the cost of regulation.⁸

With rate of return regulation, in contrast:

The dynamic process that produces socially beneficial results in a competitive environment is strongly suppressed. In fact, rather than encourage socially beneficial behavior by the regulated firm, rate of return [regulation] actually discourages it.⁹

⁵ *Id.* at 22-23.

⁶ *Id.* at 24 (internal citation omitted).

⁷ *Id.*

⁸ *Policy and Rules Concerning Rates for Dominant Carriers*, Report and Order and Second Further Notice of Proposed Rulemaking, FCC 89-91, 4 FCC Rcd. 2873, 2893 ¶ 36 (1989) (“AT&T Price Cap Order”).

⁹ *Id.* at 2889 ¶ 29. The Commission explained its conclusion as follows:

Other commenters agree with Sorenson and the Consumer Groups that RLSA's proposed rate-of-return approach is fundamentally flawed and indefensible. Purple Communications, Inc. ("Purple"), for example, argues that "[t]he rates for VRS should be regulated by price cap methodology," because "the stability provided by the price cap would optimize the incentives for VRS providers to lower costs and engage in long-term planning and investment in their VRS businesses thereby facilitating great competition and consumer choice."¹⁰ And ZVRS delivers a blistering critique of rate-of-return ratemaking, explaining that it requires a never-ending and always imprecise effort to calculate providers' costs, figure out which fit into "allowable" buckets and which do not, and so on. The result is by definition a proposal that cannot be squared with reality—and ZVRS shows in detail that RLSA's cost calculations in fact bear no

The distorted incentives created by rate of return regulation are easily illustrated. In a competitive environment, where prices are dictated by the market, a company's unit costs and profits generally are related inversely. If one goes up, the other goes down. Rate of return regulation stands this relationship on its head. Although carriers subject to such regulation are limited to earning a particular percentage return on investment during a fixed period, a carrier seeking to increase its dollar earnings often can do so merely by increasing its aggregate investment. In other words, under a rate of return regime, profits (i.e., dollar earnings) can go up when investment goes up. This creates a powerful incentive for carriers to 'pad' their costs, regardless of whether additional investment is necessary or efficient. And, because a carrier's operating expenses generally are recovered from ratepayers on a dollar-for-dollar basis, and do not affect shareholder profits, management has little incentive to conserve on such expenses.

Id. at 2889-90 ¶ 30; *see also Policy and Rules Concerning Rates for Dominant Carriers*, Second Report and Order, FCC 90-314, 5 FCC Rcd. 6786, 6790 ¶ 30 (1990) ("Unfortunately, a regulatory system that simply corrects for a tendency to pad investments or expenses is not a system that can also drive LECs to become more efficient and productive. But incentive regulation, by limiting the amount carriers can charge for their services and continually exerting downward pressure on those price ceilings, can.").

¹⁰ Comments of Purple Communications, Inc. at 16-17, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) ("Purple PN Comments").

relationship to the costs that ZVRS incurs.¹¹ In short, commenters agree that a rate proposal reflecting rate-of-return methodology is “based on flawed assumptions”¹² and would “quash new development efforts of current providers, as there would be no business incentive to operate or innovate.”¹³

In addition to rejecting rate-of-return regulation as outmoded and inefficient, many commenters criticize other aspects of RLSA’s methodology. In particular, nearly all commenters argue that RLSA should not limit recoverable costs to an artificially constrained set of “allowable” costs as it has done in the past. The Consumer Groups, again, reject rate-of-return ratemaking for VRS altogether, but also note that “[t]o the extent the FCC nevertheless evaluates rate-of-return as an option, [the] Consumer Groups support the concept that the Commission should reimburse VRS providers for the cost to finance their ongoing operational expenses.”¹⁴ The Consumer Groups go on to state that “VRS providers should be able to include costs for marketing, outreach, research and development,” including “increasing [the] awareness of the general (hearing) population” of VRS.¹⁵ ZVRS points out that RLSA’s “2012 calculated weighted average costs” dramatically undercounted ZVRS’s actual operating costs, including indirect costs such as “operations support, finance, research & development, engineering, legal, risk management, other corporate overhead and a modest executive team,” as well as costs for

¹¹ See Comments of CSDVRS, LLC at 4-9, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) (“ZVRS PN Comments”).

¹² Purple PN Comments at 12.

¹³ ZVRS PN Comments at 14.

¹⁴ Consumer Groups PN Comments at 26.

¹⁵ *Id.* at 25.

“marketing & outreach.”¹⁶ Purple likewise argues that “inclusion of outreach, marketing, and research and development costs is absolutely necessary.”¹⁷ Recognizing the challenge inherent in identifying actual costs with accuracy, regulatory agencies—including the Commission—have increasingly chosen to use price-cap approaches instead, which provide incentives for companies to become more efficient without involving industry and regulators in extended debates about the permissibility of different categories of costs.¹⁸

To the extent that the Commission persists in pursuing rate-of-return regulation, commenters also criticize the PN’s proposals for arbitrarily setting the rate of return at 11.25 percent of booked capital plant. The Consumer Groups identify a major problem with this approach: “The rate of return...should not be fixed at 11.25% or any arbitrary number, but

¹⁶ ZVRS PN Comments at 3-6.

¹⁷ Purple PN Comments at 17.

¹⁸ *See, e.g., AT&T Price Cap Order* at 2890-91 ¶¶ 31-32. The Commission explained:

[A]dministering rate of return regulation in order to counteract these incentives is a difficult and complex process, even when done correctly and well. This is so primarily for two reasons. First, such regulation is built on the premise that a regulator can determine accurately what costs are necessary to deliver service. In practice, however, a regulator may have difficulty obtaining accurate cost information as the carrier itself is the source of nearly all information about its costs. Furthermore, no regulator has the resources to review in detail the thousands of individual business judgments a carrier makes before it decides, for example, to install a new switching system.

The second inherent difficulty associated with administering rate of return regulation relates to its requirement that determinations be made about how to allocate a carrier’s costs among services that often are provided jointly or in common. Such determinations tend to become more economically problematic as they become more detailed. The history of this Commission’s experience in this area over the past several decades reflects the difficulty of implementing cost allocation systems.

Id.

instead should be adjusted to reflect the current market realities.”¹⁹ ASL Services Holdings, LLC (“ASL/Gracias”) similarly argues that the “11.25% rate of return on investment adopted in 1990 is inconsistent with current cost structures 22 years following its adoption and should be re-examined.”²⁰ Not surprisingly, the “underlying assumptions that supported this rate of return have changed in the more than two decades since adoption, resulting in an artificially lower rate of return that bears little relationship with current costs, risks, and challenges.”²¹ ZVRS points out that “utilizing the same [ratemaking] approach for the VRS industry, an industry which does not require capital investment anywhere near that of LECs, is not logical or reasonable.”²² Similarly, Purple states that “[w]ith respect to the amount of capital costs that are allowed to be recovered...a traditional rate of return investment analysis approach is not a suitable option for VRS, which is a labor-intensive industry.”²³

Of course, no commenter suggests that the amount of profit permitted under RLSA’s proposal—about 6 cents per minute, or less than 2 percent of either RLSA’s proposed \$4.51 per minute rate for Tier 3 minutes in 2013 or its ultimate rate target of \$3.40 per minute—is

¹⁹ Consumer Groups PN Comments at 26.

²⁰ Comments of ASL Services Holdings, LLC at 13, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) (“ASL/Gracias PN Comments”).

²¹ *Id.*

²² ZVRS PN Comments at 13 (citation omitted). ZVRS argues, however, that the problem with applying the 11.25 percent rate of return to VRS could be addressed by adding interpreter costs to those to which the rate of return must be applied: “ZVRS believes the FCC [c]ould...attract new capital (new investors funds) to the VRS industry by applying the ROIC methodology to both the invested capital and CA workforce costs.” *Id.* at 14. In fact, however, while this approach would be a modest improvement over *not* including workforce costs in the rate base, it certainly would not address the fundamental problems of using rate-of-return regulation in the first place, including both the incentive to drive up costs to increase returns and the disincentive to lower costs to become more efficient. *See supra*, nn.8-9 and accompanying text.

²³ Purple PN Comments at 18.

adequate. To the contrary, ZVRS explains that the “minimal rate of return” reflected in the proposal would ensure that “most providers would never be able to attract future investors, nor be able to operate at a competitive level and will simply leave the industry.”²⁴ In a labor-intensive industry, a rate-of-return approach (if used at all notwithstanding the litany of reasons to reject it) ought to provide for the recovery of a provider’s total *actual* costs plus a return on all of those costs. As outside auditors have documented, Sorenson’s actual costs (as opposed to the costs considered “allowable” by RLSA) are *****BEGIN HIGHLY CONFIDENTIAL***** *****END HIGHLY CONFIDENTIAL***** per minute.²⁵ Sorenson is the lowest-cost VRS provider, with all other providers reporting higher average costs per minute. Accordingly, any rate-of-return approach ought to call for recovery of at least *****BEGIN HIGHLY CONFIDENTIAL***** *****END HIGHLY CONFIDENTIAL***** per minute plus an adequate return. This would likely result in a rate above the blended \$5.14 per minute rate Sorenson currently receives, and certainly not in one that is substantially below \$5.14 per minute.

In short, there is broad agreement in the comments that 1) the Commission cannot ensure the “functional equivalence” of VRS by relying on the discredited rate-of-return methodology

²⁴ ZVRS PN Comments at 13-14.

²⁵ A portion of Sorenson’s documented per-minute costs consists of interest payments, which are not considered allowable. But there is no reasonable basis for disallowing financing costs, especially since Sorenson’s debt costs are similar to those of many other communications companies. And to the extent that some of Sorenson’s debt obligations represent the costs of paying dividends, the Commission cannot reasonably refuse to set rates that permit providers to earn a reasonable profit and also refuse to permit providers to borrow money. Furthermore, the interest costs that can be attributed to dividend payments amount to a return of approximately *****BEGIN HIGHLY CONFIDENTIAL***** *****END HIGHLY CONFIDENTIAL***** percent on Sorenson’s actual costs. If VRS were operated under a federal government contract model, this level of recovery would be entirely reasonable.

reflected in RLSA's proposal; 2) if the Commission decides to go down this unpromising path, it at least should not continue to arbitrarily exclude the real costs of providing service; 3) in a labor-intensive, capital-light industry like VRS, the return component of the rate cannot defensibly apply only to booked capital plant; and 4) there is simply no basis whatsoever for using the 11.25 percent rate-of-return figure derived from decades-old data in a very different industry. A reasonable rate-of-return approach that counted the actual costs of VRS providers and allowed a reasonable profit would lead to a rate above the \$5.14 rate Sorenson has proposed.

2. The rate proposals would deeply harm VRS consumers and video interpreters, and those harms will only be exacerbated if VRS providers go bankrupt.

a. Adopting RLSA's proposals would harm consumers and video interpreters.

Not a single VRS provider suggests that it could provide service at the proposed rate levels.²⁶ Clearly, however, the collapse of the VRS industry would not harm only VRS providers—the negative impact on VRS consumers and on video interpreters would also be dramatic.

With respect to the negative effects of the PN's rate proposals on consumers, the Consumer Groups provide some sobering observations. While acknowledging that they do not have sufficient information about VRS providers' operations to comment on specific rates, the

²⁶ Only ASL/Gracias's comments might be read to support the rate proposal—but ASL/Gracias apparently did not recognize the enormous cut RLSA is proposing, instead voicing its support for a two-tiered system with a \$6.2335 rate at the lower tier and \$5.0668 at the higher: "ASL/Gracias VRS does not oppose the RLSA-proposed two-tiered compensation methodology consisting of a \$6.2335 per minute rate for the first 500,000 minutes per month and \$5.0668 per minute beginning with the 500,001st minute each month generally." ASL/Gracias PN Comments at 12. It seems very likely that ASL/Gracias *would* oppose the rates *actually* proposed in the PN.

Consumer Groups do warn that “[i]f the reimbursement rate is set below-cost...the Consumer Groups can apply common sense to what will happen.”²⁷ Common sense dictates, of course, that “service quality will diminish, service improvements that bring consumers closer to functional equivalency will not be made, consumer choice will be reduced” and the “VRS program will fail to meet the ADA mandate that all consumers have access to functionally equivalent communications services.”²⁸ As a result, the Consumer Groups counsel that before undertaking dramatic changes like those proposed by RLSA, “the Commission must gather data about the potential impacts its proposals may have on consumers and the provision of VRS services as a whole.”²⁹ Moreover, “the Commission must clearly and concisely explain how such data has been evaluated before suggesting or adopting significant reforms.”³⁰

While indeed sobering, the Consumer Groups’ comments do not come close to capturing the full impact of the proposed rates on consumers. As Sorenson stated in no uncertain terms in its comments on the PN, “the rate recommendation on which the PN seeks comment supplies no commercially viable basis for providing VRS.”³¹ Other VRS providers agree. ZVRS, for example, writes that RLSA’s proposal reflects such a “minimal rate of return” that “most providers would never be able to attract future investors, nor be able to operate at a competitive level and will simply leave the industry.”³² And ZVRS plainly counts itself among the providers

²⁷ Consumer Groups PN Comments at 7.

²⁸ *Id.*

²⁹ *Id.* at 8.

³⁰ *Id.*

³¹ Comments of Sorenson Communications, Inc. at 3, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) (“Sorenson PN Comments”).

³² ZVRS PN Comments at 13-14.

that would be obliged to “leave the industry” if RLSA’s proposed rates are adopted: “The overall weighted average calculated cost by RLSA of \$3.396 is significantly lower than ZVRS’ cost.”³³ Purple, too, cannot operate at the proposed rates: “[T]he TRS Fund Administrator’s rate proposal will have the effect of decreasing rates for non-dominant VRS providers to such an extent that they will be forced out of business, and, as a result, undermine the Commission’s goal of increasing competition in the VRS industry to facilitate consumer choice and promote functional equivalence.”³⁴ Convo Communications, LLC (“Convo”) observes that “[n]o business can withstand sudden and repeated double-digit percentage decreases in their operating revenue,” and notes it would be impossible “to reduce costs in an orderly manner quickly enough to offset the type of revenue reductions that would result from RLSA’s proposed rates.”³⁵

Even interpreter organizations recognize that the rate cuts would undermine providers: “There wouldn’t be many or any VRS provider[s] that could sustain [their] organization with rate cuts, reduction of consumers, and/or services...[if] the FCC’s current proposals go into effect.”³⁶ And interpreter organizations acknowledge that their members will in turn be harmed by those proposals. The Registry of Interpreters for the Deaf, Inc. (“RID”), for example, explains that it knows from experience what happens as a result of dramatic rate reductions: “The 2010 rate reductions resulted in interpreter cutbacks and job losses, the closure of VRS centers across the country, and the implementation of new hiring practices”; even more draconian cuts, RID fears,

³³ *Id.* at 3.

³⁴ Purple PN Comments at 12.

³⁵ Comments of Convo Communications, LLC at 6, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) (“Convo PN Comments”).

³⁶ Comments of the National Alliance of Black Interpreters, Inc. at 2, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) (“NAOBI PN Comments”).

will “threaten the health of the professional interpreters working as CAs, [and] will certainly impact the overall quality of service provided through VRS.”³⁷ The Communications Workers of America argue that unreasonable demands on video interpreters have already been imposed as a result of this proceeding:

[I]n response to the Commission’s ongoing actions and discussion of possible reduction in VRS compensation rates in this instant proceeding, VRS providers have already begun to increase the previously demanding workload of video interpreters who take calls in Spanish and English to such a degree that it impairs the ability of video interpreters to provide quality interpretation services to consumers.³⁸

While Sorenson has taken great care to maintain reasonable workloads for its interpreters, there is no question that, as a practical matter, the kind of rate cuts proposed by RLSA would “impact the work of the sign language interpreter directly” and thereby “affect[] the quality of service.”³⁹ One direct impact would be less funding for technological advances that assist video interpreters in their work. Many of the technological advances made by Sorenson and other providers—including improved endpoints and advanced workplace settings—have enabled interpreters to work more comfortably and efficiently. But those advances are of course dependent on available resources, and the rate cut RLSA has proposed would eliminate funding for efforts of this kind. Without further advances, interpreters will eventually turn away from VRS work as it becomes more challenging, difficult, and demanding relative to other pursuits.

³⁷ Comments of the Registry of Interpreters for the Deaf, Inc. at 3, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) (“RID PN Comments”). ZVRS’s comments similarly argue that RLSA’s proposed rates would require providers to make impossible demands on VIs in order to make the service economical—the work “schedule [that the rates would require from VIs]...would injure interpreters mentally, emotionally and physically.” ZVRS PN Comments at 8.

³⁸ Comments of Communications Workers of America in partnership with Video Interpreters at 2, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012).

³⁹ NAOBI PN Comments at 2.

Moreover, inadequate resources will ultimately lead to inadequate technological systems which will lead to consumers requesting clarification due to poor picture quality or complaining about other facets of the service. This will predictably result in frustration for interpreters, who will likely find the work less satisfying under such conditions, which will give them additional incentives to consider leaving VRS and focus on community work instead.

b. Bankrupting providers providing substantial portions of VRS would exacerbate the harm to consumers and video interpreters.

As noted in Sorenson’s comments, the rate proposals would so obviously place all VRS providers on a path to insolvency that it is difficult to avoid the conclusion that those proposals were *designed* to result in bankruptcies—perhaps in the hope that bankruptcies could simply and neatly eliminate VRS providers’ debt, thereby reducing their costs going forward with little or no disruption or harm to consumers.⁴⁰ Although Sorenson briefly explained in its opening comments on the PN that hopes for disruption-free insolvency represent pure “fantasy,”⁴¹ the reasons why that is so bear further explanation here.

To understand why forcing Sorenson into reorganization—or, indeed, any action by the Commission engendering substantial uncertainty among Sorenson’s interpreters—would have far-reaching negative impacts on consumers, it is necessary to understand the unique relationship between VRS providers and the interpreters at the heart of the services provided. Virtually all of Sorenson’s interpreters—and, for that matter, other VRS providers’ interpreters—are part-time employees. Sorenson’s part-time interpreters, for example, typically work *** **BEGIN**

CONFIDENTIAL *** [REDACTED] *** **END CONFIDENTIAL** *** hours per week, and most are

⁴⁰ See Sorenson PN Comments at 14-15.

⁴¹ *Id.* at 15.

unwilling to work substantially more. VRS interpreters work part-time both because of the unique demands of VRS interpreting and because all ASL interpreters typically have deep, often personal, ties to deaf and hard-of-hearing individuals in their local communities. Those ties require most interpreters to work part-time at a number of interpreting jobs within their communities, eschewing full-time employment with a single employer. As employers, VRS providers thus compete with numerous other part-time interpreting opportunities available to interpreters in their communities.

Any perception of job insecurity among VRS interpreters would lead to large and disruptive outflows of critical human capital—in short, interpreters will simply leave for other, non-VRS jobs which they perceive to be more secure. This fact was dramatically underscored after the Commission slashed the Tier III compensation rate by 18 percent in June 2010. For example, while Sorenson naturally took steps to minimize the disruption caused by that change, it was nonetheless obliged to close five call centers, thereby directly eliminating hundreds of interpreter positions. That action had the unintended consequence of dramatically increasing Sorenson's interpreter turnover.⁴² Sorenson believes that many, if not most, of those who left did so because 1) they perceived VRS interpreting jobs to be less secure than alternatives within their communities as a result of the 2010 lay-offs; and/or 2) they were unwilling to take on the burdens of increased workloads imposed on them by the closure of five call centers. Sorenson believes that the vast majority of these interpreters did *not* go to work for other VRS providers—having had a negative experience with one provider due to industry-wide rates established by the regulator, most interpreters simply left the VRS industry altogether.

⁴² Sorenson currently employs more than *** BEGIN HIGHLY CONFIDENTIAL *** fewer interpreters than it did in July 2010. *** END HIGHLY CONFIDENTIAL ***

Furthermore, because interpreter reductions were necessitated by rate cuts, raising wages to increase retention was not (and will not be in the future) a realistic option for any VRS provider. Moreover, when Sorenson closes a call center in a location where no other provider operates a call center, its experience is that interpreters generally do not move to another community to continue interpreting for VRS—they simply take on other part-time jobs within their community. And, of course, it is doubtful that any provider will be able to open any *new* call centers anywhere if the rates are anything like those proposed by RLSA, as that formula provides little to no profit margin for any provider and thus the provider is unlikely to be able to obtain the financing necessary to construct new call centers.

