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FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In The Matter of

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 No. 10-51

CG Docket No. 03-123

REPLY COMMENTS OF SORENSON COMMUNICATIONS, INC.

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I. INTRODUCTION AND EXECUTIVE SUMMARY

As the Consumer Groups1 remind everyone, the touchstone of all Video Relay Service (“VRS”) reform must be functional equivalence between relay service and hearing service. Functional equivalence requires strong consumer protections, such as anti-slamming and Customer Proprietary Network Information (“CPNI”) rules, and transparent porting processes, as the Consumer Groups state. And, as the Consumer Groups also suggest, functional equivalence can be improved if quality standards such as speed of answer are brought more into line with what well-run providers can already achieve (provided that compensation is not cut), some types of skills-based routing is permitted, and, under appropriate safeguards, providers are allowed to

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1 The Consumer Groups jointly filing comments in this proceeding included the Deaf and Hard of Hearing Consumer Advocacy Network; Telecommunications for the Deaf and Hard of Hearing; National Association of the Deaf; Association of Late-Deafened Adults, Inc.; California Coalition of Agencies Serving Deaf and Hard of Hearing, Inc.; American Speech-Language Hearing Association; Registry of Interpreters for the Deaf; Deaf Seniors of America; National Black Deaf Advocates, Inc.; and the Alexander Graham Bell Association for the Deaf and Hard of Hearing (“Consumer Groups Comments”).
permit consumers to specify a preference for particular interpreters, or to block further use of a particular interpreter. Allowing hearing users to have their telephone numbers placed in the iTRS database should also be done, provided that VRS providers are not required to provision or manage those numbers, or to incur the costs of billing and collecting from hearing users for that service. Similarly, the Commission’s proposal for broadband support and new-to-category incentives (if applicable to all providers) promote functional equivalence and the universal adoption of VRS by those deaf, hard-of-hearing and visually-disabled persons who can use it.

But functionally equivalent services cannot be built amid the rubble of a financially-ruined VRS industry—which is exactly what would result if the FCC were to adopt the rate level proposals in the FNPRM. Providers agree that rate level cuts below the equivalent of the $5.14 per-minute blended compensation rate that Sorenson receives would be ruinous, and Sorenson’s competitors even protest loudly against being required to come to that level. Sorenson’s experience over the past year confirms what should be obvious—the casualties of any draconian compensation cuts will be the services that VRS users receive and the employees who deliver those services. Certainly the Commission cannot expect that providers can cut bond payments absent bankruptcy or a near-bankruptcy workout.

The record makes clear that the Commission must abandon the tiered compensation system that, in the FNPRM, it correctly found to be wasteful. While many VRS providers advocate for the continuation of tiers, none has come forward with financial data and economic analysis to justify their continuation. As Professor Michael L. Katz demonstrated, correlation between smaller providers and higher costs does not mean that the providers are inefficient because they are small, as opposed to simply being inefficient. And none of the proponents of tiers explain why the FCC should continue to subsidize the self-acknowledged inefficiency of
small VRS providers, except to argue that this is necessary to preserve consumer choice—which they in no way have demonstrated and for which they should be held to a high standard of proof. Sorenson recognizes the need for a transition period and supports a multiyear elimination of tiers as part of the implementation of a per-user system, but tiers must be eliminated if the Commission is serious about eliminating waste.

It is also hard to imagine a proposal that would abrogate consumer choice and thwart functional equivalence more than Purple’s proposal to impose market share caps. In no part of the hearing telecommunications world does the FCC (or any other regulator) prohibit consumers from subscribing to one provider’s services because that provider’s market share is “too large.” For instance, it would be unthinkable for the Commission to prohibit consumers from subscribing to AT&T or Verizon Wireless simply to increase the shares of other wireless providers. VRS is not any different. The antitrust laws have long rejected the idea that “big is bad” or that large market shares are per se unlawful; indeed, the antitrust laws do not prohibit a monopoly acquired through superior skill, foresight, and industry.² Purple’s pro-competitor, anti-consumer proposal should be rejected.

The Commission should also decline the other VRS providers’ invitations to kleptocracy (as Alfred Kahn colorfully termed it)³ with respect to VRS platform technology by confiscating Sorenson’s investment and physically occupying its videophones for the benefit of Sorenson’s competitors. There is no justification in law or economics for forcing Sorenson to modify its proprietary videophones (which Sorenson owns but licenses to users free of charge) and embedded software into a VRS platform that can be used by any competitor to offer its services.

² See U.S. v. Aluminum Co. of America, 148 F.2d 416, 430 (2d Cir. 1945) (L. Hand, J).
As both CSDVRS (“ZVRS”) and Purple demonstrate, consumers have alternatives to Sorenson videophones available today—including accessing VRS providers via applications running on PCs, tablets, mobile phones, or through “off-the-shelf” video conferencing equipment designed primarily for hearing users. (Indeed, the only equipment that Purple would subject to portability requirements is Sorenson’s.)

The important fact that other VRS providers ignore is that VRS is an “over-the-top” service. Unlike the pre-divestiture AT&T, it is not tied to any underlying last-mile transmission network, and the infrastructure over which VRS rides is entirely owned and provided by entities that are not VRS providers. Nor did Sorenson originally gain any of its customer base through a legal monopoly, as the incumbent local exchange carriers did. Deaf, hard-of-hearing, and speech-disabled Americans flocked to Sorenson’s VRS service because Sorenson designed, built and provided without charge deaf-friendly equipment enabling users to take full advantage of Sorenson’s superior, high-quality interpreting services. Had Sorenson’s service been terrible, no subscribers would have taken its equipment. And if Sorenson’s equipment had been terrible, subscribers would have taken service from one of Sorenson’s competitors or used other equipment to access Sorenson’s service. It is particularly ironic to see ZVRS and Purple complain that Sorenson somehow gained its market share “unfairly,” inasmuch as the antecedents of both companies began providing VRS before Sorenson, but—as the market ultimately demonstrated—with less attractive offerings to consumers.