The net result of these factors is that threats—such as the specter of a Sorenson bankruptcy—to the job security of video interpreters will simply cause them to leave the industry, usually for good. Of course, the threat of a Sorenson bankruptcy—or any flash-cut in rates—would have dramatic effects far beyond the relationship between VRS providers and video interpreters. Technical support staff would need to be slashed or at least reduced—and as Sorenson learned in the aftermath of the 2010 rate cuts, it simply is not possible to do that without substantial increases in wait times.⁴³ And increased wait times, of course, force VRS further from the functional equivalence demanded by statute. Any threat of insolvency would also dramatically reduce or eliminate additional expenditures on research and development, including investment to improve interoperability or the functionality of hardware and software. Field staff—an area in which VRS providers employ hundreds of deaf individuals for outreach,

⁴³ See Letter from John Nakahata, Counsel, Sorenson Communications, Inc., to Marlene Dortch, Secretary, Federal Communications Commission, Attachment 2 at 7-8, CG Docket Nos. 10-51 and 03-123 (filed July 11, 2012) (“Sorenson July 11 Letter”).

installation, customer service, and training—would also need to be cut to improve cash flow, just as occurred in 2010.⁴⁴ Once again, the result would be VRS that is further from functional equivalence, with longer wait times for service when problems arise, fewer installations for currently unserved individuals, and so on.

It bears emphasis that the Commission’s 2010 rate cut had important effects on video interpreters beyond reductions in force—terminations and other cost reductions simply were not adequate to offset the entire revenue reduction. In Sorenson’s case, for example, terminations and cost reductions addressed about one-third of the impact of the rate cuts. Included in those cost reductions were steps to limit interpreter down time and increase its interpreter “efficiency rate” to almost ***** BEGIN HIGHLY CONFIDENTIAL ***** ***** END HIGHLY CONFIDENTIAL ***** percent—a rate which previously had been considered nearly impossible and, Sorenson believes, is substantially higher than its competitors’ efficiency rates. Because 1) interpreters must take breaks for physical reasons (at least 10 minutes per hour), 2) time spent setting calls up and terminating them is not compensable, and 3) interpreters spend time in training and on vacation (for which they are paid but are not interpreting any VRS calls), Sorenson’s current efficiency level is almost certainly the practical limit and, unlike 2010, Sorenson cannot respond to a further rate cut by making interpreters work even harder. Once again, additional demands on video interpreters would simply cause vast numbers of them to leave the VRS industry

Sorenson anticipates that the kinds of dramatic rate cuts contemplated by the PN—either in the first year or at the end of a longer transition—would have an impact on VRS video

⁴⁴ *See id.*

interpreters more dramatic by orders of magnitude than the 2010 rate cut. Even rumors of a Sorenson bankruptcy would be extremely destabilizing to the interpreter workforce, and a great many would leave. At a minimum, costs of recruitment, training, and retention would go up substantially. But the effects would likely be far worse. As a general matter, bankruptcy has more limited consequences in industries—like airlines—where most of the value is in hard assets: even if a lot of employees leave an airline, the airline still has a basic infrastructure of planes, gate lease agreements, and terminal arrangements with which it can continue to operate. On the other hand, in businesses where most of the value is in human capital—like law firms, for example—that value can disappear quickly once a critical mass of employees leaves. Accordingly, if a critical mass of interpreters were to leave Sorenson—as would be likely in the case of bankruptcy or reorganization—the business could very quickly get to the point where it simply could not operate. And, of course, problems of interpreter recruitment and retention would then beset other VRS providers assuming that any remained—a doubtful assumption given that any FCC action resulting in a Sorenson bankruptcy would likely bankrupt *all* providers, since Sorenson is the low-cost provider.

The bankruptcy issues unique to the VRS industry discussed above—including losing VRS interpreters and undermining functional equivalence—would also be accompanied by all the more usual problems of bankruptcy. Vendors—of VRS network elements, for example—would, at a minimum, demand pre-payment for future orders, which would raise the costs of dealing with them. Some would refuse to do business at all, making it difficult for VRS providers to continue to deliver services. Governance issues would arise for VRS providers, as it would be difficult or impossible to retain senior management. Labor costs would go up, and productivity

would go down. Credit would become essentially unavailable. And, of course, the costs of the professional services necessary for the bankruptcy itself would be very high.

Finally, the Commission should not indulge the fantasy that, if Sorenson were to be driven into bankruptcy, the adverse impact on consumers detailed above could be avoided because other VRS providers would take up the slack. There is simply no basis for such a belief. All of the other providers are substantially smaller than Sorenson; Purple, one of the largest providers other than Sorenson, claims to be one seventh of Sorenson's size, and ZVRS is likely not any larger. Neither of these entities—nor the other even smaller VRS providers—has the capacity to quickly serve a significant percentage of the VRS demand that Sorenson serves. To be able to do so they would have to build new call centers and attract interpreters, all within the financial constraints of rates calculated to provide only a one to two percent margin on the subset of costs labeled “allowable.” Under such constraints, they are unlikely to be able to obtain the financing to expand, and even if they did, expansion takes time. Moreover, it is important to bear in mind that ZVRS and Purple have been providing VRS for more than twelve years at this point, and yet they have not succeeded in growing their customer bases beyond levels that they contend remain sub-scale. As Sorenson and Professor Katz have explained, however, their size and costs reflect inefficient management and operations. In light of these providers' track record over the last twelve years, it would be folly for the Commission to embark on a course that would effectively require them to pick up Sorenson's VRS volumes. Although a solvent Sorenson may be able to cushion the consumer disruption that could otherwise flow from other providers' bankruptcies, the other providers will not be able to do so if the Commission drives Sorenson into insolvency.

Accordingly, the net result of driving Sorenson and others into reorganization could well be the collapse of the business, driven primarily by an exodus of interpreters, but amplified by the traditional problems of bankruptcy. The effects of such a collapse would be extremely far-reaching. In the short run, of course, bankrupt providers' customers would suffer greatly from the suspension of services. And that problem would be exacerbated by the fact that it would be difficult, if not impossible, to lure VRS interpreters victimized by bankruptcy back to the industry at all.

In the longer term, the effects would likely be permanent. For the foreseeable future, it would be extremely difficult for VRS providers to attract the capital necessary to scale their services up to meet VRS demand—investors will naturally be leery of investing in an industry in which the FCC has chosen to push even the lowest-cost provider into bankruptcy. VRS users might therefore encounter a VRS industry unable to meet demand for a considerable time to come. Of course, in an efficient market, new capital and new firms would enter the market to meet demand. Unfortunately, however, in a market characterized by regulators willing to force providers into bankruptcy and unwilling to permit providers to earn more than a two percent profit, new entry may well be limited or non-existent.

In short, to the extent that the PN's proposals are intended to result in bankruptcy for the industry's lowest-cost provider in an effort to reduce costs, the Commission should make no mistake that the effects on VRS consumers and video interpreters will be far-reaching and long-lasting. And such an approach would clearly amount to a complete surrender of the Commission's statutory obligation to achieve functional equivalence.

B. The Record Does not Support the Use of Tiers, and Using Tiers to Drive the Lowest Cost Provider into Bankruptcy While Protecting Higher Cost Providers is Arbitrary and Capricious.

Notwithstanding efforts by Sorenson’s competitors to muddy the waters, the record continues to demonstrate unequivocally that it would be irrational for the Commission to retain tiered rates—and doubly irrational to retain tiered rates as a means to drive the lowest-cost provider, Sorenson, into bankruptcy while protecting its higher-cost competitors. As the Commission itself noted in its FNPRM, a tiered rate structure achieves nothing beyond “reduc[ing] the efficiency of the Fund by providing ongoing support for numerous high-cost, subscale providers”⁴⁵—which in turn contravenes the ADA’s mandate that VRS be made available “in the most efficient manner.”⁴⁶ Nothing in the comments on the PN provides any basis for a different conclusion.

1. Claims of Substantial Economies of Scale are Unfounded.

In its comments and reply comments on the FNPRM, Sorenson demonstrated that the Commission’s view that tiers should be abandoned was entirely correct⁴⁷—that tiers are

⁴⁵ *Structure and Practices of the Video Relay Service Program, Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Further Notice of Proposed Rulemaking, FCC 11-184, 26 FCC Rcd. 17,367, 17,374 ¶ 8 n.30 (2011) (“2011 VRS Reform FNPRM”); *see also id.* at 17,398 ¶ 64 (“[T]he current tiered rates . . . provide seemingly indefinite support for subscale providers and introduce extra complexity into the management of the program.”); *id.* at 17,418 ¶ 141 (“[T]he tiered rate structure supports an unnecessarily inefficient market structure, and apparently provides insufficient incentive for VRS providers to achieve minimal efficient scale.”).

⁴⁶ 47 U.S.C. § 225(b)(1).

⁴⁷ *See* Comments of Sorenson Communications, Inc. at 25-27, CG Docket Nos. 10-51 and 03-123 (filed Mar. 9, 2012) (“Sorenson FNPRM Comments”); Reply Comments of Sorenson Communications, Inc. at 37-39, CG Docket Nos. 10-51 and 03-123 (filed Mar. 30, 2012) (“Sorenson FNPRM Reply Comments”).

“inherently wasteful because they reward inefficiency.”⁴⁸ Sorenson included in the record a declaration and reply declaration from Professor Michael Katz, former FCC Chief Economist, setting forth Professor Katz’s conclusion that the use of tiers “distorts competition and reduces consumer welfare.”⁴⁹ More recently, in addressing the PN’s question regarding tiers, Professor Katz again concluded that “the principal effect of declining rate tiers is to support inefficient competitors and distort competition,” and that there “is no sound public-interest basis for retaining them.”⁵⁰ In their comments on the PN, Sorenson’s competitors now seek to rehabilitate tiers, and to undermine Professor Katz’s analyses. As set forth below, however, their arguments provide no rational justification for the perpetuation of tiered VRS compensation.

The arguments of other providers are based on their claims that Sorenson benefits from substantial economies of scale. There is no merit to those claims: as Professor Katz reaffirms in his Reply Declaration submitted with these reply comments,⁵¹ “any economies of scale in the VRS industry are sufficiently small that multiple providers can operate efficiently.”⁵² Professor Katz concludes that “[a]n examination of economies of scale demonstrates that declining compensation tiers are not needed to promote quality competition” in the VRS industry.⁵³

⁴⁸ Sorenson FNPRM Comments at 25.

⁴⁹ *An Economic Analysis of VRS Policy Reform*, Declaration of Michael L. Katz, Sorenson FNPRM Comments at Attachment A ¶14 (“Katz FNPRM Declaration”).

⁵⁰ *Response to Additional Request for Comments on VRS Policy*, Declaration of Michael L. Katz, Sorenson PN Comments at Attachment A ¶66 (“Katz PN Declaration”).

⁵¹ See Michael L. Katz, *Reply Comments on VRS Policy*, (Nov. 29, 2012) (copy attached as Attachment A) (“Katz PN Reply Declaration”).

⁵² *Id.* ¶ 31.

⁵³ *Id.* ¶ 7.

Significantly, however, the other providers do not even attempt to explain why the Commission should pay them more than it pays Sorenson to provide a minute of service even if there *were* merit to their claims about scale economies. The TRS Fund (“the Fund”) today would save approximately \$24 million per year if all providers were paid at the rate Sorenson receives for its Tier 3 minutes—and it is plainly contrary to the statutory duty to provide service in the most efficient manner to continue to pay Purple or ZVRS far more than \$5.14 per minute when Sorenson is willing to provide service at that weighted average payment level.

Purple and ZVRS attempt to justify tiers by suggesting that the Commission has decided to prop up new providers by paying them at a higher rate and to subsidize smaller competitors. Neither Purple nor ZVRS is a new competitor, however. Both started providing VRS before Sorenson did. And Sorenson does not believe the Commission has stated, or reasonably could conclude, that it makes sense to subsidize Purple and ZVRS for being less efficient than Sorenson.⁵⁴ If the Commission maintains tiers, it must not only find evidence of substantial economies of scale, but also explain why it is choosing to subsidize other providers notwithstanding the resulting burden on contributors to the TRS Fund.

a. Sorenson’s Competitors Provide No Evidence Demonstrating Substantial Economies of Scale.

Purple argues that tiers should be maintained for a “transitional” period while “technical standards are under development and implementation.”⁵⁵ But while Purple persists in

⁵⁴ Because Sorenson agrees that it is important to maintain consumer choice, Sorenson has not proposed that Purple or ZVRS be subjected to a flash cut, and Sorenson instead proposes that their payment levels should be gradually reduced to Sorenson’s level over a period of years. Knowing that it increased its efficiency rate in response to the 2010 rate cut, Sorenson is confident that Purple and ZVRS can survive if their rates are gradually reduced to \$5.14 if those providers take steps similar to those Sorenson took in 2010.

⁵⁵ Purple PN Comments at 15.

maintaining that tiers may be justified on the basis of “efficiencies” for “providers operating with higher volume”⁵⁶—and it has now recruited an expert with an MBA and a background in engineering to submit an unsworn “Report” claiming that VRS is characterized by economies of scale⁵⁷—it fails to offer any evidence that the claimed economies of scale actually exist. ZVRS, for its part, just flatly invents absurdly low per-minute costs for Sorenson, which it uses to argue that ZVRS should be paid \$2.52 a minute *more* than Sorenson to provide the same service. (In fact, ZVRS’s proposal would result in a blended per-minute rate for ZVRS that is higher than the current tiered system provides.) In short, however, neither Purple nor ZVRS offers *any* actual evidence of economies of scale beyond the minimal efficiencies already identified in Professor Katz’s initial Declaration.

Purple’s “expert” begins by arguing that the “Commission’s previous orders have shown that VRS costs are volume sensitive.”⁵⁸ This portion of the Turner Report simply repeats Commission statements to the effect that VRS “providers with greater volumes tend to have the lowest unit costs.”⁵⁹ As an empirical matter, this is undeniably true—Sorenson is the VRS provider with the greatest volume, and it is also the lowest-cost provider of VRS by a substantial margin. The real question, though, is not *whether* Sorenson has lower per-minute costs than its competitors—it does—but *why* that is so. Sorenson has consistently demonstrated that its costs

⁵⁶ *Id.* at 14.

⁵⁷ See Purple PN Comments, Addendum A, Report of Steven E. Turner (“Turner Report”). Notably, the Commission has made clear that while it accepts “unsworn declarations under penalty of perjury in lieu of affidavits,” “informal submissions that are not certified under penalty of perjury do not quality under [its] rules.” *Charter Communications, Petitions for Determination of Effective Competition in Mount Vernon, Okawville, Salem, and Richmond, Illinois*, Memorandum Opinion and Order, DA 06-750, 21 FCC Rcd. 3400, 3404 ¶ 11 (2006).

⁵⁸ Turner Report at p. 6.

⁵⁹ *Id.* ¶ 12.

are lower than its competitors' almost entirely because it runs its operations more efficiently than its competitors run theirs—especially in the areas of hiring, training, retaining, and managing video interpreters, which are the most expensive aspects of providing VRS. And the sworn declarations that Professor Katz submitted during the comment cycle on the FNPRM support Sorenson's position. In particular, Professor Katz demonstrated that interpreter economies of scale are "exhausted at a low percentage of industry output,"⁶⁰ and that call center costs, outreach and marketing costs, and other fixed costs give rise to only "very small" economies of scale.⁶¹ Accordingly, Professor Katz cautioned that the "Commission should not confuse the effects of superior management and learning with economies of scale:"⁶²

[While] the most successful firms may well have the lowest costs...this does not imply that their costs are lower because the firms are large. Indeed, there is reason to believe that causality runs in the reverse direction: those firms that are most successful in attaining low costs can be expected to gain market share...[because they can] attract new customers by offering attractive services.⁶³

Mr. Turner's citations of past Commission findings that Sorenson has lower costs than its competitors thus add nothing to the evidence on the record—Sorenson does have lower costs, but the record reflects that economies of scale account for very little of the difference.

Mr. Turner also relies extensively on RLSA's data, which he believes show that "both Purple and CSDVRS have costs approximately 70% higher than Sorenson."⁶⁴ Significantly, though, while Mr. Turner repeatedly *states* that Sorenson's lower costs result from "economies

⁶⁰ Katz FNPRM Declaration ¶¶ 27-35.

⁶¹ *Id.* ¶¶ 41-49.

⁶² *Id.* at p. 33.

⁶³ *Id.* ¶ 46.

⁶⁴ Turner Report ¶ 17.

of scale,”⁶⁵ he provides no *evidence* whatsoever for his conclusion. Once again, then, Mr. Turner merely assumes causation. But the Commission cannot, of course, rely on an assumption that has been proved false through rigorous economic analysis on the record to justify maintaining tiers.

Finally, having failed to demonstrate that Sorenson’s lower costs are *caused* by higher call volumes, Mr. Turner resorts to attempting (at length) to poke holes in Professor Katz’s analysis.⁶⁶ These criticisms are unfounded, as set forth in the attached Katz PN Reply Declaration. First, Professor Katz rebuts Mr. Turner’s various “technical criticisms” of Professor Katz’s use—in his initial declaration on the FNPRM⁶⁷—of “an Erlang C model to demonstrate that economies of scale in the provision of interpreters are exhausted at a low percentage of industry output.”⁶⁸ At a general level, Professor Katz points out that “Mr. Turner does not attempt to demonstrate that any of his criticisms are empirically important or that the basic conclusion that economies of scale in the provision of interpreters are exhausted at a low percentage of industry output is incorrect.”⁶⁹ Professor Katz then goes on to present specific sensitivity analyses empirically demonstrating that his “conclusions are robust” to Mr. Turner’s critiques.⁷⁰ Second, Professor Katz shows that Mr. Turner’s own assumptions about economies of scale for indirect costs “cannot possibly be correct” because “it is inconsistent with the numbers that [Mr. Turner himself] cites.”⁷¹ And, finally, Professor Katz demonstrates that Mr.

⁶⁵ See *id.* ¶¶ 20-24

⁶⁶ See *id.* ¶¶ 25-61.

⁶⁷ See Katz FNPRM Declaration at Section II.B.1.

⁶⁸ Katz PN Reply Declaration ¶14.

⁶⁹ *Id.*

⁷⁰ *Id.* ¶¶ 17-21.

⁷¹ *Id.* ¶ 22.

Turner’s claim that Sorenson’s lower costs flow from economies of scale rather than superior management “are unfounded”—Mr. Turner simply “provides no evidence to support this assertion.”⁷²

ZVRS’s arguments in support of tiers are even more fanciful than those of Purple and its expert. Specifically, ZVRS claims that it is able to determine “[b]ased on the information provided by RLSA” that Sorenson’s average costs are “\$2.91 per minute compared to \$5.338 per minute for the other providers,” or \$2.833 and \$5.261 respectively excluding “ROI [and] adjusted for federal tax liability.”⁷³ ZVRS does not explain how it “estimate[d]” these figures, but of course Sorenson’s own data that it has provided to the Commission shows ZVRS’s figures not to be an “estimate” at all, but rather a wildly imaginative exercise.⁷⁴ Perhaps even more bizarrely, ZVRS uses its imaginary cost data to argue that it should be paid nearly as much *more* (\$2.52) per minute than what ZVRS imagines to be Sorenson’s entire cost of providing service (\$2.91). Now those would be some truly impressive economies of scale!—if there were any evidence at all to support them, which of course there is not.⁷⁵ As Professor Katz sets forth in his attached PN Reply Declaration, the fact is that—properly understood—ZVRS’s own “claims regarding the magnitude of economies of scale” actually “support the conclusion that a single-tiered system would promote competition and consumer welfare” in the VRS industry.⁷⁶

⁷² *Id.* ¶ 27.

⁷³ ZVRS PN Comments at 9-10.

⁷⁴ *See* Sorenson July 11 Letter, Attachment 2 at 10.

⁷⁵ *See* Sorenson PN Comments at 20-25 (explaining that ZVRS’s purported cost data is no more than rank—and thoroughly inaccurate—speculation).

⁷⁶ Katz PN Reply Declaration ¶ 9.

Finally, ZVRS's argument "[b]ased on the information provided by RLSA" regarding Sorenson's costs flatly ignores ZVRS's *own* extended rebuttal of RLSA's cost data.⁷⁷ As discussed above, ZVRS argues at length that RLSA's "2012 calculated weighted average costs" dramatically undercounted ZVRS's actual operating costs, including indirect costs such as "operations support, finance, research & development, engineering, legal, risk management, other corporate overhead and a modest executive team," as well as costs for "marketing & outreach."⁷⁸ It makes no sense for ZVRS to rely on RLSA's cost data to demonstrate that *Sorenson* has low costs when ZVRS itself argues that RLSA's accounting methodology "dramatically undercount[s]" ZVRS's costs.

2. The Commission Cannot Rationally Justify Using Tiers to Drive the Lowest-Cost Provider into Bankruptcy While Protecting Higher-Cost Providers.

The arguments that Sorenson's competitors advance in favor of tiers are, at root, thinly veiled invitations to the Commission to drive Sorenson into bankruptcy, while preserving its less efficient competitors. This is both inconsistent with the statute and flatly irrational.

The specifics of the tier proposals offered by Sorenson's competitors differ, but one feature is impressively constant: Each proposes that tiers be preserved and expanded to ensure that essentially all of *its* minutes are compensated at a much higher rate than Sorenson receives. Specifically, ZVRS proposes—after presenting all manner of substanceless charts and "analysis"—that the FCC should "expand the tiers" to more "adequately account" for what ZVRS calls "real economies of scale."⁷⁹ As if by magic, ZVRS's proposed tiers expand to fit

⁷⁷ ZVRS PN Comments at 9.

⁷⁸ *Id.* at 4-6.

⁷⁹ *Id.* at 34.

ZVRS's current size, with minutes up to 1 million compensated at \$6.30 for the first 100,000 and then at \$6.00, with a sharp dip to \$4.70 above 1 million, which of course ZVRS does not reach.

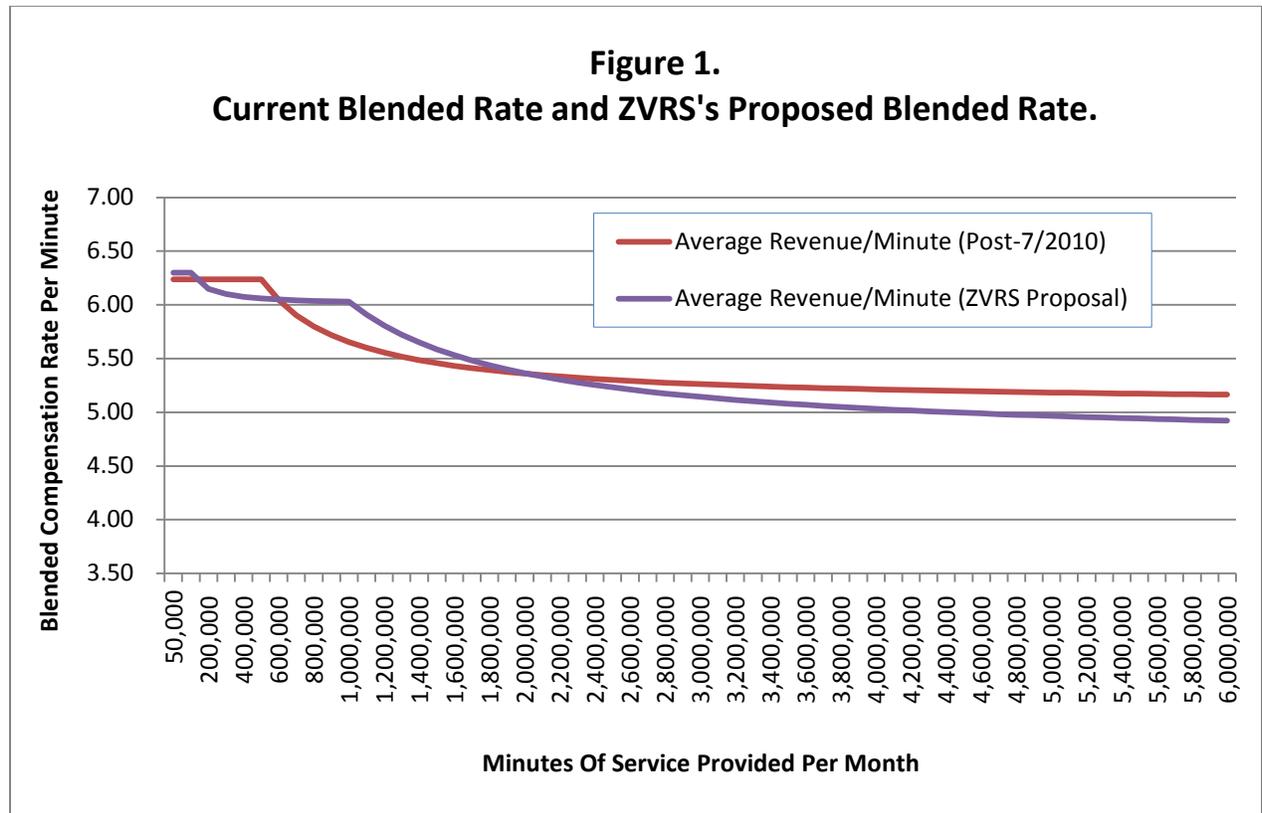
The net result—as indicated in Figure 1, below—is that ZVRS's proposal actually *increases* revenues (compared to the status quo) for providers between about 600,000 and 2 million

minutes—*i.e.*, *****BEGIN HIGHLY CONFIDENTIAL***** [Redacted]

*****END HIGHLY CONFIDENTIAL***** In other words, ZVRS does not propose anything like a reduction in current compensation for anyone other than Sorenson; to the contrary,

*****BEGIN HIGHLY CONFIDENTIAL***** [Redacted]

[Redacted] *****END HIGHLY CONFIDENTIAL*****



Purple's tier proposal is equally brazen and self-serving. Because Purple has grown still bigger than ZVRS, Purple suggests that Tier 2 should grow with it so as to apply to a provider's first *two million* minutes. Like ZVRS, Purple thus bravely volunteers Sorenson alone to bear RLSA's unsurvivable cut.⁸⁰ As Purple notes, its proposal most certainly would "allow smaller VRS providers the ability to innovate and compete,"⁸¹ but it would do so at a high cost. Notably, under Purple's proposal, a provider with 2 million minutes per month would receive a blended average of \$5.10 per minute—barely below what Sorenson receives today and down less than 5 percent from the \$5.36 per minute such a provider would receive under today's tiers—while a provider with more than 6 million minutes per month would receive a weighted average of below \$4.43 per minute—a reduction of at least 13.8 percent from Sorenson's current average compensation rate.⁸² Under Purple's proposal, the annual premium that the Commission would be paying to a "2 million minute per month" provider over what it would pay to a "6 million minute per month" provider would be over \$16 million.⁸³ That premium would expand to over \$27 million if the industry hypothetically were comprised of a 6 million minute provider, a 2

⁸⁰ See Purple PN Comments 16.

⁸¹ *Id.*

⁸² At 1 million minutes per month, a provider today would receive an average of \$5.65 per minute, and under Purple's proposed tiers would receive \$5.37 per minute—which is also a reduction of less than 5 percent.

⁸³ The calculation leading to this conclusion is straightforward. It is simply the difference between 1) the blended-rate compensation that the "2 million minute per month" provider would receive for two million minutes per month over the course of a year [$\$5.10/\text{minute} \times 2 \text{ million minutes/month} \times 12 \text{ months} = \122.4 million], and 2) the blended-rate compensation that the "6 million minute per month" provider would receive for two million minutes per month over the course of a year [$\$4.43/\text{minute} \times 2 \text{ million minutes/month} \times 12 \text{ months} = \106.32 million]. This results in a difference of \$16,080,000 per year.

million minute provider, and a 1 million minute provider. Purple comes nowhere close to justifying subsidizing inefficiency at these levels.⁸⁴

The tier regimes proposed by ZVRS and Purple thus appear precisely calculated to render Sorenson insolvent while preserving smaller, less efficient competitors. As discussed in Section II.A.2.b, *supra*, the Commission should be aware that a Sorenson bankruptcy would greatly harm both VRS consumers and video interpreters. Equally important, accepting competitors' invitation to destroy Sorenson while preserving less efficient providers is flatly inconsistent with Section 225. First, the harms to VRS consumers and video interpreters discussed above would certainly extend to elimination of any pretense of functionally equivalent VRS service. And second, even if Sorenson's competitors could somehow meet demand for VRS during or after a Sorenson bankruptcy (which is, in fact, an abject impossibility), paying competitors dramatically *more* for the same service that Sorenson had been providing would clearly contravene the ADA's mandate that VRS be made available "in the most efficient manner."⁸⁵

Finally, the approach urged by Sorenson's competitors would not pass muster under the Administrative Procedure Act. The Commission could not possibly offer the requisite reasonable explanation for a tiered system with the net result of replacing Sorenson with far *higher* cost providers. There is simply nothing on this record that could justify requiring TRS Fund contributors to pay *more* in the future for substantially worse VRS service than Sorenson is already offering.

⁸⁴ The annual premium paid to the "1 million minute per month" provider would be \$11.28 million $((\$5.65/\text{minute} - \$4.43/\text{minute}) \times 1 \text{ million minutes/month} \times 12 \text{ months} = \$11,280,000)$.

⁸⁵ 47 U.S.C. § 225(b)(1).

C. Transitioning to a Unified Rate Set at the Lower of 1) the Level that a Two-Winner Competitive Bid Would Produce; or 2) the Current \$5.14 Blended Rate that Sorenson Receives is the Only Economically Feasible and Rational Alternative on the Record that Preserves Functional Equivalence.

It is clear from the comments on the PN that neither RLSA's proposed rates nor the self-serving tiered rate proposals of Sorenson's competitors provide a viable path to functionally equivalent VRS service at an industry-wide blended per-minute rate below the status quo. Significantly, however, Sorenson has offered exactly that: a viable, sustainable way to reduce VRS costs in both the short and long runs.

Specifically, Sorenson has proposed that the Commission begin by eliminating tiers. Rate tiers are inherently wasteful because they reward inefficiency.⁸⁶ The current system thus subsidizes inefficiency by paying less efficient VRS providers more on average per minute than more efficient providers. But there is a simple fix—if all VRS minutes were compensated at the Tier III rate already applicable to approximately 80 percent of all VRS traffic, the TRS Fund would save more than \$24 million per year.⁸⁷ Sorenson therefore supports the elimination of tiers that the Commission proposed in the FNPRM. Sorenson, of course, would prefer the immediate elimination of tiered rates, which both burden ratepayers and put Sorenson at a competitive disadvantage. But Sorenson recognizes that, as a practical matter, a transition period would be necessary for other providers to improve their efficiency. Sorenson has therefore proposed a multi-year transition period for the elimination of tiers.⁸⁸

Unlike RLSA or other VRS providers, Sorenson has also set forth an economically rational means to establish rates going forward. As discussed in our opening comments on the

⁸⁶ See 2011 VRS Reform FNPRM, at 17,382-84 ¶¶ 24-26.

⁸⁷ See *id.* ¶ 24.

⁸⁸ See Sorenson PN Comments at 45.

PN, the Commission's goal should be to "replicate" the "efficiency incentives found in competitive markets."⁸⁹ The best way to do that would be to re-initialize rates at a level consistent with competition, and then to institute price caps to reduce that rate over time. As Professor Katz has explained, the most economically rational approach to re-initializing rates would be for the Commission to use a reverse auction. Professor Katz argued that if the Commission were to desire to maintain "N" competitors in the VRS market, the "market rate" should be set equal to the cost of the "N+1" lowest-cost potential service provider.⁹⁰ Assuming that the Commission would like at least two VRS providers, then rates would properly be initialized based on the costs (including all actual costs, not an arbitrary subset of them) of the third-lowest-cost provider.

And, again, the cost data on the record indicates that the costs of the third-lowest-cost provider are not likely to be substantially below \$5.14 per minute. At present scale, Sorenson is clearly the industry's lowest-cost provider, *****BEGIN HIGHLY CONFIDENTIAL***** 
 *****END HIGHLY CONFIDENTIAL*****.⁹¹ Purple and ZVRS claim that, if they provided as many minutes of service as Sorenson, they could provide service at \$4.27 and \$4.50 per minute, respectively.⁹² Even if one accepts as true their

⁸⁹ See, e.g., *Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and LinkUp*, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC 11-13, 26 FCC Rcd. 4554, 4572 ¶ 49 (2011).

⁹⁰ Katz FNRPM Declaration ¶70.

⁹¹ See Sorenson July 11 Letter, Attachment 2 at 10.

⁹² See Reply Comments of Purple Communications, Inc. at 9, CG Docket Nos. 10-51 and 03-123 (filed Mar. 30, 2012) ("Purple FNPRM Reply Comments"); Letter from Jeff Rosen, General Counsel, CSDVRS, LLC, to Marlene Dortch, Secretary, Federal Communications Commission, at Attachment 1 at 8, CG Docket Nos. 10-51 and 03-123 (filed July 10, 2012).

claims that a provider of Sorenson's size could provide service at \$4.27 or \$4.50 per minute—and, as discussed above, there is substantial reason to doubt their validity⁹³—and also assumes that they somehow reach the scale they claim necessary to achieve those low cost levels,

*****BEGIN HIGHLY CONFIDENTIAL*****

*****END**

HIGHLY CONFIDENTIAL***. Thus, \$5.14 per minute is likely to be near the very low end of the range of results that would be anticipated from a two-winner competitive bid.

Because the Commission seems committed to avoiding a rate increase at all costs, Sorenson believes that it would be reasonable to set rates at the lower of the anticipated results of a two-winner competitive bid or at \$5.14. Of course, after a period of time under a stable rate regime, further rate reductions should be possible as that would allow providers time to adjust and reduce costs further. As explained previously and further discussed below, Sorenson's debt costs are in line with those of many other communications companies.⁹⁴ Sorenson would be able to reduce its debt costs over time, but only if the Commission were to implement a price-cap regime and maintain it for a period of years without regularly threatening draconian rate cuts. (On the other hand, the cost of borrowing money will only increase—likely to prohibitive levels—if the Commission continually threatens to slash rates and periodically does so.) In short, implementation of a stable rate regime could lead to cost reductions that would permit reasonable rate reductions.

⁹³ See Section II.B, *supra*.

⁹⁴ See Sorenson July 11 Letter at Attachment 1.

D. If the Commission Adopts any Rate Level Substantially Below the Current Tier III Rate, It Must Provide an Appropriate Transition Period.

One point on which all VRS providers agree is that the Commission should not attempt to implement a flash-cut to rate levels substantially below those currently in effect. Again, Sorenson has argued that the Commission should focus first on eliminating wasteful and inefficient tiers from whatever rate structure it adopts. But even Sorenson has acknowledged that other providers cannot instantly match all of the efficiencies that Sorenson has incorporated into its VRS operations—thus, all providers agree that a transition period would be necessary to eliminate tiers. Specifically, Sorenson suggested a transition of five years after its proposed implementation phase of VRS reforms is complete.⁹⁵ Purple agreed that tiers should be eliminated, and argued for a four-year transition.⁹⁶ Other VRS providers opposed the elimination of tiers, but also urged that if the Commission does “determine[] to use a single tier, it should be implemented gradually over several years.”⁹⁷

The same factors that call for a transition period for smaller providers during the elimination of tiers also call for a transition period for any substantial reductions to Tier III rates. As a matter of both economics and common sense, efficiencies become more and more difficult to find as a provider’s per-minute costs to provide service go down. And Sorenson’s per-minute costs—which are *****BEGIN HIGHLY CONFIDENTIAL***** [REDACTED] *****END HIGHLY CONFIDENTIAL***** [REDACTED]—lead the industry by a wide margin. Sorenson understands that the Commission would like to see those

⁹⁵ See Sorenson FNPRM Comments at 32.

⁹⁶ See Comments of Purple Communications, Inc., at 3, 23-24, Exhibit 1, CG Docket Nos. 10-51 and 03-123 (filed Mar. 8, 2012) (“Purple FNPRM Comments”)

⁹⁷ See, e.g., Comments of Convo Communications, LLC at 33 n.86, CG Docket Nos. 10-51 and 03-123 (filed Mar. 9, 2012); see also Purple FNPRM Comments, at 3.

costs go lower still, but there is no magic that can make that happen overnight. As discussed above, there is simply no “fat” in Sorenson’s operations to cut; Sorenson has increased the efficiency of its operations far beyond those of its competitors, and further gains will necessarily be slow. As also noted above, some reduction of costs will be possible if Sorenson is able to reduce its debt over time to levels below those typical of communications companies. Other gains may be possible over time as technology continues to improve and Sorenson continues to eke out operational efficiencies.

There is, however, simply no way that Sorenson can quickly reduce its costs to provide service at the Tier III rate of \$4.51 proposed by RLSA as a first step in its three-year transition. Indeed, it would likely be impossible for Sorenson to provide VRS at that level as a *last* step in a three-year transition to unified rates. As noted above, Purple and ZVRS claim that, if they provided as many minutes of service as Sorenson, they could eventually provide service at that level of compensation or slightly below—but even crediting their claims, they hazard no guesses as to how far in the future “eventually” might be. Presumably, however, it would be a substantial number of years *after* the four years that Purple suggests for the elimination of tiers.

In sum, a one-year drop in Tier III compensation of the magnitude suggested by RLSA would be extremely damaging, likely placing the future of the VRS industry at grave risk. Even a three-year drop to \$4.51 is unrealistic—Sorenson estimates that a transition of at least twice that length would be necessary to reduce costs to the point where a \$4.51 Tier II rate would not threaten the viability of VRS.

III. ZVRS'S SINGLE-APPLICATION PROPOSAL IS DESIGNED SOLELY TO GRAB MARKET SHARE AT THE EXPENSE OF INNOVATION AND CONSUMER CHOICE, AND COMMENTERS HAVE OVERWHELMINGLY OPPOSED IT.

ZVRS's proposal to impose a unified soft endpoint on all VRS providers and users would destroy incentives to innovate, introduce vast complexity, and eviscerate consumer choice—results that would represent a dramatic step backward to the VRS industry. In its comments, however, ZVRS reveals the true basis for its proposal: to eliminate Sorenson's competitive advantage that results from offering consumers superior service and equipment that they overwhelmingly prefer over the alternatives.⁹⁸

Like its networking-operations proposal (discussed further below), ZVRS's single-application proposal is designed myopically to eliminate the innovative offerings that have allowed Sorenson to succeed. ZVRS seems not to notice (or to willfully ignore) the harm that its proposal would cause consumers, as evidenced by the thousands of comments that consumers have filed in strong opposition to ZVRS's plan. ZVRS's goal is to harm Sorenson's competitive interests at all costs, even if it means debasing the service that has transformed consumers' lives.

The independent Rehabilitation Engineering Research Center on Telecommunications Access ("RERC-TA"), however, concludes that a single application would be a disaster for consumers: "RERC-TA believes that forcing VRS providers to adopt a single common software platform would not resolve the interoperability problems, and do more harm than good to VRS users, due to reduced competition and incentives for research and development."⁹⁹ Moreover,

⁹⁸ See ZVRS PN Comments at 2 ("[T]he current structure must be changed in light of Sorenson's anti-competitive use of a Video Phone ('VP') which is not available off-the-shelf") ("[A] standard software VP application would...even out market share").

⁹⁹ Comments of the Rehabilitation Engineering Research Center on Telecommunications Access at 7, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) ("RERC-TA PN Comments").

though ZVRS has tried in vain to convince the FCC that the consumer groups are on its side, it is particularly noteworthy that the Consumer Groups completely reject the overwhelming majority of the proposals presented in the PN, as discussed in more detail below.

Because ZVRS can find no real-world support for its anticompetitive and destructive proposal, it resorts to a ridiculous and shameless fictional vignette decrying a parade of horrors that Sorenson's innovative equipment has inflicted on "John Q."¹⁰⁰ ZVRS's laughably self-serving *ad hominem* attack levels baseless accusations at Sorenson but bears no relation to reality. In the real world, the industry—as well as consumers (the real-world counterparts to ZVRS's mythical John Q.) who are horrified by the idea of losing the equipment of their choice—have mounted widespread and vocal opposition to ZVRS's proposal. In addition to clear opposition to the proposal from the Consumer Groups and the independent RERC-TA, over 22,000 comments have been filed by consumers and video interpreters in strong opposition to ZVRS's proposal—in direct contrast to the make-believe views of John Q.

Indeed, commenters have roundly rejected all aspects of ZVRS's proposal: they have vigorously opposed the elimination of consumer choice, rejected a move from proprietary to off-the-shelf equipment, and expressed widespread support for interoperability standards over the imposition of central-planning on the VRS industry. Based on this record, a reasoned decision-making process leads inexorably toward complete rejection of ZVRS's single-application proposal.

¹⁰⁰ ZVRS PN Comments at 23.

A. Commenters Recognize the Substantial Benefits of VRS-Endpoint Competition and Reject the Idea of a Single Application.