The Commission should be under no illusions: splitting access technology (whether hardware or software) from interpreting will not improve functional equivalence and innovation, but will likely kill it. As the Commission has previously (and correctly) found, enhanced features for VRS are a competitive market, and that competition drives innovation. Moreover,
the access platforms support many more minutes of calling through point-to-point communications than through VRS. The features used for both VRS and point-to-point will not continue to improve if providers cannot capture the benefits of those improvements, or if they are compensated only a paltry amount for the fundamental enabling platform services, as ZVRS proposes.

For similar reasons, the Commission should abandon two proposed mandates: that all VRS equipment be “off-the-shelf;” and that all equipment be portable among providers. With respect to videophones that a provider owns (like all of Sorenson’s videophones), an equipment portability requirement would be an unconstitutional taking (because of the physical occupation of the VRS provider’s property) and also unnecessary. As ZVRS points out, equipment need only work within a given provider’s federation. This promotes innovation and functional equivalence because each provider has an incentive to develop new features and services that differentiate it from other VRS providers. What is critical is that all end points be able to communicate with all other end points (i.e., interoperability) so that consumers can call each other, whether using VRS or point-to-point. Sorenson also reiterates its support for developing a format by which consumers can obtain all of their contact lists and speed-dial lists when they port. This facilitates consumer choice, advances functional equivalence, and protects against perceived lock-in.

With respect to rate structure, Sorenson continues to support the Commission’s per-user proposal. Under a per-user structure, however, functional equivalence does not require the Commission to permit end users to select multiple personal VRS providers, such as for fixed and mobile non-workplace use. Unlike hearing services, in which the selection of the service provider also entails the selection of an underlying transmission network, the VRS consumer’s
choice of transmission network is separate and distinct from the choice of VRS provider, and thus consumers may properly be limited to a single “over-the-top” VRS service provider that will operate across the end user’s Internet access technologies.

To the extent that the Commission may wish to accommodate dial-around and to deflect the Consumer Groups’ concerns with respect to discrimination against high volume VRS users, the Consumer Groups’ proposal for a hybrid per-user and per-minute compensation structure could be a viable middle ground provided: (1) there are no compensation tiers for either the per-user or per-minute portion of compensation; (2) provision of the per-user and per-minute compensation for the default provider can be divorced (such that compensation for dial-around calls would necessarily go to multiple providers); (3) the per-user component represents a substantial portion of the compensation (all but the interpreter time); and (4) VRS users are permitted to select only one default VRS provider for non-workplace use, across all of the user’s endpoints. Maintaining a low per-minute component to any hybrid compensation is critical to mitigating the potential for minute-based fraud to the maximum extent possible.

Sorenson’s proposed transition plan to a per-user rate structure (or to a hybrid plan, for which a similar transition schedule would be necessary) is the only proposal in the record that makes sense. Both because of the time required to develop necessary standards and because Sorenson will need to modify its endpoints once those standards are set, a thirty-month timetable is realistic for the implementation phase. Similarly, Sorenson’s proposed five-year growth phase gives smaller providers a reasonable opportunity—after the establishment of interoperability and consumer data portability standards, as well as any implementation of broadband support and new-to-category payments—to achieve scale.
In the interest of bringing VRS to more end users, Sorenson reaffirms its support for new-to-category payments, and notes that other providers’ opposition reflects the fact that their business plans rely on poaching existing users rather than locating and recruiting unserved individuals. Sorenson also joins others in supporting the Commission’s proposal to increase VRS acceptance in the hearing community by employing an independent entity to conduct general outreach, though Sorenson and others agree that VRS providers remain best suited to conduct outreach to the deaf, hard-of-hearing, and speech-disabled.

In addition, Sorenson reiterates its view—shared by many others—that developing a VRS User Database would greatly facilitate program administration and increase the Commission’s understanding of VRS trends. Sorenson agrees with other commenters, however, that the database must include robust privacy and competitive safeguards.

Sorenson also shares the Consumer Group’s view that high-quality interpreting is the most important ingredient in providing valued VRS to consumers, and it also agrees that interpreter certification (including NAD-RID Certification) often helps to identify skilled interpreters. That said, Sorenson opposes requiring any particular certification as a prerequisite for working as a VRS interpreter, as doing so would artificially shrink the pool of interpreters (resulting in higher interpreter costs), degrade service (due to the distinct possibility of interpreter shortages), and have no positive impact on VRS interpreter quality. Instead, the Commission should preserve its existing interpreter quality standards and permit providers to compete based on their interpreters’ skill.

Finally, Sorenson agrees that the Commission should establish a blue ribbon panel to advise it with respect to the sweeping reforms it has proposed, particularly with respect to the compensation system. To be effective, however, the panel must be open to all industry
stakeholders, and it must be operated in a manner that ensures all participating stakeholders can contribute (including in dissent, if necessary) to the views it provides to the Commission.