Consumers derive substantial benefits from VRS-endpoint innovation, which is driven by providers who compete to acquire and retain customers. As Sorenson discussed in its comments, the 2002 release of Sorenson’s VP-100[®] revolutionized the industry.¹⁰¹ And today, despite a wide variety of available off-the-shelf equipment, the vast majority of Sorenson’s consumers opt to use Sorenson’s videophone hardware equipment. Without the existence of competition, Sorenson’s revolutionary equipment would never have hit the market, and consumers would have been deprived of the devices they overwhelmingly prefer today. RERC-TA and the Consumer Groups agree, stating, “To date, competition in the VRS market has resulted in highly differentiated technology offerings among the VRS providers,”¹⁰² and, thus, “consumers are fortunate that the technical competition among VRS providers exists, which gives them a better chance at finding the provider that meets their needs.”¹⁰³

Consistent with these principles, commenters, ranging from the Consumer Groups to interpreters to VRS providers, have lined up to support consumers’ ability to choose their own VRS endpoint. For example, the Consumer Groups plainly state that “consumers should have the ability to choose from multiple, qualified VRS providers and their various products and applications.”¹⁰⁴ The National Alliance of Black Interpreters, Inc. (“NAOBI”) declares that “VRS consumers should have a right to choice—choice in VRS equipment and VRS service.”¹⁰⁵

¹⁰¹ Sorenson PN Comments at 50.

¹⁰² RERC-TA PN Comments at ii.

¹⁰³ *Id.* at 6.

¹⁰⁴ Consumer Groups PN Comments at 5.

¹⁰⁵ NAOBI PN Comments at 1.

ASL/Gracias advocates for “a wide range of communications devices, service options, and expertise that can only be met through different access technology and service providers”¹⁰⁶ Even Purple states, “Put simply, consumer choice requires provider differentiation through characteristics like interpreter quality, products and software.”¹⁰⁷

Given the benefits consumers derive from choice, eliminating endpoint competition would “mark the end of the consumer-friendly, feature-rich VRS experience that has literally transformed the lives of deaf and hard-of-hearing users in recent years.”¹⁰⁸ Indeed, RERC-TA acknowledges that “[r]estricting the choice of consumers to a single custom VRS platform is likely to slow down the pace of innovation.”¹⁰⁹ Moreover, Purple states that a standard application would cause providers to “lose incentive to compete on quality and innovation thereby stifling the competitive marketplace that best facilitates consumer choice.”¹¹⁰ Purple further asserts that a “standard application ultimately sacrifices consumer choice and free-market competition in favor of a one-size-fits-all government-issued baseline service.”¹¹¹

As a result of this strong preference for innovative options driven by consumer choice, commenters have overwhelmingly opposed ZVRS’s regressive single-application proposal. For example, NAOBI firmly states that “the current proposal will have a devastating impact on the Deaf Community,” and that the proposal “would be taking a huge step backwards,” before

¹⁰⁶ ASL/Gracias PN Comments at 7.

¹⁰⁷ Purple PN Comments at 2.

¹⁰⁸ Sorenson PN Comments at 47.

¹⁰⁹ RERC-TA PN Comments at ii.

¹¹⁰ Purple PN Comments at 5.

¹¹¹ *Id.*

pleading with the Commission to “[k]eep VRS innovative and progressive.”¹¹² Convo warns that “[t]he unilateral mandate by the Commission of a single VRS technology, as proposed by CSDVRS, effectively will freeze VRS technology and prevent individual VRS providers from developing new and better VRS products.”¹¹³ The independent RERC-TA points out that “it is not clear what incentive there would be for the developer of a single, standardized VRS app to pursue the research and development of a large number of new features, nor is it clear whether a single developer would possess the resources to do so.”¹¹⁴ As a result, “[f]orcing the VRS providers to use a common app would eliminate much of this competition and carry the risk of stagnation with respect to features that consumers need.”¹¹⁵

As Sorenson noted in its comments, eliminating consumer choice in favor of a plain-vanilla, government-mandated application would be the equivalent of migrating the entire hearing population back to rotary phones designed and licensed by a single manufacturer.¹¹⁶ RERC-TA sounds a similar alarm, stating that ZVRS’s proposal “would be akin to forcing everyone in the hearing population [to] go back to the AT&T monopoly for all their calling needs, rather than the plethora of landline, VoIP, and mobile calling options that exist today.”¹¹⁷

Moreover, as Sorenson also noted in its comments, ZVRS’s single-application proposal would, much like RLSA’s rate proposal, detach VRS from the moorings of functional

¹¹² NAOBI PN Comments at 1-2.

¹¹³ Convo PN Comments at 15-16.

¹¹⁴ RERC-TA PN Comments at 4-5.

¹¹⁵ *Id.* at 6.

¹¹⁶ Sorenson PN Comments at 47.

¹¹⁷ RERC-TA PN Comments at 7.

equivalence.¹¹⁸ As one commenter noted, “[h]earing callers have access to a plethora of devices, equipment, and technology to place calls.”¹¹⁹ The functional-equivalence principle requires that the deaf and hard-of-hearing community likewise enjoy such a “plethora” of technological options, and competition ensures progress toward that goal. The Consumer Groups recognize, however, that “rather than moving VRS toward functional equivalency, mandating a single application is likely a step backwards.”¹²⁰ Likewise, NAOBI explains that ZVRS’s proposal “would create an environment in which deaf people would not be able achieve functional equivalent communication,”¹²¹ and RERC-TA states that “mandating a single application would be a bad idea and move us further away from the goal of functional equivalence.”¹²² Other commenters have brought forth similar criticism.¹²³

Accordingly, the record is replete with exhortations on behalf of VRS-endpoint competition and innovation, as well as forceful, well-reasoned opposition to ZVRS’s anticompetitive and regressive single-application proposal that would represent a complete

¹¹⁸ Sorenson PN Comments at 48-49.

¹¹⁹ ASL/Gracias PN Comments at 7. *See also* Consumer Groups PN Comments at 5 (“Because hearing consumers are not restricted to one choice of communications service provider, the Commission should not adopt rules that effectively limit VRS users to one option.”).

¹²⁰ Consumer Groups PN Comments at 5.

¹²¹ NAOBI PN Comments at 1.

¹²² RERC-TA PN Comments at 12.

¹²³ *See* ASL/Gracias PN Comments at 7 (“Strict service access standardization...will not provide Deaf and HoH individuals with communications options designed to meet their individual needs, much less promote functional equivalency”); *See also* Purple PN Comments at 3 (“Now is not the time for the Commission to abandon the progress it has made towards an industry model that promotes competition, unless it is prepared to abandon its commitment to consumer choice and functional equivalence, a cornerstone of the ADA...Complete or significant disaggregation amounts to reform that will impair competition, restrict consumer choice, and threaten functional equivalence.”).

abdication of the functional-equivalence mandate. Should the Commission nevertheless choose to adopt ZVRS's proposal, it would face a tall order, based on the current record, in explaining how such a conclusion resulted from reasoned decision making.

B. Commenters Confirm That an Off-Shelf-Equipment Mandate Would Not Advance Interoperability and Would Only Deprive Consumers of Specialized Features Upon Which They Have Come to Depend.

As Sorenson discussed in its comments, there simply is no basis for a mandate that forces consumers to use garden-variety, multi-use, off-the-shelf equipment instead of the specially-designed, feature-rich equipment they overwhelmingly prefer today. ZVRS's proposal finds support from a single industry participant, the Communication Access Ability Group ("CAAG")—which stands to benefit markedly from a "leveling down" approach to VRS provision.¹²⁴

On the other hand, the voices of numerous other commenters drown out CAAG's support for an off-the-shelf mandate—a requirement that would obliterate consumer choice and ignore the critical need for equipment designed specifically for deaf and hard-of-hearing individuals. As Sorenson has explained, mass-market devices are designed for the hearing world and prioritize demands accordingly.¹²⁵ By contrast, equipment specially designed for deaf and hard-of-hearing

¹²⁴ See Comments of Hancock, Jahn, Lee & Puckett, LLC d/b/a Communications Access Ability Group ("CAAG") at 2, CG Docket Nos. 10-51 and 03-123 (filed Nov. 14, 2012) ("CAAG PN Comments") ("Acceptance of the principle that legacy equipment should be phased out because those devices are incompatible with interoperability is an essential first step.... Commitment to the development of access and delivery software applications to operate in conjunction with 'off the shelf' devices likewise is essential. Support for a common platform with a single operator, eliminating the need for each provider to develop and maintain its own platform, has definite advantages and may be the single most promising proposal to drive down the cost of providing VRS.").

¹²⁵ Sorenson PN Comments at 58.

consumers includes features such as high frame rates, visual ringing, integrated 911 address provisioning, “offline” access to 911, amplified audio, and a number of other features.¹²⁶

Multiple commenters also recognize the benefits consumers derive from specially-designed equipment. As the Consumer Groups assert, deaf and hard-of-hearing consumers currently enjoy access to equipment that, unlike multi-use off-the-shelf equipment, “includes unique properties such as flashing lights and high-quality video technology that is focused on capturing ‘flying hands.’”¹²⁷ And as RERC-TA further explains, “[t]he trade-offs required with respect to video quality and frame rate are very different for the mainstream and sign language users; the mainstream tends to emphasize resolution, whereas sign language users need to emphasize frame rate.”¹²⁸ An off-the-shelf mandate would force VRS users onto “mainstream” equipment that simply does not prioritize their unique needs in the way that existing proprietary equipment does. This degradation in quality is why Sorenson’s users overwhelmingly choose Sorenson’s equipment over any available off-the-shelf equipment.

Moreover, as CAAG itself recognizes, an off-the-shelf mandate would require equipment acquisition from mass-electronics producers, potentially requiring “that consumers absorb the cost.”¹²⁹ But the Consumer Groups point out that deaf consumers “may have difficulty purchasing off-the-shelf equipment themselves.”¹³⁰ Indeed, as a whole, the deaf community tends to have lower average incomes than the general population—and “off-the-shelf” video conferencing equipment is orders of magnitude more expensive than a basic voice telephone. It

¹²⁶ *Id.* at 58-59.

¹²⁷ Consumer Groups PN Comments at 12.

¹²⁸ RERC-TA PN Comments at 3-4.

¹²⁹ *See* CAAG PN Comments at 2.

¹³⁰ Consumer Groups PN Comments at 13.

would be a mockery to the concept of functional equivalence to require deaf, hard-of-hearing, and speech-disabled persons to pay out-of-pocket for expensive high-tech, multi-use equipment—that doesn’t even adequately meet their needs—simply to engage in basic telecommunications. And, especially if RLSA’s rate proposals are adopted, there is likely nowhere else to turn other than to deaf users to cover equipment costs: providers would simply be unable to foot the bill given their razor thin (or nonexistent) margins.

This fundamental reality notwithstanding, ZVRS still pedals an off-the-shelf mandate. ZVRS’s advocacy here is especially disingenuous, as it claims the support of “consumer groups.”¹³¹ However, the Consumer Groups here expressly state that “VRS providers should not be prohibited from distributing equipment (proprietary and off-the-shelf).”¹³² In addition, RERC-TA highlights the “need for customized VRS equipment and software to provide an optimal communication experience for deaf and hard-of-hearing users, and to meet the needs of people with additional disabilities, such as the deaf-blind and people with motor disabilities.”¹³³ With both consumers and engineers supporting distribution of proprietary equipment, the only explanation for ZVRS’s decidedly consumer-unfriendly position is, once again, ZVRS’s own economic interest: to eliminate the consumer-friendly features and innovations that have caused hundreds of thousands of consumers to choose Sorenson as their default provider.

Though ZVRS and CAAG cite “interoperability” to support their positions, a single-application world would not actually resolve all interoperability problems.¹³⁴ As discussed

¹³¹ ZVRS PN Comments at 25.

¹³² Consumer Groups PN Comments at 13.

¹³³ RERC-TA PN Comments at ii.

¹³⁴ *See* ZVRS PN Comments at 31; *see also* CAAG PN Comments at 3.

below, and as Sorenson and other commenters make clear, interoperability standards will be needed—even with a single VRS application running on off-the-shelf equipment—to accommodate differences in providers’ backend systems. And since standards are needed in any case, there is no defensible reason to destroy consumer choice in a misguided effort to achieve interoperability.

1. A Mandated Single-Application, Off-the-Shelf-Equipment Environment Will Not Resolve Interoperability.

Contrary to the assertions of ZVRS and CAAG, interoperability issues are not simply a product of the multiple VRS-endpoint choices available to consumers. Rather, as Sorenson has explained, and as the Consumer Groups recognize, “current interoperability problems are the result of a combination of issues with applications/equipment and VRS provider gateways/proxies Moreover, there is no evidence to suggest or support that a single application would address interoperability issues that arise from gateway/proxy problems.”¹³⁵ Likewise, RERC-TA states that “it is a fallacy to assume that the interoperability problems in the VRS industry would be solved via introducing a common application.”¹³⁶ Indeed, RERC-TA explains that it has conducted a number of interoperability tests and found that “interoperability problems occurred even though all these test cases involved clients that are based on a common app ... It is not just the hardware and software that have to interoperate, but also the network, the proxies, and the gateways.”¹³⁷

¹³⁵ Consumer Groups PN Comments at 4-5.

¹³⁶ RERC-TA PN Comments at 6.

¹³⁷ *Id.* RERC-TA’s testing even demonstrated that two endpoints offered by ZVRS cannot seamlessly interoperate with one another. *See* Letter from Christian Vogler, Ph.D., Director, Technology Access Program, Gallaudet University, to Marlene H. Dortch, Secretary, Federal

2. Industry-Wide Standards, not Central Planning, Will Promote Interoperability, and the Development Process is Underway.

Accordingly, implementing standards to ensure interoperability represents a far more effective approach to interoperability than depriving deaf consumers of the feature-rich, specially-designed equipment upon which they have come to depend. A variety of commenters from all corners of the VRS industry agree. For example, Purple states that “clear and stringent technical standards are a far simpler means of establishing the interoperability and portability that is essential to consumer choice than a standard application.”¹³⁸ ASL/Gracias asserts that the Commission should “allow individuals the freedom to determine whether to accept nationally-distributed equipment or purchase equipment of their choosing, so long as the equipment remains compatible with Commission standards.”¹³⁹ Convo likewise states that “[t]he adoption of industry-consensus interoperability reference standards will enable VRS industry-wide interoperability without jeopardizing the ability of VRS technologies to evolve.”¹⁴⁰ And RERC-TA proposes “setting strict minimum standards for the interoperability of multiple VRS and off-the-shelf platforms.”¹⁴¹

In an effort to gin up support for its proposal, ZVRS argues that RERC-TA has documented that Sorenson’s ntouch VP is not fully interoperable.¹⁴² But RERC-TA doesn’t call for the elimination of choice, even though that’s what ZVRS would like the Commission to

Communications Commission, Spreadsheet at 2, CG Docket Nos. 10-51 and 03-123 (filed Aug. 9, 2012) (“TAP August 9 Letter”).

¹³⁸ Purple PN Comments at 6.

¹³⁹ ASL/Gracias PN Comments at 5-6 n.7.

¹⁴⁰ Convo PN Comments at 15.

¹⁴¹ RERC-TA PN Comments at 7.

¹⁴² See ZVRS PN Comments at 25.

believe. As reflected in the language above, RERC-TA advocates widespread choice and interoperability standards. Indeed, ZVRS's argument highlights that interoperability standards are sorely needed—as Sorenson and RERC-TA argue unequivocally. The bottom line is that interoperability is a two-way street: both providers and their endpoints must meet a particular standard for a point-to-point call to be possible. If the ntouch VP doesn't interoperate with a ZVRS endpoint, that doesn't somehow lead to the conclusion that Sorenson has blocked interoperability (as ZVRS suggests). Rather, it indicates that both providers need to take steps to identify and resolve the problem—which standards will allow.

ZVRS's citations to RERC-TA's filings is especially galling, as those same filings demonstrate that ZVRS's Z4 application is not even interoperable with some of ZVRS's *own equipment*.¹⁴³ Yet, ZVRS attempts to distract from its own interoperability failings by taking every opportunity to impugn the interoperability of Sorenson's equipment.

Interestingly, however, ZVRS itself “supports the creation of a common set of interoperability standards.”¹⁴⁴ If ZVRS agrees that there should be standards to ensure interoperability, then why eliminate consumer choice under the guise of interoperability as well? The answer is clear: because ZVRS wants to eliminate Sorenson's world-leading technology that consumers overwhelmingly prefer.

Moreover, as Sorenson noted in its comments, standards are far from an abstract idea. To the contrary, a working group—which includes representatives from the leading VRS providers and the FCC's Chief Technology Officer, among others—has been established under the SIP

¹⁴³ See TAP August 9 Letter, at Spreadsheet.

¹⁴⁴ ZVRS PN Comments at 28.

Forum to work toward identifying and adopting VRS interoperability standards.¹⁴⁵ On November 15, 2012, after parties filed comments on the PN, the SIP Forum Board approved the VRS Task Group Charter, which means the working group is now up and running.¹⁴⁶ The Commission should allow the Task Group to complete its work to establish interoperability standards—not adopt anticompetitive central-planning proposals that threaten to unwind years of progress toward achieving telecommunications functional equivalence for deaf and hard-of-hearing consumers.

3. A Reference Platform May Be Effective in Making Interoperability a Reality, but It Should Be Chosen Carefully and Should Not Impede Innovation.

Both RERC-TA and the Consumer Groups have proposed the use of a “reference platform” to facilitate interoperability testing.¹⁴⁷ Essentially, the reference platform would consist of a single endpoint that all parties establish as a benchmark for interoperability testing. If a provider’s device can make and receive a point-to-point call with the benchmark endpoint, it passes the interoperability test.¹⁴⁸

Sorenson supports the idea of a reference platform, as it would help ensure practical implementation of the standards that the industry is in the early stages of developing. But Sorenson’s support is subject to three critical caveats. First, care should be taken to choose the best possible platform. If, for example, flaws exist in the way that a particular protocol is implemented in the reference platform, then the flaws will be perpetuated throughout all devices

¹⁴⁵ Sorenson PN Comments at 54-55.

¹⁴⁶ Video Relay Service (VRS) Task Group Charter, *available at* <http://www.sipforum.org/content/view/404/291/> (last visited Nov. 29, 2012).

¹⁴⁷ Consumer Groups PN Comments at 6; RERC-TA PN Comments at ii, 8.

¹⁴⁸ Consumer Groups PN Comments at 10; RERC-TA PN Comments at 8.

that use the reference platform as a basis for interoperability. Accordingly, the choice of reference platform should be chosen by industry consensus through the SIP Forum VRS Task Group currently in operation.

Second, the reference platform should merely set a baseline for interoperability and should in no way impede future innovation. In other words, providers should not be prevented from adding new features to their devices simply because those features weren't included on the reference platform. Otherwise, innovation will be frozen, and the reference platform will create a *de facto* standardized device, to the detriment of consumers.

Finally, the Commission must recognize that interoperability should not affect the way a provider's own devices communicate within its own ecosystem—such as on a point-to-point call between two customers of the same provider, or when a customer's endpoint communicates with the provider's back-office systems. So long as providers can interoperate with one another, end users will be able to achieve interoperability despite using different devices. But standardizing internal network architecture is in effect no different than simply creating an industry-wide, standardized device. Accordingly, the reference platform should be used to test for interoperability between providers' endpoints, but should have no impact on the ways that a provider chooses to structure its own internal network.

4. Although Portability of Speed-Dial Lists and Address Books Can Benefit Consumers, Requiring Full Portability of All Enhanced Features Will Kill Innovation.

Both Purple and the Consumer Groups urge the Commission to develop standards for both interoperability and portability.¹⁴⁹ In this context, however, “portability” does not and cannot mean full portability of all enhanced features. Otherwise, free-riding concerns would

¹⁴⁹ Purple PN Comments at 6; Consumer Groups PN Comments at 4.

destroy providers' incentive to innovate, resulting in a "race to the bottom" that would produce a uniform, featureless endpoint and directly contravene the Consumer Groups' and Purple's core interest in preserving competition and choice in endpoints. Indeed, Purple clarifies that, in its comments, "portability" refers to address books: "Purple believes that one of the most significant barriers to consumer choice and movement among providers is the lack of address book portability across the industry. The Commission could quickly and easily establish a technical standard requiring address book portability."¹⁵⁰ Likewise, RERC-TA states that "porting VRS address books could be handled in a functionally equivalent manner via VRS providers supporting a mainstream cloud-based service, and allowing consumers to export their address books."¹⁵¹

ZVRS, on the other hand, calls for full portability of features available on any equipment distributed by providers: "ZVRS believes that any interoperability standard must allow VRS Access Providers to provide fully functional CPE where *all features* must stay intact when selecting an alternate VRS Interpreting Provider or when making a dial-around call."¹⁵² Once again, the juxtaposition of ZVRS's position against that of RERC-TA and the Consumer Groups exposes ZVRS's quest to eliminate competition via Commission rulemaking. Instead of devoting resources to the development of innovative features, ZVRS prefers to leave the hard work to Sorenson and benefit from the finished product. If ZVRS gets its way, however, providers will have no incentive to innovate at all because a healthy portion of their research and development dollars would be subsidizing their competitors.