II. **THE COMMISSION SHOULD DECLINE TO ADDRESS INTEROPERABILITY, PORTABILITY, AND OFF-THE-SHELF ISSUES IN A WAY THAT CONFER THE BENEFITS OF SORENSON’S INVESTMENTS AND INNOVATIONS ON ITS COMPETITORS.**

Sorenson supports the development of standards to support interoperability, *i.e.*, the ability to call from any VRS endpoint to any other VRS-enabled device, and consumers’ ability to retain and port their data—such as contact lists and speed-dial lists—from one VRS provider to another. These measures are pro-competition and pro-consumer, without favoring any particular provider.

The thrust, however, of Sorenson’s competitors’ comments regarding interoperability, portability, and off-the-shelf issues is that the Commission should confer on those competitors the benefits of Sorenson’s investments and innovations in VRS equipment and enhanced features, or should at least prevent Sorenson from reaping the benefits of its investments. But that, of course, is not the Commission’s proper role in the marketplace. As the Commission itself has long held, its job is to be “pro-competitive,” not “pro-competitor.”4 It should not and does not “determine which competitors will be ‘winners’ and ‘losers’” in the marketplace, but rather “ensure[s] that all [service providers] receive an equal opportunity to compete.”5 In this proceeding, the Commission should continue to focus on allowing consumers to select their preferred provider of VRS, and should refrain from addressing interoperability, portability, and off-the-shelf issues in such a way as to engineer market gains for competitors at Sorenson’s

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expense. Moreover, forcing Sorenson to share the benefits of its investments—in the form of superior proprietary equipment and enhanced features—with competitors that have failed to make such investments would represent a taking without just compensation.

A. Competitors’ Unsupported Claims that Sorenson Achieved “Dominant” Market Share Through Alleged “Unfair Practices” are Historically, Economically and Legally Wrong.

A number of Sorenson’s competitors suggest that Sorenson benefitted from an unfair advantage that allowed it to achieve and maintain its current high share of the VRS market. Purple, for example, writes that “Sorenson’s market share is not the result of operating excellence,” but rather results from some alleged “unfair practices.”6 These allegations ignore the history of the VRS marketplace and of Sorenson’s investments that have permitted it to offer a high quality experience that customers broadly prefer to its competitors’ offerings.

Sorenson’s competitors fail to recognize that when Sorenson entered the market as a service provider, Purple’s7 predecessor Hands On Video Relay Services, Inc. (as well as MCI, which also became part of Purple) and ZVRS’s8 predecessor CSD were already providing VRS services, and Sorenson had a zero percent market share. Unlike Purple and ZVRS, however, Sorenson focused on developing a videophone specifically tailored to the unique needs of deaf, hard-of-hearing, and speech-disabled users. Sorenson’s first videophone, the Sorenson VP-100®,

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6 Purple Comments at 7; see also Healinc Comments at 2 (“[T]here are no explicit restrictions on anti-competitive behavior in the provision of relay services, or means for effectively competing against entrenched dominant providers.”).
7 Purple Communications, Inc. (“Purple”) was formed through the consolidation of Hands On VRS, MCI Communications Corporation’s VRS operations (first acquired by Verizon Communications, Inc., then sold to the company that became Purple), and GoAmerica, Inc.
8 ZVRS was spun off by non-profit Communication Service for the Deaf, Inc. (“CSD”) in 2006. CSD touts itself as the “very first to launch commercial . . . VRS” in 2000, “creating a highly competitive industry” by 2002. See CSD, History, http://www.c-s-d.org/AboutCSD/History.aspx (last visited Mar. 27, 2012). By 2002, CSD was “market[ing] VRS nationally through a partnership with Sprint.” Id.
reflected more than $50 million in investments, and was revolutionary when it was released in 2002. But Sorenson did not settle for developing innovative, deaf-friendly equipment—it also hired and trained its own interpreters, bringing a level of quality control to VRS that had not previously existed, and developed an array of enhanced add-on capabilities beyond the minimum standards identified in the FCC’s rules. The combination of unique videophones tailored to deaf, hard-of-hearing, and speech-disabled users, a higher level of interpreting quality, and enhanced features naturally attracted many users to Sorenson VRS. Clearly, however, that was a choice made by consumers—they were not obliged to take Sorenson’s equipment or use Sorenson service, but could have opted for VRS offerings from other, more established providers in the marketplace. Consumers chose Sorenson’s VRS because it simply worked better than all other offerings on the market.

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9 As noted in Sorenson’s opening comments, Sorenson has been awarded many patents for its videophones’ enhanced features and other innovations related to VRS. See Sorenson Comments at 73.

10 Even in the early days of VRS, some customers chose to take advantage of Sorenson’s superior interpreters without opting for Sorenson videophones; for example, customers used Microsoft’s NetMeeting to call Sorenson VRS.

11 Notably, a number of VRS providers began offering the D-Link i-2-Eye videophone shortly after the VP-100 entered the market. D-Link was an Original Equipment Manufacturer (“OEM”) licensee of Sorenson, and the i-2-Eye videophone hardware was essentially the same as the VP-100. Sorenson differentiated the VP-100 by adding enhanced features to the device targeted to the deaf, hard-of-hearing, and speech-disabled community and by offering better interpreting services.

12 Rather than designing more appealing features and improved services, Sorenson’s competitors sometimes attempted to entice VRS users to switch to them from Sorenson by offering financial incentives for VRS use, which raised clear concerns about stimulating unnecessary usage. For example, Hands On ran a “Brown Bag” reward program that offered users rewards for each minute of use of their VRS service. In January 2006, the Commission ordered an end to the Brown Bag program and all “program[s] that involve[] the use of any type of financial incentives to encourage or reward a consumer for placing a TRS call.” Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Declaratory Ruling, CC Docket No. 98-67, CG Docket No. 03-123, ¶ 1 (rel. Jan 26, 2005).
One of Sorenson’s competitors, ASL Services Holdings, LLC (“ASL Holdings”), complains that competitors now face a “Hobson’s choice” because of an alleged “dilemma in the allocation of limited resources between investment in the provision of service and in development of supporting equipment.”\textsuperscript{13} According to ASL Holdings, the solution to this “dilemma” is for the Commission to become the source of new VRS technologies and innovations via a “Commission relay technology program.”\textsuperscript{14} But both ASL Holding’s premise and its conclusion border on bizarre. First, as noted above, Sorenson’s success with VRS users is founded on Sorenson’s investments in both “development of supporting equipment” and “in the provision of service.” Sorenson addressed the resource problem by doing what companies in competitive industries around the world do—it obtained private capital to make the investments necessary to develop a superior VRS offering. Indeed, ASL Holdings appears to have done the same thing, albeit to a more limited extent, by creating a software-based videophone that can be downloaded and run on a PC, with other versions for the iPhone, iPad, and Samsung Galaxy and Epic.\textsuperscript{15} Most fundamentally, however, ASL Holding’s proposed solution is guaranteed to fail; the 20th Century amply demonstrated that central government planning cannot compete with private markets when it comes to innovation to meet continually evolving consumer demand.

\textsuperscript{13} ASL Holdings Comments at 19.

\textsuperscript{14} \textit{Id.} at 20-21.

In the face of Sorenson’s competitors’ failure to invest in improving VRS equipment and services, they suggest that there is something unlawful about the fact that Sorenson has invested in both and offers both to consumers. ASL Holdings, for example, decries the alleged “anti-competitive tying of specialized provider-equipment to subscribers,”[16] and argues that the “provision of relay services must be made equipment and technology-neutral in so far as tying subscribers to specific providers.”[17] But Sorenson’s competitors’ allusions to the antitrust notion of “tying” are unavailing for multiple reasons.

First, the concept of tying is simply misplaced in the context of the history discussed above. Even assuming, solely for the sake of argument, that an endpoint enabled to access a VRS network and VRS services are separate products,[18] when Sorenson launched the VP-100 it had a zero percent share of both the VRS equipment and service markets, while Purple and ZVRS were market leaders. As both a logical and a legal matter, it is clear that a new entrant into the market cannot engage in unlawful tying. When Sorenson entered the VRS industry, it was “launching . . . a new business with a highly uncertain future” and plainly could not have been engaged in anticompetitive unlawful tying.[19]

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16 ASL Holdings Comments at 17.

17 Id. at 15.

18 A better view is that the functionality necessary to access a provider’s VRS network (whether wholly software based or combined hardware and software) and the associated VRS services are not severable separate products, but are a single product. It is not necessary to parse that distinction here, however, because in any event, competitors’ allegations of anti-competitive tying fail even when viewed as separate products.

To the contrary, as Professor Katz points out in his accompanying Reply Declaration,\(^{20}\) “the equipment policies that Sorenson adopted when it entered the market (a time at which it manifestly lacked market power or any advantage of lock-in), benefited consumers.”\(^{21}\) Consumers “got the videophones they wanted and needed, and Sorenson did not receive any additional compensation for providing this equipment,” while the VP-100’s release spurred competing equipment releases by Sorenson’s competitors.\(^{22}\) In short, Sorenson’s initial business model “led to tremendous growth in the industry and benefits to customers.”\(^{23}\)

Moreover, Sorenson still could not plausibly be accused of tying even as its position in the VRS industry has matured, so it is not surprising that Sorenson’s competitors fail to cite even a single relevant case. As a legal matter, there can be no such thing as “tying” unless an entity has sufficient market power in the “tying” market to coerce buyers into taking an otherwise unwanted “tied” product as well.\(^{24}\) Here, those competitors alleging anti-competitive tying fail to specify in which product market Sorenson allegedly has market power, but it cannot seriously be contended that Sorenson has market power in the market for videophones. ZVRS alone claims to use video customer premises equipment (“CPE”) from sources as diverse as “Cisco,  


\(^{21}\) Id. at 10.

\(^{22}\) Id. at 11.

\(^{23}\) Id. at 13.

\(^{24}\) See Illinois Tool Works Inc. v. Independent Ink, Inc., 547 U.S. 28, 34 (2006) (“[O]ur cases have concluded that the essential characteristic of an invalid tying arrangement lies in the seller’s exploitation of its control over the tying product to force the buyer into the purchase of a tied product that the buyer either did not want at all, or might have preferred to purchase elsewhere on different terms.”) (quoting Jefferson Parish Hospital Dist. No. 2 v. Hyde, 466 U.S. 2, 12 (1984)).
Polycom, and Lifesize,” and there are, of course, many other manufacturers of videophones as well, as well as software applications that convert PCs, tablets and mobile phones into videophones. VRS consumers, in other words, do not seek out Sorenson videophones because they lack other options in the marketplace—they seek out Sorenson phones because they are better for VRS applications. But that is clearly not an antitrust violation; it is a sign that Sorenson’s equipment investments and innovations provide recognizable differentiation. Nor did Sorenson have market power in interpreting services as there were other providers with the capacity to provide substitute interpreting services within a non-transitory period of time.