¹⁵⁰ Purple PN Comments at 6.

¹⁵¹ RERC-TA PN Comments at 18.

¹⁵² ZVRS PN Comments at 30 (emphasis added).

Accordingly, to the extent “portability” refers to consumers’ ability to transfer address-book and speed-dialing data, Sorenson supports the development of such standards. Sorenson vigorously opposes, however, any regressive, innovation-killing policy that requires innovative providers to transfer all the fruits of their labor to competitors.

5. Third-Party Interoperability Testing Can Add Value to the Process, As Long as the Initiative Is Adopted by Industry Consensus, Not Imposed by Regulatory Fiat.

A variety of parties, including the Consumer Groups, RERC-TA, Convo, and Purple urge the engagement of a third-party to conduct interoperability testing.¹⁵³ Sorenson agrees with the concept of interoperability testing and already works with other providers on an *ad hoc* basis to troubleshoot interoperability problems. A third-party testing initiative, however, must be developed by consensus through a working group, such as the SIP Forum VRS Task Group that is currently operating.

Indeed, Sorenson vigorously opposes any suggestion that the FCC itself adopt interoperability standards of any kind. As Sorenson noted in its comments and reply to the FNPRM, standards continually evolve to incorporate new technology, and any Commission-imposed requirements will freeze VRS interoperability standards in place and become a straightjacket that will stunt innovation.¹⁵⁴

¹⁵³ Consumer Groups PN Comments at 11; RERC-TA PN Comments at 10; Convo PN Comments at 17; Purple PN Comments at 7.

¹⁵⁴ See Sorenson FNPRM Comments at 65; *see also* Sorenson FNPRM Reply Comments at 30-31.

C. ZVRS and Its Allies Fail to Address the Enormous Cost and Customer-Service Nightmare That ZVRS's Proposal Would Cause.

ZVRS and its supporters ignore a number of other fatal flaws that plague the single-application proposal. First, supporters fail to recognize the enormous and unending costs of keeping the application up-to-date and operational on the constantly evolving menu of off-the-shelf equipment. As Sorenson has discussed, operating systems are constantly evolving, and VRS services will be unavailable to users of new devices and operating systems until the government or its chosen application developer decides to update the VRS application.¹⁵⁵ Essentially, the Commission will be stuck between a rock and a hard place: allow technology to outpace VRS services, or pay enormous costs to keep up with a rapidly evolving industry. RERC-TA recognizes the problem, stating that this proposal “would have the unfortunate effect of further delaying the availability of VRS on new hardware, which is already a problem today on mobile Android devices, due to the over-reliance on a single vendor to provide the platform.”¹⁵⁶

Second, apart from the cost of keeping the application up-to-date, ZVRS's off-the-shelf proposal would generate enormous costs in the form of stipends necessary to equip VRS users with devices on which the application can run. While CAAG, a supporter of ZVRS's proposal, acknowledges that equipping users may require “a periodic stipend,”¹⁵⁷ it does not come to grips with the magnitude of that stipend, nor does it identify a funding source. As Professor Katz explained in his Declaration attached to Sorenson's comments on the PN, ZVRS's off-the-shelf

¹⁵⁵ Sorenson PN Comments at 65.

¹⁵⁶ RERC-TA PN Comments at 7.

¹⁵⁷ CAAG PN Comments at 3.

stipend proposal could cost the TRS Fund \$40 million—and even then users would have received support for a single device, with no allowance for upgrades over time.¹⁵⁸

Third, this proposal would take an enormous toll on the TRS Fund beyond the need to keep up with evolving technologies, as the Commission would need to engage an outside party to develop the VRS application.¹⁵⁹ In order to develop the application, that developer would need to understand each VRS provider's backend operations so that the application could work with all of them. In turn, providers would have to retrofit their back-office systems to work with the new application. The sum total would be an enormously expensive effort that would result in a uniform endpoint utterly devoid of features. ZVRS and its proponents flatly ignore this explosive-cost, negligible-return reality.

Finally, supporters fail to acknowledge the customer-service disaster that would result from this proposal.¹⁶⁰ It is hard envision what incentive a developer would have to support an application once it has been paid. And per-minute compensation for customer support eliminates any developer incentive to fix bugs or develop bug-free products. Moreover, end-user issues will likely lead to finger-pointing and inefficiency as providers and the developer dispute responsibility for problems. Purple agrees, stating that “the technical support and troubleshooting issues relating to a standard application and off-the-shelf equipment ... lend further support to Purple's position opposing this approach.”¹⁶¹ ZVRS and its supporters, however, are silent on this issue.

¹⁵⁸ See Katz PN Declaration ¶ 23.

¹⁵⁹ Sorenson PN Comments at 63-64.

¹⁶⁰ See *id.* at 66.

¹⁶¹ Purple PN Comments at 8.

* * *

The Commission should see ZVRS's single-application proposal for what it is: an attempt to gain market share, not by offering superior products or services, but by eliminating the innovation that has benefited deaf and hard-of-hearing consumers and pushed VRS closer to functional equivalence. In a direct refutation of ZVRS's proposal, the record reflects broad support for the development of interoperability standards and a strong rebuke of policies that kill innovation and force a community with specialized needs onto generalized equipment. Accordingly, the only possible reasoned decision is to reject ZVRS's single-application proposal in its entirety.

IV. COMMENTERS AGREE THAT DISAGGREGATING VRS NETWORK FUNCTIONS WOULD DISSERVE CONSUMERS AND POSE HEIGHTENED RISKS TO PRIVACY—AT A HIGHER COST TO THE FUND AND WITHOUT COMBATTING FRAUD.

A. ZVRS's Disaggregation Proposal Would Generate Widespread Disruption Without Any Corresponding Benefits.

Commenters reacted with great concern and confusion in response to ZVRS's proposal to disaggregate certain network functions and entrust them to a centralized and vastly expanded iTRS Database Administrator. Purple, for example, explains that the proposed disaggregation would "threaten the competition that is integral to consumer choice and thus functional equivalence, while unwinding many improvements that the Commission has made to the industry since 2010."¹⁶² Sorenson made the same points in its own comments, describing in detail how the proposal would centralize call handling in a manner that would eliminate competition and innovation, fail to address fraud (or even attempt to address fraud), expand the burden on the TRS Fund, complicate the industry-wide compensation structure, and spawn an

¹⁶² Purple PN Comments at 9.

unwieldy and unresponsive customer service experience for consumers.¹⁶³ Moreover, Sorenson observed that it would lead to these harms without producing any corresponding benefit. As Professor Katz noted in his declaration attached to Sorenson’s comments, there is “no evidence of a public-interest problem to which [ZVRS’s] proposal would be a solution.”¹⁶⁴

Like Professor Katz, RERC-TA raises questions about the proposal’s general purpose and design. RERC-TA questions in particular the policy underpinnings of the proposal as crafted, observing that it “conflate[s] several conceptually unrelated functions and entities” and “lump[s] them all together” in a “problematic” way.¹⁶⁵ Rather than even consider the proposal in its current form, RERC-TA recommends that it be reconsidered at a conceptual level: “Before any extensions to the database are considered, each proposed function should have a clearly defined purpose, and it should be defined clearly who will [be] in control of what information, and in what situations [it] will be used.”¹⁶⁶

Without more information about which functions would be entrusted to the revamped administrator and, more importantly, *why and how* they would be entrusted to the administrator, RERC-TA finds it difficult to comment beyond pointing out that the proposal’s proponents appear not to have thought it all the way through. As an example, RERC-TA notes that “[i]t is not clear why address book information would belong with an enhanced iTRS Database” as proposed in the PN; from a functional equivalence perspective, RERC-TA observes, “there is

¹⁶³ Sorenson PN Comments at 81-100.

¹⁶⁴ Katz PN Declaration ¶ 3.

¹⁶⁵ RERC-TA PN Comments at 14-15.

¹⁶⁶ *Id.* at 15.

nothing similar available in the mainstream.”¹⁶⁷ RERC-TA likewise questions the proposal to centralize the video mail function, disputing the proposal’s assumption that “the logical place for implementing interoperable voice mail is an enhanced iTRS Database.”¹⁶⁸

ZVRS’s disaggregation proposal is a solution in search of a problem. Or, as Sorenson explained in its comments, it should be understood for what it really is: a calculated effort by one of Sorenson’s competitors to eliminate an element of the competitive landscape in which Sorenson has succeeded by providing service that customers value highly. In the place of the existing consumer-friendly competitive dynamic, ZVRS proposes a centrally planned system in which network operations and even certain features are supported by a government-appointed network operator.

As the Commission is aware, Sorenson voiced strong support earlier this year for the creation of another centralized database as a component of a transition to a “per user” compensation model.¹⁶⁹ As Sorenson explained in that context, a so-called “VRS User Database” would be necessary in order to achieve the reductions to waste, fraud and abuse that a per-user regime could deliver. Among other things, a VRS User Database implemented in that context could protect against duplicate subscriptions (and duplicate payments), facilitate the allocation of funds for a TRS broadband pilot, and ease the administration of a “new-to-category” financial incentive program. Even in that context where there was a clear potential to eliminate the minute-pumping incentives inherent in the per-minute regime, however, Sorenson was guarded about its support, explaining that the database’s creation must be accompanied by

¹⁶⁷ *Id.* at 18.

¹⁶⁸ *Id.* at 19.

¹⁶⁹ *See* Sorenson FNPRM Comments at 58-61; Sorenson FRPRM Reply Comments at 55-57.

robust measures to ensure protections for the customary proprietary information it would contain.

The proposals contained in the PN for an enhanced and greatly expanded role for the iTRS Database Administrator—which go far beyond the mere operation of a database—are markedly different from the conceptual VRS User Database that the Commission raised in the FNPRM in the context of a transition to a per-user compensation system. Not only would the expanded iTRS “database” house much more (and more varied) data on every VRS user in the country, it would also apparently require much more widespread access by providers with competing interests, and it would even provide communications platform functions as well as some vertical features. And, perhaps most importantly, the expanded iTRS “database” operations identified in the PN would not have the same impact on waste, fraud, and abuse than would a per-user regime backed up by a VRS User Database. Therefore, notwithstanding its support for another central database in another context, Sorenson cannot support the wholesale transition of network operations and functionalities to a vastly expanded iTRS Database/communications provider administrator.

Sorenson nonetheless can support reforms that can address the potential for waste, fraud, and abuse without exposing users to unnecessary privacy risks. Accordingly, Sorenson agrees with other commenters who call for an expansion of the iTRS Database Administrator’s role to include storage of basic registration information as well as confirmation from the end user’s provider that it has verified the user’s eligibility. Such a database could also contain a flag if the user to whom the number is assigned would be ineligible for VRS compensation—such as a hearing user with a VRS-capable endpoint and an associated ten-digit number—thus potentially permitting point-to-point calls between ASL-capable hearing persons and deaf persons. With this

limited expansion, providers could access the database for each call to validate that the end user is registered and verified—and the verification status would be explicit, rather than implied simply from presence of the user’s number in the database for an extended period of time.

The iTRS Database should not store usage information (including contact lists) under any scenario, and it should secure the information it does contain against uses other than call processing. For example, it must secure name and address information so that it could not be used by competing VRS providers with access to the database as a source of marketing leads. Moreover, the iTRS Database Administrator should not itself conduct registrations or verifications, as it lacks the staff to conduct them nationwide and interposing a third party into the sign-up process is likely to create a significant impediment to enrolling legitimate users.

Unlike more expansive proposals, entrusting this role to the iTRS Database Administrator would comport with the capabilities of a Database Administrator, would have comparatively few privacy-related consequences for users, and it could also have a direct and positive impact on call efficiency and the reduction of waste, fraud, and abuse.

B. The Commission Should Not Entrust the Database Administrator with Gathering Registration and Verification Information.

While some commenters have argued that the iTRS Database Administrator’s role could be expanded to include *gathering* and storing customer registration and verification information, none of the commenters justifies the expansion or addresses the various harms that it would impose on consumers. Convo, for example, argues that “[t]he iTRS Database should be expanded to collect additional information about the public’s use of VRS, and the iTRS

Administrator should be tasked with registering and verifying all VRS users.”¹⁷⁰ According to Convo, “[t]hese actions will provide the Commission with unprecedented data about the nature of the community of VRS users and the manner in which they use VRS.”¹⁷¹ While Convo neglects to explain why centralizing an “unprecedented” volume of personal data and usage information related to every VRS user in the country would be beneficial, it does suggest three potential benefits that might flow from the proposal. Addressing each in turn helps clarify why the Commission should reject ZVRS’s broad disaggregation proposal (beyond simply storing users’ registration and verification information, which would permit providers to confirm on each call that the user is registered and verified).

Convo argues first that centralizing the registration and verification functions would result in cost savings for the TRS Fund by eliminating video mail messages left for inactive ten-digit telephone numbers.¹⁷² While Sorenson shares Convo’s interest in preserving scarce TRS Fund resources, there is no logical connection between 1) centralizing the collection and storage of registration and verification data; and 2) eliminating video mail messages left for inactive numbers. The problem with “stranded” video mail messages simply does not result from the fact that providers themselves currently gather and store their own customers’ registration and

¹⁷⁰ Convo PN Comments at 18. CAAG alone argues that the Database Administrator should also be responsible for routing calls internally among a provider’s call centers, subject to “provider-specified internal call routing rules to be communicated to the operator of the enhanced iTRS Database.” See CAAG PN Comments at 4-5. As Sorenson explained in its comments, this tangent of the disaggregation proposal would wreak havoc on VRS providers’ operations: “Call center routing depends centrally on critical company decision-making that simply cannot be outsourced, including decisions related to staffing availability, costs, interpreter abilities, and other core operational factors.” Sorenson PN Comments at 94. Under no circumstances, therefore, should the iTRS Database Administrator hold responsibility for routing calls within a provider’s network of call centers.

¹⁷¹ Convo PN Comments at 18.

¹⁷² See *id.* at 18 n.49.

verification information. Rather, it is a consequence of the fact that there are no rules or guidance on what it means to be an inactive customer—or, relatedly, on whether providers may seek compensation for video mail messages left for them. Some providers (including Sorenson) have proactively adopted clear-cut approaches to inactive users and video mail messages left for them, but the Commission should issue rules or formal guidance to the industry as a whole. Even if the Commission were to centralize these functions, it would not solve the “stranded video mail” problem without generating guidance for the administrator on when messages are compensable. Since the lack of guidance is the problem (not the lack of centralization), the Commission should simply release direction on inactive users and video mails, and then turn to providers for implementation.

Second, Convo argues that centralizing these functions would “ensure that all users meet the same verification standards and thereby reduce any consumer confusion caused by the disparate registration methods currently utilized by VRS providers.”¹⁷³ This rationale reinforces the point made by Professor Katz that creating a centralized network operations provider is a solution in search of a problem.¹⁷⁴ There is simply no evidence on the record (or anywhere else, so far as Sorenson knows) that consumers are confused because providers use different registration forms. Moreover, if there is any consumer confusion related to registration and verification, it is a consequence of the relatively vague requirements that the Commission has implemented (by order, not in the rules). Centralizing the registration and verification function would not clear up that ambiguity, however. Rather, if the Commission believes that consumers are confused because providers’ forms are not identical (and, again, Sorenson is not aware of any

¹⁷³ *Id.* at 19.

¹⁷⁴ Katz PN Declaration ¶¶ 45-47.

widespread confusion on that score), then the proper reaction would be to clarify the requirements—not to centralize the collection and storage of registration and verification data.

Finally, Convo argues that “cost efficiencies can be gained by assigning registration and verification responsibilities to a single entity.”¹⁷⁵ Convo contends that providers are currently devoting redundant resources to gathering registration and verification information, but “if the iTRS Administrator verifies and registers all users, the overall costs of user verification and registration paid by the TRS Fund should be substantially lower.”¹⁷⁶ This argument grossly misses the mark. The primary problem with Convo’s theory is that it assumes that VRS providers could or would completely shut down their networks of field staffers if the iTRS Database Administrator handled all registration and verification. But any VRS provider committed to expanding its customer base would still need staff in the field to locate new customers, as well as to provide field maintenance and repair when service problems cannot be addressed through a videophone call. Convo’s proposal would actually generate redundancy (not cure it) by preventing those field staffers from registering users in real time, instead leaving it to another team managed by the iTRS Database Administrator to make a duplicative contact with the customer. Convo’s approach also assumes the iTRS Database Administrator actually has the resources and capabilities to undertake the registration and verification processes efficiently and in a timely manner—but it manifestly does not. Many VRS providers employ deaf outreach and training staff to locate users, visit their residences or workplaces, obtain their registration information, verify the information’s accuracy, and answer any questions they may have about the process. The Database Administrator simply is not equipped to take on this role, as it does

¹⁷⁵ Convo PN Comments at 19.

¹⁷⁶ *Id.* at 20.

not have the nationwide network of deaf employees necessary to gather this information reliably. The process of building up that staff would be extremely costly, if it were even possible for the Database Administrator to do it. And, in the period of time before the administrator had this kind of staff in place, many otherwise eligible consumers would find themselves without access to VRS because they were unable to complete the registration and verification process once it was entrusted to the Database Administrator.

Moreover, depending on the compensation structure adopted for the expanded centralized administrator (a glaring source of difficulty, as Sorenson explains below), the cost savings that Convo envisions might simply result from improper incentives—with a predictably harmful impact for consumers. If the iTRS Database Administrator is not compensated on a per-user basis every time it gathers another consumer’s registration and verification data (or in a comparable manner), then the administrator will have no financial incentive to make sure that it registers and verifies as many consumers as it can or that it does so with any kind of urgency. Costs would surely go down, but only because otherwise eligible users will have no access to VRS, in violation of the ADA mandate to ensure the service is “available ... to the extent possible ...”¹⁷⁷

C. Disaggregating Network Functions from the Provision of VRS Would Jeopardize Privacy Rights, Fail to Address Fraud, Undermine Service Quality, Further Complicate the Compensation Structure for the VRS Industry, and Lead to Disastrous Customer Service Experiences.

Moreover, the parties that have voiced support for an expanded role (beyond storage of registration and verification information to enable providers to confirm that each call involves a registered and verified user) appear not to even consider the severe harms that the proposal

¹⁷⁷ 47 U.S.C. § 225(b)(1).

would inflict on consumers and on the TRS Fund. As Sorenson explained in its comments, centralizing these functions would jeopardize consumers' privacy interests, fail to even attempt to combat fraud, degrade service quality, require a complete reassessment of the industry-wide compensation structure, and—perhaps most troubling—undermine customer support.

Privacy. Sorenson explained in its comments that the proposal to centralize every VRS user's identification and usage data in a single massive database to which every provider (and perhaps other entities) have some degree of access would create an unprecedented risk to consumers' privacy interests.¹⁷⁸ Directing the iTRS Database Administrator to take on the full range of responsibilities identified in the PN would for the first time in history pool in a single location an extraordinarily detailed body of information covering every VRS user in the country. The risks associated with such an undertaking are clear, as the iTRS Database Administrator would have to afford providers (and others, perhaps including auditors, the TRS Fund administrator and FCC staff) with some measure of access to the information. But housing all of this information centrally and making it available to some degree to a variety of entities—many of which have directly competing interests—would create dangerous temptations for improper access.

Many other commenters voiced similar concerns about consumers' privacy interests in the event of an expanded role for the iTRS Database Administrator. The Consumer Groups, for instance, noted the importance of ensuring that “the personal information of the users remains private and confidential,”¹⁷⁹ RERC-TA likewise pointed to the importance of “ensur[ing] that

¹⁷⁸ Sorenson PN Comments at 85-89.

¹⁷⁹ Consumer Groups PN Comments at 18.

consumers' privacy is protected,"¹⁸⁰ and ZVRS "adamantly opposes the creation of any system which would undermine the privacy of personal information."¹⁸¹

Assessing the privacy-related impacts through the lens of functional equivalence helps underscore the risks. It is not difficult to imagine the reaction that consumer groups and privacy rights organizations would have if the Commission proposed storing every hearing telecom user's critical data (including name, address, phone number, usage data, and user profiles) in a single massive repository to which every provider had some level of access. Accepting these privacy risks would be unthinkable in the hearing world, and it should be unthinkable for deaf consumers too.