Furthermore, nothing in antitrust law requires Sorenson to share the benefits of its investment and innovations in equipment and vertical features with other providers. This is particularly true here, where unlike the local telecommunications networks at issue in Trinko, VRS network infrastructure lacks any natural monopoly characteristics. VRS is a service that rides over a communications infrastructure, but VRS providers do not provide the underlying transmission service and there is thus no transmission monopoly here that could be leveraged into other markets.

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25 ZVRS Comments at 40.

26 Of course, in today’s technological environment of software-based VRS applications running on a variety of hardware platforms, VRS users need not use videophone hardware at all—they are free to use applications such as Sorenson’s ntouch PC or ntouch mobile, which interoperate with other VRS provider services, or to use VRS software applications from other providers.

27 See, e.g., Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 399, 411 (2004) (finding that even where Congress imposed on ILECs the obligation to lease elements of their networks to competitive carriers, the failure to do so did not state an antitrust claim because, under Section 2 of the Sherman Act, “there is no duty to aid competitors”).

As required by FCC regulations, Sorenson has enabled its videophone endpoints to support dial-around, and to permit calls to be placed through a new provider when an end user ports his VRS service.
As Professor Katz argues, the Commission here must “be careful to distinguish between:
(a) factors that lead to lock-in, and (b) quality-based competition that allows successful providers
to attract and retain customers.”\(^{28}\) The fact that Sorenson permits consumers to use its equipment
without charge “does not create consumer lock-in” because, as an economic matter, “there is no
sunk investment by consumers.”\(^{29}\) And “providing equipment with features that customers find
beneficial does not create anti-competitive lock-in, although it will attract customers to those
providers that provide the best features.”\(^{30}\) Indeed, innovation in the kinds of enhanced features
that consumers want is, as the Commission has recognized, an “important dimension of
competition in the VRS industry.”\(^{31}\)

Sorenson’s competitors also argue that the Commission should treat Sorenson as a
“dominant provider” in the VRS marketplace, as if that were a talisman to justify unbundling the
features and functions of the videophone from the rest of Sorenson’s VRS service.\(^{32}\) This
argument is often coupled with explicit claims that the Commission should engineer market
gains by smaller providers at Sorenson’s expense.\(^{33}\) But while Sorenson clearly is the most
successful VRS provider, it is not “dominant,” as that term is typically used by the FCC;
“dominant” does not simply equal “big” or “largest.” In its recent *Phoenix Qwest Forbearance
Order*, the Commission defined “a dominant carrier as a carrier that possess[es] market power

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28 Katz Reply Declaration at 15.
29 *Id.*
30 *Id.* at 15-16.
31 *Id.* at 16 (citing FNPRM ¶ 14).
32 See, e.g., Healinc Comments at 3 (claiming that “the dominant carrier retains a market share
that would in no other competitive industry” be “deemed appropriate”); Convo Comments at
22 n.60 (arguing that Sorenson has “market dominance”); Purple Comments at 9 (suggesting
that HHI index should be used to “aggressively combat Sorenson’s dominant market share”).
33 See, e.g., Purple Comments at 25-26 (urging the Commission to institute explicit market
“share caps”).
(i.e., the power to control price), and a nondominant carrier as one that does not possess power over price.”34 Of course, these concepts are not applicable to iTRS providers because they are not considered common carriers,35 but even if they were it is clear that Sorenson would not be considered “dominant.” Sorenson plainly cannot exercise market power to control prices, and it therefore has no ability to price its competitors out of the market.36 Rather, VRS compensation rates are set by the FCC, which is the only purchaser in the VRS market.37 Nor, as discussed above, can Sorenson compel end users to select its VRS service if they do not wish to do so. In addition, supply elasticity is high in the VRS context—competitors can readily scale up to provide additional capacity, and barriers to new entry into the market are relatively low compared to infrastructure-intensive industries with high start-up costs like local telecommunications.

In the end, while Sorenson’s competitors make a variety of attacks on Sorenson’s market-leading position in the VRS industry, those attacks are entirely misplaced. Sorenson’s growth in the VRS industry was the direct result of the fact that it did a better job than its competitors at meeting consumers’ needs, not any unfair or illegal advantage. While Sorenson’s competitors


35 See 47 U.S.C. § 153(11) (“The term ‘common carrier’ or ‘carrier’ means any person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or interstate or foreign radio transmission of energy…”); Structure and Practices of the Video Relay Service Program, Second Report and Order and Order, CG Docket No. 10-51, ¶ 34 (rel. July 28, 2011) (confirming that a company need not be a common carrier in order to be an FCC-certified iTRS provider).

36 See, e.g., Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier, Order, 11 FCC Rcd. 3271, 3310-18 ¶¶ 75-87 (1995) (addressing AT&T’s ability to exercise market control over prices as key element in dominance analysis).

37 And, of course, far from being able to dictate higher prices for its products, under the Commission’s tiered compensation scheme, Sorenson currently receives more than 20 percent less than other VRS providers for providing the same VRS services.
certainly wish the market were more evenly divided, consumers determine market share by choosing the company they want to provide them VRS, and consumers have consistently voted for Sorenson. The constant barrage of allegations from competitors seeking to cast Sorenson’s success in a negative light, and of recommendations seeking to undermine consumer choice, is fundamentally misplaced. “Wishing” for more equal market share only matters to the extent that it spurs innovation, competition, and more choices for consumers in the VRS marketplace, not fewer.

B. Sorenson’s Competitors’ Arguments for “Interoperability” and “Portability” Misunderstand Those Concepts and Should be Rejected.

In its opening comments, Sorenson agreed with the FNPRM’s suggestion that the Commission should address interoperability and “Access to Advanced Technology” as part of this proceeding.38 Sorenson also agreed with the FNPRM’s definition of interoperability to the extent that it means “the ability of a VRS user to (1) freely connect to and communicate through any of several VRS providers, and (2) directly connect to and communicate with other individuals using various forms of VRS access technology.”39 Such interoperability is, of course, already required by the Commission’s rules, although Sorenson’s comments acknowledged that “a lack of standards has made it impossible for any provider fully to meet them, and frustrated the effectiveness of those requirements.”40 Sorenson accordingly urged the Commission to work toward standards-setting through a neutral working group (coordinating with VRS providers, commercial off-the-shelf (“COTS”) manufacturers, and the Consumer Groups), and in particular to target standards allowing VRS consumers to transfer personal data

38 Sorenson Comments at 62-81; FNPRM ¶ 41.
40 Sorenson Comments at 63.
they had inputted, such as contact lists and speed-dial lists, to another provider. But Sorenson argued that because VRS “is on a path toward software applications that run on a variety of hardware platforms,” there would be little consumer benefit to expensive and time-consuming efforts to achieve “full portability for VRS access technology equipment.”

With respect to the focus on interoperability over portability, some commenters appear to agree with Sorenson. ZVRS, for example, writes that “[d]ue to the transition . . . to an application-centric model, it is easy for anyone to deploy software to a personal communications device that services the needs of a given customer base.” In this environment, “[b]y placing the call routing on the server side” and adopting “standards-based technology,” ZVRS argues that “innovative new CPE signaling approaches can be afforded without requiring device portability.” VRSCA similarly focuses on interoperability, urging that “[i]t is important for VRS consumers to have reliable available technologies and videophones that meet established technical standards and achieve a minimum level of interoperability.” With respect to portability, VRSCA “does not expect that every feature would continue to work after porting occurs.” Rather, “[u]nique features should be protected” to “encourage innovation and the development of improved technology.” Finally, it is notable that the Consumer Groups

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41 See id. at 62-68.
42 Id. at 62-63.
43 ZVRS Comments at 38-39.
44 Id. at 41.
45 VRSCA Comments at 3.
46 Id. at 4. Like Sorenson, however, VRSCA argues that videophones “should allow consumers to easily transfer information such as a list of contacts from one videophone to another videophone, similar to a transfer of contacts from one cell phone to another.” Id.
47 Id.
acknowledge that a central facet “of the Commission’s interoperability rules is working, namely that VRS users can make and receive calls through any VRS provider.”

Most of Sorenson’s competitors, however, urge the Commission to take a much more sweeping view of “interoperability” than that set forth in the FNPRM. ASL Holdings, for example, argues that the Sorenson VP-200® is “effectively” not interoperable, while Healinc Telecom, LLC (“Healinc”) claims that “the dominant provider” imposes “proprietary’ non-inter operable [sic] equipment” on consumers. But these and other competitor attacks on the purportedly inadequate “interoperability” of Sorenson’s VP-200 are fundamentally misplaced.

First, there can be no question that the VP-200 currently complies with the Commission’s VRS interoperability requirements. In particular, as required by the Commission’s 2006 Declaratory Ruling, Sorenson’s VP-200 can—as the Consumer Groups appear to acknowledge—“place a VRS call through any of the VRS providers’ service” and can “receive calls from, and make calls to, any VRS consumer.” Furthermore, Sorenson does not increase wait times for calls through other providers, nor do Sorenson customers need multiple sets of equipment to place calls through multiple providers, as they can do so utilizing the FCC-mandated dial-around capability. Significantly, Purple appears to concede that Sorenson’s VP-200 complies with the 2006 Declaratory Ruling and the Commission’s interoperability rules,

48 See Consumer Groups Comments at 41. Moreover, as a result of the Commission’s interoperability rules and 10-digit numbering (and number portability), there is no “network effect” of initially accepting Sorenson’s service—VRS users are always free to move to other VRS providers.

49 ASL Holdings Comments at 16.

50 Healinc Comments at 3.


52 See id. at 5454-56 ¶¶ 30-34.
claiming only that “the damage to the industry was done” by the time of the 2006 ruling, and urging the Commission to impose new “interoperability” requirements on providers.\textsuperscript{53}

Against this backdrop that the VP-200 \emph{does} comply with the interoperability requirements, it is clear that what Sorenson’s competitors desire is not interoperability as defined by the Commission, but rather \emph{portability of enhanced features} from one VRS provider to another. Healinc, for example, laments that purportedly “aggressive interpretation of Commission policy” has “made it possible for some [VRS providers] to develop equipment with ‘special features’” that are “non-interoperable.”\textsuperscript{54} ASL Holdings argues that “[s]ubscribers ultimately fear” changing providers “on the perception that they will lose critical service capabilities and features.”\textsuperscript{55} And Purple appears to urge that all features of Sorenson’s “proprietary software” associated with the VP-200 and the Sorenson ntouch\textsuperscript{®} videophone must be made “portable” to other providers, even though that portability requirement would not apply to any \emph{other} VRS hardware or software provider.\textsuperscript{56}

But the notion that a VRS provider’s proprietary enhanced features should (or even could) be portable ignores relevant Commission decisions, fundamental features of VRS providers’ networks, and the statutory baseline of “functional equivalence.” First, with respect to the existing regime, the Commission has made it clear that “Internet-based TRS providers (and, to the extent necessary, their numbering partners) must take such steps as are necessary to \emph{cease} acquiring routing information from any Internet-based TRS user that ports his or her number to