Fraud. In contrast to the VRS User Database that the Commission considered in the context of a transition to a per-user regime, centralizing the various functions identified in the PN would not even attempt to curtail fraud. As Sorenson explained in its comments, some may be concerned that the current guest-user rules create opportunities for fraud—but centralization of the functions identified in the PN would do nothing to address any misconduct related to those rules.¹⁸²

Far from combatting fraud, Video Interpreters United ("VIU") argued in its comments that centralizing these functions would actually *increase* the potential for fraud. VIU observed that there would be more entities involved at one level or another in the provision of VRS—including the possibility of more fly-by-night interpreting providers tantalized by the prospect of setting up shop (and earning per minute compensation, with the minute-pumping incentives that

¹⁸⁰ RERC-TA PN Comments at 17.

¹⁸¹ ZVRS PN Comments at 32.

¹⁸² Sorenson PN Comments at 83.

come with it) without needing any of the infrastructure or routing capability that VRS providers must currently support.¹⁸³ In short, entrusting the full range of functions identified in the PN to a centralized network provider would do nothing to combat fraud; if anything, it might generate more.

Quality of Service. A centralized database provider may have little incentive (depending on the as-yet undetermined compensation structure) to find and register users, improve transmission capabilities, offer high-quality video mail or address book features, or perform at a reasonably high level with respect to any of the other functions identified in the PN.¹⁸⁴ This, of course, is the central flaw with any “solution” that eliminates competition, as ZVRS’s disaggregation proposal would do. RERC-TA suggests that consumers do not worry about (or have any connection with) many of the functions that would be entrusted to the enhanced database provider,¹⁸⁵ but that position neglects to account for the impact that these functions have on overall quality of service. Even core call routing—including maintaining adequate transmission capacity and successfully completing calls—has a direct bearing on quality of service. Providers currently compete on this metric (and many others, of course), which gives them competitive incentives to deliver superlative service. That incentive—and the service quality that comes with it—would be lost with respect to any functions transferred from competing providers to the expanded database operator under ZVRS’s disaggregation proposal.

Compensation Structure. Supporters of expanding the role of the iTRS Database Administrator also ignore the impact the proposal would have on the industry-wide

¹⁸³ Comments of Video Interpreters United at 1, CG Docket Nos. 03-123 and 10-51 (filed Nov. 14, 2012) (“VIU PN Comments”).

¹⁸⁴ See Sorenson PN Comments at 89-91.

¹⁸⁵ RERC-TA PN Comments at 16-17.

compensation structure.¹⁸⁶ At a threshold level, the Commission would need to address the challenge of developing a compensation system that might incentivize the Administrator to, for example, seek out users (for registration and verification operations) or offer cutting edge features (for many of the other functions the proposal identifies). The Database Administrator's current contract structure would fail to generate appropriate incentives of this kind. The current structure would also lead to incentive problems in connection with the expanded customer support role the Database Administrator would need to play (when problems inevitably arise with the functions it provides) and, even more critically, in connection with the provision of point-to-point services (which, depending on the scope of its expanded role, may be supported in substantial part by the administrator).

Apart from attempting to develop a new compensation system that creates appropriate incentives for the Database Administrator, it is also important to recognize that expanding the Database Administrator's role (and implementing a corresponding reduction in the role played by VRS providers) would require a complete reassessment of the compensation structure for the entire VRS industry. The existing system, of course, addresses all of these issues through competitive forces. Providers have market-based incentives to supply cutting edge and efficient network operations and to provide highly responsive customer support—all of which is supported through a single compensation system.

Customer Service. Finally, and perhaps most critically, expanding the Database Administrator's role as suggested in ZVRS's proposal would undermine customer service in

¹⁸⁶ See Sorenson PN Comments at 91.

sweeping and entirely predictable ways.¹⁸⁷ Without any explanation or analysis, CAAG suggests in its comments that entrusting the Database Administrator with more functions would somehow *improve* customer service and the availability of features and enhancements.¹⁸⁸ But, as both Purple and Sorenson explain in their filings, the actual impact would be precisely the opposite. Purple noted that the proposed disaggregation would create debilitating “logistical difficulties” for “providers, consumers, and the Commission.”¹⁸⁹ Disaggregation, Purple explained, would:

reduce quality and innovation because no single provider will be accountable for a particular customer’s experience. This approach likely will create a technical support nightmare for consumers—who should a consumer file a complaint against if they have difficulties connecting to VRS? ...In addition to consumer confusion, additional vendors undoubtedly will create additional bureaucracy and, possibly, additional costs for a lower quality service.¹⁹⁰

Sorenson sounded precisely the same warning in its own comments. Disaggregating VRS—including through the development of a single standardized endpoint and the transfer of functionalities to the iTRS Database Administrator—would result in a notably disjointed experience for consumers. With as many as three separate providers supporting an end-to-end service formerly offered by just one, consumers will frequently have no idea whom to contact to resolve the problems and technical difficulties that will surely arise. In turn, as Sorenson explained in its comments, it will often be difficult for any of the three providers in the chain to zero in on the source of the difficulty and resolve it with anything like the level of responsiveness that exists today.

¹⁸⁷ *See id.* at 90-91.

¹⁸⁸ CAAG PN Comments at 5.

¹⁸⁹ Purple PN Comments at 10.

¹⁹⁰ *Id.*

In a disaggregated world, any one provider may have no meaningful insight into the problem at the root of any particular complaint, meaning that—from the customer’s perspective—there will be an aggravating amount of run-around time as the multiple providers burn money and consumer patience attempting to determine the source of the problem and a way to resolve it. Not only would this be far less efficient and responsive than the current system (in which vertically integrated providers have strong competitive incentives to rapidly identify and resolve any technical problem), it would generate greater burdens on the TRS Fund. This is because the three entities providing a service formerly offered by just one would have to staff duplicative customer support operations that would spend substantial time simply trying to determine which entity in the chain bears responsibility for resolving a problem.

V. OTHER ISSUES RAISED IN COMMENTS: THE COMMISSION SHOULD REJECT CALLS FOR NATIONAL CERTIFICATION, DISREGARD THE PROPOSAL TO LIMIT THE VRS INDUSTRY TO A SINGLE PROVIDER, CONSIDER SKILLS-BASED ROUTING SUBJECT TO CRITICAL SAFEGUARDS, AND PRESERVE CONFIDENTIALITY FOR SENSITIVE FINANCIAL INFORMATION.

A. While Superlative Interpreting Is Fundamental for VRS, Imposing a National Certification Requirement Would Degrade Service Quality and Raise Costs.

As it did in its comments in response to the Commission’s VRS Reform FNPRM,¹⁹¹ RID argues in its comments in response to the PN that the Commission should adopt a national NAD-RID certification requirement.¹⁹² As Sorenson explained in its FNPRM reply comments, it shares RID’s commitment to ensuring that VRS providers employ only highly qualified interpreters, but it adamantly opposes a uniform national certification requirement under which

¹⁹¹ Comments of Registry of Interpreters for the Deaf, Inc. at 3, CG Docket No. 10-51 and 03-123 (filed Mar. 9, 2012).

¹⁹² RID PN Comments at 2.

interpreters must be approved by a designated national certifying agency or agencies.¹⁹³ While RID's PN comments largely cover the same ground as its FNPRM comments, RID has neglected to address any of the critical concerns that Sorenson raised in its FNPRM reply. Sorenson summarizes those concerns again here.

First, NAD-RID interpreter certification currently requires applicants to hold a bachelor's degree before they can sit for the performance portion of the certification exam.¹⁹⁴ But not all successful video interpreters have college degrees. As a result, many highly skilled interpreters who have been in the VRS workforce for years would find themselves unqualified overnight without any short-term prospects of resuming work in their chosen profession.¹⁹⁵ While some of these interpreters might decide to attend college in order to secure a certification that has little bearing on their abilities, many others would reasonably conclude that the cost—in terms of time or money or both—is too exorbitant to bear.

Second, national certification would completely bypass and ignore the state-based certifications that many highly skilled interpreters have obtained. Many states have adopted their own state-level requirements because they do not feel that a national certification process can meet the needs of their local deaf and hard-of-hearing communities. Interpreters working in many states—including, for example, Missouri, Kansas, Utah, Illinois, Texas and Michigan—must obtain certification at the state level, and many of them therefore have had no need to even

¹⁹³ Sorenson FNPRM Reply Comments at 60-64.

¹⁹⁴ See RID, Educational Requirements, *available at* <http://rid.org/education/testing/index.cfm/AID/195> (last visited Nov. 29, 2012).

¹⁹⁵ In addition, NAD-RID does not certify bilingual and trilingual interpreters at all. As a result, imposing a NAD-RID certification requirement would completely undermine providers' ability to offer ASL-to-Spanish VRS, and it would effectively terminate VRS employment options for the interpreters who currently handle those calls.

consider separate national certification. RID's proposal would arbitrarily render these interpreters unqualified overnight, even though many of them are highly skilled and trained, have been working as interpreters for years, and have already been certified at the state level.

Third, imposing a new narrow certification requirement would immediately shrink the pool of available interpreters at a time when there are already concerns about inadequate supply.¹⁹⁶ Simply put, the number of interpreters needed to provide nationwide VRS far outstrips the ability of NAD-RID to certify them—and while NAD-RID certification has value in demonstrating some level of proficiency and skill, the test itself does nothing to actually train interpreters for the unique job of handling VRS calls. Moreover, it is important to recognize that there are several kinds of NAD-RID certification—including, for example, “Certified Deaf Interpreter” certification. Depending on what kind of certification RID thinks would be required under its proposal, the pool of qualified interpreters could shrink even further, which would exacerbate the problem. As basic supply and demand principles dictate, shrinking the supply of qualified interpreters in this arbitrary manner would drive up interpreting costs across the board—for VRS providers and for any community interpreting that requires certified interpreters. This would of course impose ever greater strains on the TRS fund as the cost of providing service would rise dramatically.

Moreover, imposing a NAD-RID certification requirement would create a huge financial windfall for RID and effectively give it a monopoly and gatekeeping control over the most critical element of VRS. It would also create an enormous backlog: many skilled video interpreters who are currently working at the highest levels even without NAD-RID certification

¹⁹⁶ See VIU PN Comments at 2.

would immediately apply for certification in hopes of preserving their livelihoods, and that flood of applications would likely overwhelm NAD-RID's ability to process them. Additionally, as history has shown, RID may also suspend all certification testing for weeks, months, or even longer without prior notice, which would effectively prevent any VRS provider from hiring new interpreters. Moreover, even when RID testing has not been suspended, wait times for results have at times in the past exceeded nine months. Relying on just one certifying body for the entire industry would put a single breaking point in the system. When that point breaks, the entire hiring system will grind to a halt. There must be multiple points of entry for people to gain access to the field on VRS interpreting; relying on a single gatekeeper would cripple VRS providers' ability to hire enough interpreters to meet both customer expectations and speed of answer requirements.

Finally, while NAD-RID certification often signals that an interpreter is skilled, that is not always the case. Sorenson has hired many NAD-RID certified interpreters, and many of them work successfully as highly skilled VRS interpreters after completing Sorenson's rigorous training program. But NAD-RID certification is not a guarantee of quality, as many interpreters who come to Sorenson with NAD-RID certification in hand have not lived up to Sorenson's exacting standards. This track record confirms Sorenson's view that VRS providers themselves are best situated to identify, hire, and train the interpreters they need.

For all of these reasons, Sorenson reiterates its view that a national certification requirement is not necessary or advisable. Sorenson reiterates its commitment to highly-skilled interpreting as a key component in moving toward functional equivalence, and it is not opposed to refinements to the existing interpreter qualification standards reflected in the FCC's rules. Adopting a national certification requirement, however, would lead to cascading complexities

that would ultimately disserve consumers, disenfranchise qualified interpreters, and increase the burden on the TRS Fund. Among other complexities, imposing a national certification requirement would oblige the Commission to resolve the conflict with state laws that require state-level (not national) certification; determine whether RID must assume responsibility for consumer complaints about VRS interpreter quality; and take steps to ensure an adequate supply of qualified interpreters to meet VRS demand, particularly in light of the long time period—and four-year college degree—needed to obtain NAD-RID certification.

B. To Preserve Consumer Choice and Competitive Incentives, the Commission Should Reject Calls to Limit the VRS Industry to a Single Provider—Just as It Should Decline to Limit Competition by Mandating a Single Standardized VRS Endpoint or a Dramatically Expanded Role for a Centralized Administrator.

Sorenson strongly opposes the suggestion offered by VIU that having just one VRS provider would best promote consumer choice and quality communications access.¹⁹⁷ In support of its position, VIU contends that limiting the market to a single provider would ensure that the best of the video interpreter talent pool and the latest technological innovations are available to all VRS users.¹⁹⁸ VIU argues further that reducing the industry to a single provider would eliminate competition based on interpreter quality—an outcome that it favors because, it contends, a marketplace in which providers compete based on interpreter quality “toy[s] with the linguistic human rights of Deaf people.”¹⁹⁹

Sorenson disagrees with VIU’s position completely. As Sorenson argued throughout its comments, competition at every level of VRS directly advances the interests of consumers by

¹⁹⁷ See VIU PN Comments at 2.

¹⁹⁸ See *id.*

¹⁹⁹ *Id.* at 3.

fostering innovation, efficiency, and improvements.²⁰⁰ Encouraging providers to compete on several different levels (*e.g.*, interpreter quality, endpoint design, customer service, network operations, enhanced features, etc.) gives them clear incentives to differentiate themselves from their competitors by striving for excellence—all of which directly benefits consumers. Thus, while Sorenson believes that it is the only entity with the capability to serve as a single provider responsible for the entire industry, it is strongly opposed to any changes that lead to that outcome. The impact on consumers, competition, and choice would be unacceptably severe. As noted in its comments, Sorenson supports competition at every level in the provision of VRS, and it steadfastly opposes any proposal to reduce competition—including VIU’s proposal for a single VRS provider, ZVRS’s proposal for a single standardized VRS endpoint application, or the creation of a centralized provider of a wide array of network operations and enhanced features.

C. Sorenson Supports Calls for Skills-Based Routing, Subject to Important Safeguards.

In keeping with its commitment to ensuring that consumers continue to have access to world-leading VRS provided by competing providers, Sorenson agrees that providers should be permitted to offer users access to interpreters with particular skills in certain subject matters, like medicine, law, or technology. As ASL/Gracias explained in its comments, this kind of skills-based routing can beneficially match VRS users with interpreters who are particularly qualified to handle particular kinds of conversations.²⁰¹

²⁰⁰ See Sorenson PN Comments at 67; see also Convo PN Comments at 10 (“Smaller providers are the primary source of the innovation in the VRS market that improves the VRS consumer experience.”).

²⁰¹ ASL/Gracias PN Comments at 18.

Sorenson's support for skills-based routing is not unequivocal, however. As Sorenson explained in its reply comments in response to the FNRPM, the Commission should only consider skill-based routing if it also develops parameters and safeguards to ensure it does not do more harm than good.²⁰² First, and perhaps most critically, skills-based routing should be an optional feature that providers *may* offer at their election, since it may not be possible for every provider to locate and hire interpreters who can handle every type of unique interpreting skill that may be needed. Moreover, providers almost certainly would not be able to have those capabilities available 24 hours per day. Accordingly, to account for the difficulty in identifying, recruiting, and training interpreters with particular skills, the Commission should implement skills-based routing as a voluntary adjunct to VRS. If the Commission were to make skills-based routing mandatory despite the challenges in recruiting interpreters with particular skills, it must clearly identify which skills a caller may request (*e.g.*, law, medicine, personal finance, etc.) so that providers can strive to recruit the interpreters they will need (or provide additional training to the interpreters they already employ) to fulfill the mandate.

In addition, the Commission should recognize that interpreters with a particular unique skill may not always be available. Accordingly, any skills-based routing rules must be flexible enough to enable providers to support the service when staffing capabilities allow it, but not to penalize them when staffing constraints make it impossible. For the same reason, the fact that an interpreter skilled in a particular area may not always be available—or may be occupied on another call when a second user requests the same skill—means that the speed of answer

²⁰² Sorenson FNPRM Reply Comments at 49-51.

requirements should not apply in any case where a user requests to be routed to an interpreter with a particular skill.

Moreover, having skill in a particular area does not mean that an interpreter will be able to interpret any call on that topic (no matter the depth of the conversation or the tangents it takes) without any errors. Accordingly, the Commission must also recognize that the VRS provider and interpreter cannot guarantee error-free specialized interpretation, and they cannot be liable for any inadvertent mistakes that may occur.²⁰³ Finally, the Commission will have to make adjustments to the compensation regime before implementing any skills-based routing program—particularly if it maintains a cost-of-service approach to ratemaking—as skills-based routing would require additional training for interpreters, higher wages for those interpreters with specialized skills, and technological changes to providers’ internal call routing operations—all of which would generate new costs.

D. The Commission Should Preserve Protections for Sensitive Financial Information and Other Confidential Information.

Convo argues in its comments that “all cost information submitted by VRS providers to the Commission and the Administrator should be made public and the compensation payments to VRS providers from the TRS Fund also should be publicly disclosed.”²⁰⁴ In keeping with Commission precedent—including the protective orders issued in this very proceeding—Sorenson strongly opposes Convo’s proposal, as it would discourage providers from filing the

²⁰³ On a related subject, the Commission would have to consider who would determine whether an interpreter has the requisite skill needed for a particular call—the interpreter himself or herself, the VRS provider, a certifying body? If some form of specialized certification is required, the Commission must recognize the complexities that would entail, including higher costs, certification bottlenecks, and limited supply (as explained in more detail in Section V.A, above).

²⁰⁴ Convo PN Comments at 14.

sensitive information that is critical to enabling the Commission to reform the VRS industry successfully and sustainably.

The Commission itself has frequently recognized the need to protect sensitive financial information in order to preserve competition. Most recently, in its Fifth Report and Order on Reconsideration of the *USF/ICC Transformation Order*, the Commission found that “in some instances there could be a potential for competitors to use the submitted financial data ... in an anticompetitive manner.”²⁰⁵ For that reason, the Commission allowed privately-held carriers (*i.e.*, those that do not have to file comparable information publicly for other reasons) to “file the financial data...subject to a Protective Order.”²⁰⁶

The Commission explained further that these protections were necessary only for carriers serving single study areas because, unlike carriers that can aggregate data from several study areas, single-study-area carriers’ filings can be more easily dissected to determine revenues and profits associated with particular services offered in particular markets.²⁰⁷ For purposes of assessing confidential treatment of data, the provision of VRS is comparable to serving a single study area, since all VRS providers serve customers under a single nationwide program subject to a single nationwide rate regime. As with a carrier that serves just one study area, it would be relatively easy to determine any VRS provider’s revenue and profit data associated with the provision of VRS if its sensitive financial information were made public. This, in turn, would

²⁰⁵ *Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing a Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and LinkUp, Universal Service Reform—Mobility Fund, Fifth Order on Reconsideration, FCC 12-137, 2012 WL 5862449, ¶ 15 (rel. Nov. 16, 2012).*

²⁰⁶ *Id.*

²⁰⁷ *See id.*

make it relatively easy “for competitors to craft business plans that capitalize on their knowledge of the [provider’s] reported finances,”²⁰⁸ just as the FCC warned in the Fifth Report and Order on Reconsideration. Accordingly, the same protections are therefore warranted here.

Moreover, the Court of Appeals for the District of Columbia Circuit has reached the same conclusion in the context of disclosures under the Freedom of Information Act (“FOIA”). In particular, the D.C. Circuit held that “commercial or financial matter is ‘confidential’ for purposes of [determining whether it must be made available in response to a FOIA request] if disclosure of the information is likely to have either of the following effects: (1) ... impair the Government’s ability to obtain necessary information in the future; or (2) ... cause substantial harm to the competitive position of the person from whom the information was obtained.”²⁰⁹ Convo’s proposal would produce both of these effects, and confidential treatment is therefore required.

Even more to the point, the Commission has already assessed the question and determined that protections are warranted in this very context. When it released its first Protective Order in this proceeding, the Commission recognized that the “sensitive nature” of the information providers would submit justified affording to protections against unwarranted disclosure.²¹⁰ Likewise, in its Second Protective Order, the Commission noted the need to impose even greater limitations on “access to certain especially competitively sensitive information ... which, if released to competitors ... would allow those persons to gain a

²⁰⁸ *Id.* at ¶ 16.

²⁰⁹ *Nat’l Parks & Conservation Ass’n v. Morton*, 498 F.2d 765, 770 (D.C. Cir. 1974).