\textsuperscript{53} Purple Comments at 7.
\textsuperscript{54} Healinc Comments at 3.
\textsuperscript{55} ASL Holdings Comments at 16.
\textsuperscript{56} Purple Comments at 14, 15, Figure A. Indeed, not a single one of Sorenson’s competitors expresses any interest in making \textit{its} videophones and enhanced features portable to other services.
another provider or otherwise selects a new default provider.”57 In other words, when a user
ports to a new default provider, the original provider must cease providing services to that
videophone. Indeed, upon reconsideration of 2008 Report and Order, the Commission squarely
rejected a competitor’s suggestion that “a default provider that furnishes CPE to a consumer
must ensure that the CPE’s enhanced features (e.g., missed call list, speed dial list) can be used
by the consumer if the consumer ports his or her number to a new default provider.”58

More importantly, as the Commission has noted in the past, providers “offer such
features on a competitive basis,” which “encourage[s] innovation.”59 Indeed, because VRS
providers cannot engage in price competition, differentiation of services through the provision of
enhanced features is perhaps the most important way for providers to compete with one another.
As the 2008 Second Report and Order recognizes, if providers must continue to provide
enhanced features once a customer ports, they lose the incentive to attempt to attract customers
through innovation. VRS providers would therefore no longer devote resources to the
development and deployment of enhanced features and consumers would ultimately suffer, as
the VRSCA plainly recognized in its comments in this proceeding.60

In any event, against the backdrop of the Commission’s decision in the 2008 Second
Report and Order, it would simply be impractical for VRS providers—given the nature of their

57 See Telecommunications Relay Services and Speech-to-Speech Services for Individuals with
Hearing and Speech Disabilities, Report and Order and Further Notice of Proposed

58 See Telecommunications Relay Services and Speech-to-Speech Services for Individuals with
Hearing and Speech Disabilities, Second Report and Order and Order on Reconsideration, 24

59 Id.

60 See VRSCA Comments at 4; see also Letter from Tamar E. Finn to Marlene H. Dortch,
Secretary, FCC, CG Docket Nos. 03-123 and 10-51 at 2 (filed Feb. 4, 2011) (Consumer
Groups note “the positive impact competition has on the introduction of new features,
products and services”).
networks—to continue to provide enhanced services to consumers who elect to port to a new default provider, absent some sort of new unbundling regime\textsuperscript{61} that neither Section 225 nor the Commission’s rules contemplate.\textsuperscript{62} Enhanced services do not, of course, generally reside in the videophone itself—in Sorenson’s case, at least, they are “cloud”-based services provided from servers on Sorenson’s network. This necessarily means that once Sorenson ceases to acquire routing information from a particular VP-200, as required by the Commission’s decisions, enhanced services to that videophone are no longer available.

The Commission’s decisions (and Sorenson’s practices) are, of course, also consistent with the statutory requirement of functional equivalence. In the realm of services for hearing consumers, enhanced services provided by carriers’ proprietary networks are not portable among service providers. So, for example, if a Verizon Wireless customer switches to AT&T for wireless service, Verizon Wireless does not continue to provide voicemail or other enhanced

\textsuperscript{61} Some of Sorenson’s competitors now urge the Commission to adopt such a regime, but as set forth in Section II.C, infra, their arguments are thinly veiled attempts to free-ride on Sorenson’s investments and innovations in equipment and enhanced services, and should be rejected.

\textsuperscript{62} Even in the case of local telecommunications networks—which, as noted above, at least arguably reflect natural monopoly characteristics absent from VRS, see supra at 14—the Commission does not require unbundling comparable to what Sorenson’s competitors seek here. Specifically, while the Commission initially required ILECs to unbundle all the features and functions of the local switch—which would include enhanced functionalities such as the ones that other providers seek to force Sorenson to provide even after the customer has terminated service from Sorenson—the Commission later concluded that competitors were not impaired in their ability to compete for customers without access to the features and functions of ILEC switches, since CLECs could deploy their own switches. See Unbundled Access to Network Elements, Order on Remand, 20 FCC Rcd. 2533, 2644 ¶ 204 (2005). Similarly, other VRS providers can compete for users by providing customers their own enhanced features, whether accessed through their own hardware, off-the-shelf hardware, or via software for use on PCs, tablets, and other platforms.
services. And, as the Commission has explained, imposing such a requirement would undermine competition among providers on the basis of enhanced features.63

C. Sorenson’s Competitors’ Arguments for “Unbundling” the Provision of Equipment and Enhanced Features from Interpreting are Attempts to Share in the Benefits of Sorenson’s Investments and Innovations, are Fundamentally Anti-Consumer, and Should be Rejected.

As discussed above, Sorenson’s offerings of equipment and enhanced features are fully consistent with the Commission’s existing interoperability requirements. But those equipment and service offerings are also superior to other offerings in the VRS marketplace. A number of Sorenson’s competitors accordingly advance innovative arguments for how they should be allowed to share in the benefits of Sorenson’s investments and innovations. ZVRS, in particular, presents an elaborate vision of how other VRS providers could be allowed to free-ride on Sorenson’s investments. ZVRS describes a purported problem with “consumers becoming effectively ‘locked in’ to a particular provider because of its technology offerings.”64 According to ZVRS, the solution for this “problem” is for the Commission to mandate that consumers be allowed to select a “provider to provide them with technology access” (what ZVRS calls a “VRS Access Provider”) separately from a “VRS Interpreting Provider.”65 ASL Holdings similarly advocates a “bifurcation of equipment and service,”66 while Purple relatedly argues that the Commission should bar VRS providers from manufacturing CPE.67