²¹⁰ *Structure and Practices of the Video Relay Service Program, Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Protective Order, DA 12-402, 27 FCC Rcd. 2557, ¶ 1 (2012).

significant advantage in the marketplace or in negotiations.”²¹¹ The Commission again considered the public’s right to access and the corresponding need to protect particularly sensitive information, and it reached the appropriate conclusion that subjecting sensitive information to the safeguards of a protective order “serve[s] the public interest.”²¹²

Nothing in Convo’s proposal counters the Commission’s reasoned conclusion that public disclosure of sensitive financial information submitted in this proceeding could lead to unfair competitive advantages for the competitors who receive it. Accordingly, the Commission should dismiss Convo’s proposal.

²¹¹ *Structure and Practices of the Video Relay Service Program, Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Second Protective Order, DA 12-858, 27 FCC Rcd. 5914, ¶ 1 (2012).

²¹² *Id.* at ¶ 1.

VI. CONCLUSION

The record confirms that each of the proposals contained in the PN—whether viewed individually or in aggregate—would devastate VRS as we know it. In the myriad ways catalogued in Sorenson’s PN comments and the analysis above, the proposals would obliterate the financial structure of every VRS provider, freeze investment in the industry, fail to curtail fraud, eliminate consumer choice, require consumers to abandon the endpoints they prefer, undermine incentives to innovate, forcibly discard existing functionalities that users value greatly, generate enormous technical problems (and, as a result, dropped calls or call failures), and ensure disastrous customer support and customer relations experiences. The proposals should be rejected.

Respectfully submitted,



Michael D. Maddix
Director of Government and
Regulatory Affairs
SORENSEN COMMUNICATIONS, INC.
4192 South Riverboat Road
Salt Lake City, UT 84123

John T. Nakahata
Christopher J. Wright
Charles D. Breckinridge
Timothy J. Simeone
WILTSHIRE & GRANNIS LLP
1200 Eighteenth Street, N.W.
Washington, D.C. 20036
T: (202) 730-1300
jnakahata@wiltshiregrannis.com

Counsel to Sorenson Communications, Inc.

November 29, 2012

Attachment A

REPLY COMMENTS ON VRS POLICY

Declaration of Michael L. Katz

November 29, 2012

CONTENTS

I.	INTRODUCTION AND OVERVIEW.....	1
II.	COMMENTS FILED BY OTHER VRS PROVIDERS FAIL TO DEMONSTRATE THAT ECONOMIES OF SCALE IN THE PROVISION OF VRS ARE SUFFICIENTLY IMPORTANT TO JUSTIFY TIERED PRICING.....	8
A.	MR. TURNER’S ANALYSIS SUFFERS FROM SEVERAL SERIOUS FLAWS.	8
1.	<i>Mr. Turner’s criticisms of my analysis of queuing efficiencies are incorrect and/or irrelevant.....</i>	<i>9</i>
2.	<i>Mr. Turner draws illogical conclusions from changes in costs over time.</i>	<i>16</i>
3.	<i>Mr. Turner’s claims regarding cross-firm comparisons are unfounded.</i>	<i>19</i>
B.	CSDVRS’S CLAIMS REGARDING ECONOMIES OF SCALE IN SG&A DO NOT CHANGE THE FACT THAT A SINGLE RATE TIER WOULD PROMOTE COMPETITION AND BENEFIT CONSUMERS.	20
III.	A COMPETITIVE COMPENSATION RATE	22
IV.	CONCLUSION.....	24

I. INTRODUCTION AND OVERVIEW

1. At the request of counsel for Sorenson Communications, Inc. (Sorenson), I conducted an economic analysis of the likely effects on competition and consumer welfare of the proposals described in a public notice issued by the Consumer and Governmental Affairs Bureau.¹ My broad conclusion was that implementing these proposals would be likely to quash competition (in some cases by design), stifle innovation, and degrade the quality of services offered to deaf and hard-of-hearing consumers.²

2. I have been asked by counsel for Sorenson to conduct an analysis of the central economic arguments made in filings submitted in this proceeding contemporaneously with my previous declaration.³ There is substantial agreement among many of the commenters about several of the conclusions I reached in my earlier declaration. These commenters include both consumer representatives and competing service providers.

3. Most notably, Telecommunications for the Deaf and Hard of Hearing, Inc., the Association of Late-Deafened Adults, Inc., the National Association of the Deaf, the Deaf and

¹ *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 08-123 and 10-51, Additional Comment Sought on Structure and Practices of the Video Relay Service (VRS) Program and on Proposed VRS Compensation Rates, October 15, 2012 (hereinafter *Public Notice*).

² *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Response to Additional Comments Sought on VRS Policy Reform, Attachment A to Comments of Sorenson Communications, Inc., November 13, 2012 (hereinafter *Katz PN Declaration*).

³ I have not attempted to identify and analyze every argument made. The fact that an argument may have been raised without my discussing it below does not indicate that I support that argument or believe that its conclusions are correct.

Hard of Hearing Consumer Advocacy Network, the California Coalition of Agencies Serving the Deaf and Hard of Hearing, the National Black Deaf Advocates, Inc., the Cerebral Palsy and Deaf Organization, the Alexander Graham Bell Association for the Deaf and Hard of Hearing, and the American Society for Deaf Children (collectively, Consumer Groups) all broadly oppose CSDVRS's and the Commission's proposals to radically restructure the industry in ways that would eliminate competition and reduce consumer choice.⁴ The fact that Consumer Groups oppose these proposals should come as no surprise; these proposals are manifestly anti-consumer and would deny deaf and hard-of-hearing consumers functional equivalence and would threaten the availability of VRS.

4. VRS providers other than CSDVRS generally join Consumer Groups in opposing the proposed industry restructuring. Specifically:

- Consumer Groups, Rehabilitation Engineering Research Center on Telecommunications Access (RERC), ASL Services Holdings, LLC (ASL Holdings) and Purple Communications, Inc. (Purple) agree that creating a

⁴ *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Comments of Consumer Groups in Response to Public Notice Seeking Additional Comments on Structure and Practices of the Video Release Service (VRS) Program and on Proposed VRS Compensation Rates, CG Docket Nos. 10-51 and 03-123, November 14, 2012 (hereinafter *Consumer Groups Comments*).

monopoly-franchise VRS application would deny choice to deaf and hard-of-hearing consumers and stifle innovation;⁵

- RERC, Consumer Groups, ASL Holdings and Purple agree that relying only on off-the-shelf hardware would harm consumers by denying them choice and stifling innovation;⁶ and
- RERC and Purple agree generally that severing access-related elements of video communications services (*e.g.*, user registration and validation, authentication, call routing, and usage accounting) from other components of VRS risks blocking the realization of economies of scope, creates greater uncertainty with respect to rate

⁵ *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Comments of the Rehabilitation Engineering Research Center on Telecommunications Access, CG Docket Nos. 10-51 and 03-123, November 14, 2012 (hereinafter *RERC Comments*) at ii; *Consumer Groups Comments* at i and ii; *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Comments of ASL Services Holdings, LLC, CG Docket Nos. 10-51 and 03-123, November 14, 2012 (hereinafter *ASL Holdings Comments*) at 7; *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Purple Communications, Inc. Comments to Public Notice on Structure and Practices of the Video Relay Services Program, CG Docket Nos. 10-51 and 03-123, November 14, 2012 (hereinafter *Purple Comments*) at 1 and 2.

⁶ *RERC Comments* at 3-7; *Consumer Groups Comments* at 12 and 13; *ASL Holdings Comments*, note 7 and at 7; *Purple Comments* at 5.

setting, and may reduce provider accountability to deaf and hard-of-hearing consumers.⁷

5. There is widespread agreement that there is a better way to promote competition and consumer welfare. As do I, RERC, Consumer Groups, ASL Holdings, Convo Communications, LLC (Convo), and Purple all conclude that the Commission should support a process designed to develop common implementation of baseline standards.⁸

6. There is also widespread agreement among Consumer Groups and VRS providers (*i.e.*, ASL Holdings, Convo, CSDVRS, and Purple) that RLSA’s rate proposal is problematic, in large part because low compensation rates threaten the quality and availability of VRS to deaf and hard-of-hearing consumers.⁹

⁷ *RERC Comments* at ii; *Purple Comments* at 9-11.

⁸ *RERC Comments* at ii; *Consumer Groups Comments* at i; *ASL Holdings Comments* at 5; *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Comments of Convo Communications, LLC in Response to October 15, 2012 Public Notice, CG Docket Nos. 03-123 and 10-51, November 14, 2012 (hereinafter *Convo Comments*), §IV; *Purple Comments* at 5-7.

⁹ *Consumer Group Comments* at i and ii; *ASL Holdings Comments*, §VI; *Convo Comments*, §III; *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Comments of CSDVRS, LLC, CG Docket Nos. 10-51 and 03-123, November 14, 2012 (hereinafter *CSDVRS Comments*), §I; *Purple Comments*, §III.A.

7. In addition, some VRS providers continue to argue that economies of scale are important in the VRS industry and justify the continued use of tiered pricing.¹⁰ I previously examined this issue and concluded that:¹¹

- A compensation system of declining rate tiers harms deaf and hard-of-hearing consumers by supporting inefficient competitors and distorting competition.
- A single-tiered compensation system would benefit deaf and hard-of-hearing consumers—as well as telecommunications users more generally—by promoting efficiency and undistorted competition.
- An examination of economies of scale demonstrates that declining compensation tiers are not needed to promote quality competition.

8. With the exception of two VRS providers, no commenter responded to the *Public Notice* by submitting new theoretical or empirical evidence bearing on this issue. Purple submitted a new analysis regarding economies of scale, supported by an expert declaration,

¹⁰ See, in particular, *CSDVRS Comments*, §I.B; *Purple Comments*, §III.B.

¹¹ *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, An Economic Analysis of VRS Policy Reform, Appendix A to Comments of Sorenson Communications, Inc., March 9, 2012 (hereinafter *Katz NPRM Declaration*), § III. See also *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Reply Comments Regarding VRS Policy Reform, March 30, 2012 (hereinafter *Katz NPRM Reply Declaration*), § II.

and CSDVRS submitted data on SG&A costs per minute and volumes.¹² I focus my analysis below on these submissions.

9. Briefly, my findings regarding these submissions are the following:

- My earlier conclusions regarding the degree of economies of scale and the desirability of a single compensation tier, summarized above, remain valid.¹³
- The analysis offered by Purple's expert, Mr. Turner, suffers from several serious defects. First, his criticisms of my earlier analysis of queuing efficiencies are incorrect and/or irrelevant. Second, he draws illogical conclusions from changes in VRS providers' costs over time. Indeed, as I demonstrate below, it is logically impossible for the data to represent what Mr. Turner believes they represent. Third, his claims regarding cross-firm comparisons are unfounded.
- CSDVRS's claims regarding the magnitude of economies of scale support the conclusion that a single-tiered system would promote competition and consumer welfare. In particular, CSDVRS's figures support the finding that economies of

¹² *CSDVRS Comments*, §I.B; *Purple Comments*, §III.B and Addendum A.

CSDVRS had previously submitted this analysis in an *ex parte* filing in July 2012. See *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket Nos. 10-51 and 03-123, *Ex Parte* of CSDVRS, LLC, Attachments, July 10, 2012.

¹³ More broadly, nothing in any of the comments filed in response to the *Public Notice* causes me to change the conclusions I reached in my previous declarations. (See *Katz NPRM Declaration*; *Katz Reply NPRM Declaration*; and *Katz PN Declaration*.)

scale in the VRS industry are sufficiently small that multiple providers can operate efficiently.

10. I also briefly address the ongoing issue of what costs should be included if the Commission pursues a cost-based, administrative rate-setting process. If the Commission uses an administrative process to set compensation rates, then it should set rates that correspond to those that would emerge from the use of a competitive-bidding process. By mimicking the competitive process, such rates would promote efficiency of the VRS program and benefit consumers by promoting the availability of VRS and encouraging functional equivalence. One implication of this general principle is that all of the costs of providing service, including call center and interpreter costs, marketing and outreach costs, administrative costs (including product management, engineering, customer support, general and administrative, human resources, information technology, and technical support), taxes, and investment costs including principal and interest, should be included in the rate because a potential bidder would take into account all of the costs of providing service when choosing whether to bid or to exit the industry.

11. The remainder of this declaration explains these findings in greater depth and provides details of the facts and analysis that led me to reach them.

II. COMMENTS FILED BY OTHER VRS PROVIDERS FAIL TO DEMONSTRATE THAT ECONOMIES OF SCALE IN THE PROVISION OF VRS ARE SUFFICIENTLY IMPORTANT TO JUSTIFY TIERED PRICING

12. Several commenters argue that economies of scale in the provision of VRS are important.¹⁴ However, none of these arguments overturns the conclusion that a compensation scheme with only a single rate would enhance consumer welfare for the reasons I discussed previously.¹⁵

A. MR. TURNER’S ANALYSIS SUFFERS FROM SEVERAL SERIOUS FLAWS.

13. Purple submitted an expert declaration by Steven E. Turner, which purports to show that “the VRS industry is characterized by significant economies of scale” and “the suggestion that CA costs do not benefit from economies of scale is unfounded and contradicted by all available evidence.”¹⁶ Mr. Turner makes several arguments that he claims support his conclusion that economies of scale in the provision of VRS services are important. These arguments include:¹⁷

¹⁴ See *CSDVRS Comments*, §I.B; *Purple Comments*, §III.B; *ASL Holdings Comments* at 14; *Convo Comments*, §III.C; although the latter two provide no new empirical or theoretical evidence.

¹⁵ See *Katz NPRM Declaration*, § III.

¹⁶ *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Report of Steven E. Turner, Addendum A to Comments to Public Notice on Structure and Practices of the Video Relay Services Program, November 14, 2012 (hereinafter *Turner Report*), §§ II.B and II.C.

¹⁷ Mr. Turner also tries to make an argument based on an analogy to stock portfolios. (*Turner Report*, ¶¶ 32-35.) In doing so, he misunderstands and misapplies the concept of Beta from the capital asset pricing model. He measures riskiness by volatility, and he asserts that Beta measures the riskiness of a portfolio relative to the overall market, with a Beta of less than one

- a critique of previous submissions that use Erlang C models to demonstrate that economies of scale in the provision of interpreters are exhausted at a low percentage of industry output;
- a comparison of VRS providers' costs over time;¹⁸ and
- a comparison of certain costs across VRS providers.¹⁹

Each of these analyses is flawed and potentially misleading.

1. Mr. Turner's criticisms of my analysis of queuing efficiencies are incorrect and/or irrelevant.

14. In my earlier declaration, I employed an Erlang C model to demonstrate that economies of scale in the provision of interpreters are exhausted at a low percentage of industry output.²⁰ Mr. Turner acknowledges that "Erlang-C is undoubtedly useful in evaluating the staffing needs of call centers within an organization," but he then makes several technical criticisms of the model.²¹ However, many of these criticisms are incorrect and/or irrelevant. More generally, Mr. Turner does not attempt to demonstrate that any of his

indicating the portfolio is less risky (volatile) than the market. He also says that as a portfolio's size grows, its Beta tends towards one and it becomes less risky. In fact, a portfolio's Beta measures the normalized covariance of its returns with those of the market, not the riskiness of a portfolio relative to the overall market. (See, e.g., Richard Brealey, Stewart Myers and Franklin Allen, *Principles of Corporate Finance* (Ninth Edition), McGraw-Hill, 2008, at 193 and 194.) For example, a particular investment may be extremely volatile but be completely uncorrelated with the overall market, in which case it has a Beta of zero. Moreover, if one begins with a very safe asset and adds a volatile asset, the larger, more-diversified portfolio is more volatile than the original one.

¹⁸ *Turner Report*, § II.

¹⁹ *Turner Report*, Figure 1 and ¶ 42.

²⁰ *Katz NPRM Declaration*, § III.B.1.

²¹ *Turner Report*, ¶ 25.

criticisms are empirically important or that the basic conclusion that economies of scale in the provision of interpreters are exhausted at a low percentage of industry output is incorrect. Nor does Mr. Turner present any analysis regarding the levels of VRS efficiencies attained by Purple or claim that Purple has not reached sufficient scale to attain the preponderance of possible VRS efficiencies. As I demonstrate below, the fundamental conclusion that economies of scale in the provision of interpreting services are exhausted at low volumes is robust to the criticisms presented by Mr. Turner.

15. Mr. Turner first points out that staffing is based on peak loads, which vary over time.²² As I discussed in my earlier declaration, I account for this variation by modeling staffing needs for each hour of the week based on Sorenson's call distribution throughout the week, scaled up or down to reflect different VRS provider sizes.²³ This accounts for the fact that call centers are likely to be less busy on nights and weekends. Mr. Turner presents no evidence that this approach is unreasonable. Moreover, while modeling the call distribution in a more disaggregated fashion undoubtedly makes the model more realistic, there is no evidence that it substantively changes the conclusions. For example, Dr. Pelcovits reached substantially the same conclusions based on an Erlang C model that assumed constant call volumes over 8- and 24-hour periods.²⁴

²² *Turner Report*, ¶ 26.

²³ *Katz NPRM Declaration*, ¶ 33.

²⁴ Declaration of Michael D. Pelcovits, Attachment A to *In the Matter of Structure and Practices of the Video Relay Services Program*, CG Docket No. 0-51, Reply Comments of Sorenson Communications, Inc. (May 21, 2010).

16. Mr. Turner next claims that “[g]iven the known weaknesses of Erlang-C, most modern call centers use much more sophisticated staffing models.”²⁵ The Erlang C model has been employed by previous commenters in this proceeding, including GoAmerica (a predecessor to Purple, the firm on whose behalf Mr. Turner submitted his testimony), to assess the magnitude of economies of scale in the provision of interpreting services.²⁶ It is also my understanding that Sorenson currently uses a version of the Erlang C model to manage its call center staffing.²⁷ Mr. Turner does not state whether Purple currently uses an Erlang C model or a “much more sophisticated” staffing model.

17. Third, Mr. Turner suggests that I should have used different parameter values as model inputs. Specifically, he asserts that there is no basis to assume that the maximal feasible VRS efficiency is 50 percent.²⁸ As a statement about what happens over a short period, say 10 minutes, this assertion is correct but irrelevant. What is relevant is what happens over a longer period of time, which governs the average efficiency that a VRS provider can attain. As I stated in my initial declaration, “Sorenson and other industry

²⁵ *Turner Report*, ¶ 27.

²⁶ See *Katz NPRM Declaration*, note 56 and cites therein.

Moreover, GoAmerica employed an Erlang C model from the same source and made very similar assumptions to those that I made. (*In re Telecommunications Relay Services for Deaf and Hard of Hearing and Speech Disabled Persons*, CG Docket No. 03-123, Petition for Rulemaking, GoAmerica, Inc. (January 23, 2009) (hereinafter *GoAmerica Comment*) at 5 and 6.)

²⁷ Interview with Jason Dunn, Vice President, Operations, Sorenson Communications, Inc., February 16, 2012; Interview with Jason Dunn, Vice President, Operations, Sorenson Communications, Inc., and Chris Wakeland, Vice President, Interpreting, Sorenson Communications, Inc., November 20, 2012.

²⁸ *Turner Report*, ¶ 30.

participants believe that VRS efficiency levels significantly above 50 percent are infeasible.”²⁹ Moreover, GoAmerica made an identical assumption in a previous filing.³⁰ Notably, Mr. Turner provides no empirical evidence to support his claims regarding actual average efficiency levels. Nonetheless, I show below that my conclusions are robust to assuming higher maximal attainable VRS efficiencies.

18. In addition to attacking my choice of the efficiency parameter, Mr. Turner argues that competitive pressures may induce VRS providers to target service levels that exceed the statutory mandate of answering 80 percent of calls within 120 seconds. Indeed, Sorenson does exceed those service levels, targeting a service level of *****BEGIN HIGHLY CONFIDENTIAL***** *****END HIGHLY CONFIDENTIAL***** percent of calls answered within *****BEGIN HIGHLY CONFIDENTIAL***** *****END HIGHLY CONFIDENTIAL***** seconds.³¹ In my earlier declaration, I followed previous commenters

²⁹ *Katz NPRM Declaration*, ¶ 32.

Sorenson has observed that efficiency levels above 50 percent are attainable for short periods of time but are otherwise unsustainable because higher efficiency levels lead to injuries and employee attrition if maintained for significant periods of time. (Interview with Jason Dunn, Vice President, Operations, Sorenson Communications, Inc., and Chris Wakeland, Vice President, Interpreting, Sorenson Communications, Inc., November 20, 2012.)

³⁰ Mr. Turner characterizes this assumption as a hypothetical. (*Turner Report*, note 30.) But the GoAmerica filing makes clear that requiring interpreters to interpret in excess of 50 percent of work time can lead to repetitive-stress injuries. Specifically, in applying an Erlang C model, GoAmerica adjusted “the number of required interpreters to avoid situations where the interpreter would interpret in excess of 50 percent of work time in order to avoid repetitive stress injuries.” GoAmerica also noted that “[o]ther input assumptions would yield results similar to, although obviously not identical to, that set forth in the example.” (*GoAmerica Comment*, note 3.)

³¹ Interview with Jason Dunn, Vice President, Operations, Sorenson Communications, Inc., and Chris Wakeland, Vice President, Interpreting, Sorenson Communications, Inc., November 20, 2012.

in assuming a target service level of 80 percent of calls answered within 120 seconds. Below, I show that my results are robust to assuming higher service levels.

19. In my *NPRM Declaration*, I demonstrated that VRS providers can attain high VRS efficiency at relatively low call volumes and incremental VRS efficiency gains quickly fall as volume increases.³² This finding is consistent with previous analysis submitted to the Commission, including analysis by GoAmerica.³³ To demonstrate that this finding is also robust to both of Mr. Turner's parameter critiques, I replicate my previous analysis and conduct several sensitivity analyses.³⁴ Specifically, I conduct analyses for each of the following sets of parameter values:

1. I relax the assumption that the VRS efficiency level cannot be sustained significantly above 50 percent by assuming that maximal VRS efficiency level (VRS Eff in the figure below) is 60 percent;
2. I increase the target level of service (SvcLvl in the figure) by applying Sorenson's internal service level target described in paragraph 18 above (instead of assuming 80 percent of calls would be answered within 120 seconds as in previous comments),³⁵ and
3. I increase the maximal VRS efficiency level to 60 percent and increase the target service level to Sorenson's internal service level target.

³² *Katz NPRM Declaration*, ¶ 34.

³³ *GoAmerica Comment* at 5 and 6.

³⁴ *Katz NPRM Declaration*, ¶ 34.

³⁵ *Katz NPRM Declaration*, note 57.

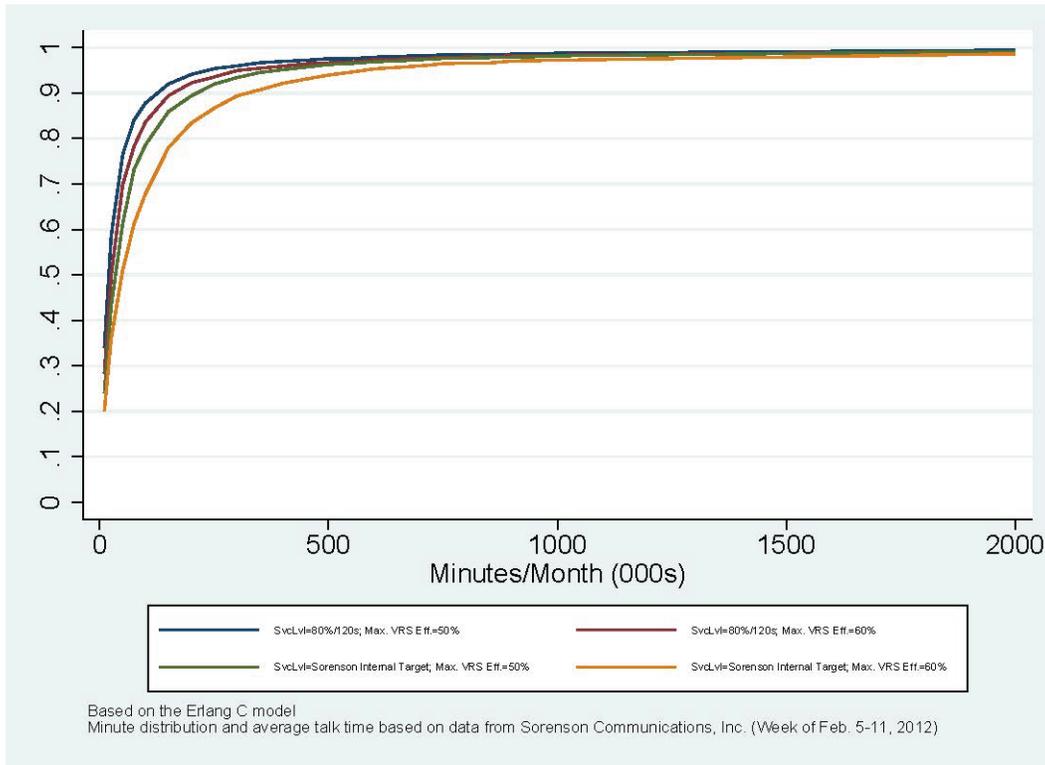
20. As Figure 1 clearly illustrates, regardless of the specification used, substantially all of the efficiencies attained from the provision of interpreters are exhausted by the time a VRS provider reaches 500,000 minutes per month, and 90 percent of the attainable efficiencies are achieved at lower thresholds of 100,000 to 350,000 minutes per month, depending on the specification. *****BEGIN HIGHLY CONFIDENTIAL***** [REDACTED]

[REDACTED]

[REDACTED] *****END HIGHLY CONFIDENTIAL***** minutes per month, and CSDVRS providing approximately *****BEGIN HIGHLY CONFIDENTIAL***** [REDACTED] *****END HIGHLY CONFIDENTIAL***** minutes per month.³⁶ Even under the most conservative set of assumptions, a VRS provider operating at Purple’s volume should be able to achieve approximately *****BEGIN HIGHLY CONFIDENTIAL***** [REDACTED] *****END HIGHLY CONFIDENTIAL***** percent of the maximal attainable efficiency.

³⁶ *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket Nos. 10-51 and 03-123, Notice of Ex Parte Conference, Purple Communications, Inc., Highly Confidential Attachment at 7; CSDVRS Rolka Submission HIGHLY CONFIDENTIAL.xlsx[RLSA Reconciliation].

Figure 1: Queuing Efficiency Sensitivity Analysis



21. It is notable that comments submitted by CSDVRS are consistent with my conclusions and inconsistent with Mr. Turner’s analysis. In particular, CSDVRS presents an analysis that shows that “CA Related & Non-CA Relay Center Costs” decline by just three percent on a per-minute basis as a VRS provider expands from 500,000 minutes per month to 5,000,000 minutes per month, which indicates that economies of scale in communications assistant and relay center costs are not significant.³⁷ As I discuss below, CSDVRS’s estimates of reductions in SG&A costs as volume increases are also consistent with my previous analysis.

³⁷ CSDVRS Comments, Table 1.

2. Mr. Turner draws illogical conclusions from changes in costs over time.

22. Mr. Turner observes that “total industry per-minute indirect costs dropped 11.3% between 2010 and 2012, as volumes increased by 8.7%.”³⁸ He then implicitly *assumes* that the change in average indirect costs must be due to the increase in volume and asserts that these trends prove economies of scale are significant.³⁹ Straightforward arithmetic demonstrates that Mr. Turner’s assumption cannot possibly be correct; it is inconsistent with the numbers that he cites.

23. To see this point, first observe that the strongest possible form of economies of scale with respect to indirect costs arises when all indirect costs are fixed, so that a firm with a larger volume incurs no more costs than does a firm with a smaller volume. Let F denote these fixed costs, and let M denote the number of minutes of VRS provided by the firm. Then the indirect costs per minute are F/M . If volume increased by $\lambda \times 100$ percent, then indirect

costs per minute would fall to $\frac{F}{M(1+\lambda)}$. In percentage terms, the change in per-minute costs

would be $\left(\frac{F}{M} - \frac{F}{M(1+\lambda)}\right) / \frac{F}{M} = \frac{\lambda}{1+\lambda}$. Observe that $\frac{\lambda}{1+\lambda} < \lambda$. In other words, even if,

counterfactually, all indirect costs were fixed, a given percentage increase in VRS volume would lead to a smaller percentage decrease in per-minute costs. The only way to have per-

³⁸ *Turner Report*, ¶ 22.

³⁹ *Turner Report*, ¶ 23.

minute costs fall by a larger percentage than the increase in the number of minutes is for *total* costs to fall as volume rises.

24. There is no even-remotely-plausible cost function for the VRS industry that has this property. To see why, suppose, counterfactually, that a firm's indirect costs fell as its traffic volume rose. Then an economically rational, low-volume firm should operate the associated company functions *as if* it had high volume. Although it would have excess capacity of these functions, by hypothesis the firm would enjoy lower costs than otherwise. Indeed, by operating in this fashion, the smaller firm would have the same costs as would the larger firm, thus contradicting the counterfactual claim that total—as opposed to average—indirect costs could actually fall with volume.

25. Hence, when Mr. Turner argues that total industry per-minute indirect costs dropped by a larger percentage than the service volume increased and asserts that this is due solely to economies of scale, he is making a claim that is inconsistent with economic rationality and common sense. That is, he is implying total indirect costs (*i.e.*, the aggregate amount, not just the per-minute amount) fell due to an increase in output.⁴⁰ For the reasons just described, a decline in total costs cannot possibly be due solely to the realization of economies of scale.

⁴⁰ For example, suppose a VRS provider served 100,000 minutes per month and had a total indirect cost of \$500,000, yielding an average per minute cost of \$5. An increase in minutes of 8.7 percent coupled with a decrease in per minute costs of 11.3 percent would imply that total indirect costs fell to \$482,085 (a four-percent decline).

See *Katz NPRM Declaration*, ¶ 49 for a discussion of other management improvements that Sorenson has made over time.

26. The likely source of Mr. Turner's error is clear. As I discussed in my initial declaration:⁴¹

... the Commission should be careful not to infer economies of scale from the observation that a provider's average costs have fallen over time as the firm's volume has grown. Instead of economies of scale, the fall in costs may be the result of learning and ongoing innovation.

It also should be recognized that observed costs also could fall due to changes in service quality. Learning, innovation, and changes in service quality very likely all played important roles in explaining the decline in costs. For example, in response to the Commission's 2010 reductions in VRS compensation rates, Sorenson closed VRS centers, increased its interpreter efficiency, reduced headcount associated with training and development, outreach and marketing, field sales activities, technical support, and network infrastructure, and reduced management compensation and overhead.^{42, 43} Of course, these facts do not imply that economies of scale played no role. As discussed in my earlier declaration, the provision of VRS is subject to economies of scale though they are limited.⁴⁴ The critical point is that Mr.

⁴¹ *Katz NPRM Declaration*, ¶ 47.

⁴² *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket Nos. 10-51 and 03-123, Sorenson Ex Parte, July 11, 2012, Attachment at 7.

⁴³ This type of response was not unique to Sorenson. For example, in explaining reductions in SG&A from 2010 to 2011, CSDVRS noted "Due to all the uncertainties going on within the FCC during 2011 (elimination of VARS, Contractors, rate change & potential "pay by customer"), CSDVRS put a freeze on spending the second half of the year. Many strategic [sic] growth plans were postponed." (CSDVRS Rolka Submission HIGHLY CONFIDENTIAL.xlsx[Economies of Scale].)

⁴⁴ *Katz NPRM Declaration*, § III.B.

Turner's methodology for estimating the size of the economies of scale is fundamentally unsound and contradicted by the facts.⁴⁵

3. Mr. Turner's claims regarding cross-firm comparisons are unfounded.

27. As I discussed in my *NPRM Declaration*, the Commission also must be careful not to confuse the effects of superior management with the effects of economies of scale.⁴⁶ Mr. Turner argues that the fact that Sorenson's costs are significantly lower than those of its smaller rivals cannot be due solely to management decisions and therefore must be due to economies of scale.⁴⁷ Mr. Turner provides no evidence to support this assertion. Rather, as I explained in my *NPRM Declaration*, "there is reason to believe that the causality runs in the reverse direction."⁴⁸ That is, the most efficient firms have the greatest incentives to attract new customers and grow in size.

28. Despite his use of cross-company comparisons to argue that economies of scale are significant, Mr. Turner appears to agree with my critique of such comparisons (*i.e.*, that difference across firms may be driven by factors other than scale). In particular, he states that "the Commission must recognize that there are other, perfectly valid reasons that two different providers may have very different cost structures."⁴⁹ He goes on to note that

⁴⁵ This critique of Mr. Turner's methodology also applies to his discussion of per-minute CA-related costs. (*Turner Report*, ¶ 37.)

⁴⁶ *Katz NPRM Declaration*, § III.B.5.

⁴⁷ *Turner Report*, ¶ 42.

⁴⁸ *Katz NPRM Declaration*, ¶ 46.

⁴⁹ *Turner Report*, ¶ 39.

providers such as Purple and CSDVRS compete on quality and customer service. Although potentially different competitive strategies might result in different cost structures for Purple and CSDVRS, Mr. Turner agrees that “[t]his result is not indicative of an ineffective or uncompetitive industry – rather, it is reflective of a competitive industry in its growth and development where the service has not been commoditized.”⁵⁰

B. CSDVRS’S CLAIMS REGARDING ECONOMIES OF SCALE IN SG&A DO NOT CHANGE THE FACT THAT A SINGLE RATE TIER WOULD PROMOTE COMPETITION AND BENEFIT CONSUMERS.

29. CSDVRS provides numerical estimates of per-minute “SG&A (Indirect) Costs” for a range of VRS output levels and asserts that these costs are subject to significant economies of scale.^{51, 52}

30. In my *NPRM Declaration*, I noted that, although some SG&A costs are fixed with respect to volume, many are not.⁵³ CSDVRS agreed with this observation in earlier comments.⁵⁴ The fact that SG&A costs vary with service volume reduces the degree of economies of scale compared to a situation in which these costs all are fixed.

⁵⁰ *Turner Report*, ¶ 39.

⁵¹ *CSDVRS Comments*, Table 1 and § I.B.

⁵² As discussed above, CSDVRS’s analysis indicates that it does not believe that “CA Related & Non-CA Relay Center Costs” are subject to significant scale economies once a provider reaches a relatively small share of total industry output.

⁵³ *Katz NPRM Declaration*, § III.B.4.

⁵⁴ *Structure and Practices of the Video Relay Service Program and Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Further Notice of Proposed Rulemaking*, CG Docket No.s 10-51 and 03-123, Comments of CSDVRS, LLC, March 9, 2012, at 7 (“But for all providers, big or small, as usage increases, ... more human resources personnel and management must be hired.

31. In my *NPRM Declaration*, I also presented a straightforward mathematical model that demonstrated “any economies of scale in the VRS industry are sufficiently small that multiple providers can operate efficiently.”⁵⁵ To calibrate that model, I used Sorenson estimates of CSDVRS’s and Purple’s traffic volumes as well as data on the growth in Sorenson’s SG&A costs over time.⁵⁶ I reach the same conclusion as I did in my *NPRM Declaration* if I instead calibrate the model using traffic-volume data recently submitted by CSDVRS and Purple as well as the relationship between SG&A costs and provider volume submitted by CSDVRS in response to the *Public Notice*.⁵⁷ In other words, even using CSDVRS’s figures, any economies of scale in the VRS industry are sufficiently small that multiple providers can operate efficiently.

Additional effort must be put into ensuring regulatory compliance, more customer service personnel must be hired, more finance and accounting personnel must be retained, and more engineering personnel are required to maintain the provider’s network up and operational.”)

⁵⁵ *Katz NPRM Declaration*, ¶ 44.

⁵⁶ Specifically, I assumed that fixed administrative expenses account for 41 percent of all administrative expenses. This led to the conclusion that “six equally sized firms could attain per-minute costs just four percent higher than those of a single firm that accounted for 100 percent of VRS volume.” I also presented a robustness check in which I assumed that fixed administrative expenses account for 30 percent of all administrative expenses and showed that “six equally sized firms could attain per-minute costs just three percent higher than those of a single firm that accounted for 100 percent of VRS volume.” (*Katz NPRM Declaration*, ¶ 44 and Technical Appendix.)

⁵⁷ I use data presented by CSDVRS and Purple to infer the number of minutes that they served in 2009. I then apply CSDVRS’s reported SG&A costs to these minutes to estimate the percentage of these indirect costs that are fixed. This exercise implies that fixed administrative expenses account for *****BEGIN HIGHLY CONFIDENTIAL***** *****BEGIN HIGHLY CONFIDENTIAL***** percent of all administrative expenses, which is within the range of estimates that I presented previously.

32. Moreover, if other VRS providers believe that economies of scale are particularly important, they are free to expand their operations to take advantage of the higher margins that they predict they would achieve.⁵⁸ As I explained in my *NPRM Declaration*.⁵⁹

It is also important to recognize that scale and cost efficiency are not permanent firm characteristics. Setting a single compensation rate will allow all firms to compete to achieve scale and cost efficiency... by paying a lower marginal price to the most successful firms, the tiered compensation structure reduces the incentives of inefficient, low volume providers to become more efficient and attain higher service volumes.

III. A COMPETITIVE COMPENSATION RATE

33. As I discussed in my *NPRM Declaration*, use of a competitive-bidding process could benefit deaf and hard-of-hearing consumers and improve the efficiency of the VRS program but, because designing an appropriate bidding process is complicated, it would be premature for the Commission to adopt such a process immediately.⁶⁰ However, even if the Commission instead uses an administrative process to set compensation rates, the Commission should set rates that correspond to those that would emerge from the use of a competitive-bidding process.⁶¹ As I explained earlier, such rates would have the following properties: (a) there would be a single rate, which is an approximation to the competitive price; (b) the rate would be set so that it allows the most efficient firms to earn an adequate return on investment; and (c) the rate would allow firms to benefit if they are able to operate more efficiently than are

⁵⁸ Some VRS firms may argue that alleged anti-competitive acts by Sorenson prevent them from expanding. I previously addressed these claims and showed them to be without merit. (*Katz Reply NPRM Declaration*, § III.A.)

⁵⁹ *Katz NPRM Declaration*, ¶ 52.

⁶⁰ *Id.*, § V.A.2.

⁶¹ *Id.*

their rivals.⁶² Specifically, in a process that seeks to fund N service providers in order to facilitate quality competition, the rate would be equal to the cost level of the $N+1^{\text{st}}$ lowest-cost potential service provider.⁶³ If the goal, therefore, were to maintain at least the current number of competitors, the rate would be equal to the cost level of the next firm that would enter, *i.e.*, above the cost levels for all current firms. By mimicking the competitive process, rates adhering to these principles would promote efficiency of the VRS program and benefit consumers by promoting the availability of VRS and encouraging functional equivalence.

34. There is another important implication of the competitive benchmark. A potential bidder would take into account all of the costs of providing service when choosing whether to bid. In the long run, the potential bidder would consider *all* of the costs associated with being in business. These costs would include call center and interpreter costs, marketing and outreach costs, administrative costs (including product management, engineering, customer support, general and administrative, human resources, information technology, and technical support), taxes, and investment costs including principle and interest. If it would be unable to submit a winning bid greater than the average of all of its costs of doing business, then the firm would find it economically rational to shut down rather than to offer VRS to deaf and hard-of-hearing consumers.⁶⁴ Hence, by the principle that administratively set prices should

⁶² *Id.*

⁶³ Because quality is a strategic choice of each service provider, a firm's cost level in this discussion should be understood to refer to the function that relates the firm's cost to its quality level evaluated at the quality level at which the firm will find it optimal to compete.

⁶⁴ Although the Commission seems to have concluded some or all carriers providing voice telephone services could be required to supply VRS, it is clear that Sorenson and other current

mimic competitively determined prices, the calculation of the costs of the $N+1^{\text{st}}$ lowest-cost potential service provider should include all of the costs of being in the business of providing VRS service.

IV. CONCLUSION

35. The *Public Notice* contemplates the adoption of two seriously flawed proposals: (a) the use of government fiat to dictate industry structure, and (b) the use of principles and amounts drawn from rate-of-return regulation to set compensation rates. There is broad agreement among Consumer Groups and VRS service providers that these proposals threaten to distort and eliminate competition, reduce consumer choice, and stifle innovation. If these proposals are adopted, deaf and hard-of-hearing consumers can expect lower quality service and fewer options. The comments submitted in response to the *Public Notice* reinforce my earlier conclusion that the statutory goals of ensuring that VRS is available to all eligible users and offers functional equivalence would be much better served by promoting undistorted competition within a framework of industry-wide interoperability standards and by setting compensation based on incentive-regulation principles.

VRS providers are not required to do so. Moreover, even any carriers that could be forced to provide VRS would have no incentives to provide anything beyond the absolute minimums with respect to availability and quality.

I declare, under penalty of perjury, that the foregoing is true and correct.

A handwritten signature in black ink, appearing to read "Michael L. Katz", written over a horizontal line.

Michael L. Katz

November 29, 2012