What these proposals have in common, of course, is a desire to prevent Sorenson from reaping the benefits of its investments and innovations. By forcing Sorenson to essentially

63 See FNPRM ¶ 17 n.62.
64 ZVRS Comments at 17.
65 Id. at 16.
66 ASL Holdings Comments at 21.
67 See Purple Comments at 14.
“unbundle” the equipment and innovative enhanced features that VRS users prefer from interpreting services, competitors hope to be able to build VRS offerings—incorporating Sorenson’s equipment and features—that consumers will like as much as Sorenson’s, but without having to make the investments that Sorenson had to make. What is lacking from the competitors’ arguments, however, is any justification for mandating the separation of equipment and features from the provision of service, and there is none. Moreover, in a VRS market that is already flooded with small competitors having trouble reaching profitability, splitting the market further between “Access Providers” and “Interpreting Providers” will likely exacerbate their problems reaching critical mass.68

There is no conceivable argument that the superior equipment and features that Sorenson has developed have any of the “natural monopoly” features that have supported calls for unbundling of infrastructure in other contexts, such as the provision of natural gas, electric power, or even telecommunications services. While ZVRS attempts to analogize the provision of VRS equipment and enhanced features to “natural monopoly” infrastructure by calling them “VRS Access,” the reality is that they are not “access” at all—they are physical devices and/or software that connect to and services that ride over underlying transmission facilities, and as such they are things any company can attempt to produce. In other words, in the VRS context, there is nothing stopping Sorenson’s current competitors (or anyone else) from entering the

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68 In addition, it is important to keep in mind that the vast majority of calls for which VRS equipment is used are point-to-point calls, not calls using interpreting services. Today, VRS reimbursement defrays the real-world expenses of point-to-point calls. Splitting Access Providers from Interpreting Providers would Access Providers without financial support for network costs relating to point-to-point calls.
capital markets—just as Sorenson did—to seek investments allowing them to “build a better mousetrap” and attract more VRS customers.  

This is particularly true in a world of VRS applications running on a variety of PCs, tablets, and other platforms, where consumers can change services by simply changing applications. Sorenson’s competitors do not need “access” to anything at all—and certainly not to a natural monopoly infrastructure analogous to the old monopoly AT&T telecommunications network—in order to compete with Sorenson. Sorenson’s competitors need only build a better application that VRS consumers prefer to Sorenson’s offerings.

At root, however, Sorenson’s current competitors do not appear to wish even to attempt to compete in the marketplace for better VRS equipment, applications, or enhanced features—and they therefore seek to shut down competition altogether. But eliminating any incentive to build that “better mousetrap” is certainly not in the interests of VRS users, as noted by the Consumer Groups.

D. Requiring Sorenson to Allow its Competitors to Use its Equipment and Enhanced Features Would Effect a Taking Without Just Compensation.

As discussed above, Sorenson’s competitors plainly wish to get the benefit of Sorenson’s investments in superior equipment and enhanced services so as not to have to make similar investments themselves. As a general matter, however, an agency may not require a private company to “unbundle” aspects of its offerings so that competitors may also take advantage of them—the Fifth Amendment, of course, prohibits the taking of private persons’ property for

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69 Sorenson’s competitors appear unwilling to make such investments—indeed, so far as Sorenson is aware, its competitors have yet to even make the investments necessary to make it easy for users to change their 911 address from the device as required by the Commission.

70 See Consumer Groups Comments at 2.
public use without just compensation.71 This is particularly true in a world in which alternatives to Sorenson’s equipment and features are readily available; again, ZVRS alone claims to use video CPE from a variety of manufacturers including “Cisco, Polycom, and Lifesize.”72

1. **Mandating Sharing of Sorenson’s Equipment Would Effect a Physical, or Per Se, Taking.**

Both the Commission’s rules and Sorenson’s competitors appear to contemplate that VRS users should be able to keep Sorenson’s equipment after porting to another provider without Sorenson being compensated in any way.73 Sorenson permits its customers to use its equipment free of charge, but of course maintains title to that equipment. Requiring customers to be allowed to keep the equipment without compensating Sorenson would violate the Takings Clause.

Whenever the government grants a license to establish a “permanent physical occupation” of another person’s property—including personal property—the government effects a physical taking.74 Under both the Commission’s existing and proposed rules, a VRS customer that switches VRS service providers apparently has the government-granted right to maintain in his or her home a videophone owned by the equipment provider regardless of whether it continues to provide VRS service to that equipment. This is a *per se* taking.

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71 U.S. Const. amend. V.

72 ZVRS Comments at 40.

73 See Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Report and Order and Declaratory Ruling, CG Docket No. 03-123, ¶ 94 (rel. Nov. 19, 2007); ZVRS Comments at 48; Purple Comments at 15, Figure A.

74 Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 426 (1982) (a “permanent physical occupation authorized by government is a taking without regard to the public interests that it may serve”); see also Nixon v. U.S, 978 F.2d 1269, 1284-85 (D.C. Cir. 1992) (holding that the *per se* takings doctrine extends to personal property).
Contrary to the Fifth Amendment, the existing and proposed rules provide for no compensation for the equipment providers’ loss of property. Further, the D.C. Circuit has held that, when an agency regulation effects such a taking, courts will defer to that regulation only if there is a “clear warrant [in the statute] to grant third parties a license to exclusive physical occupation.” Here, there is no “clear warrant” in the enabling statutes to justify the taking of VRS service providers’ property.

2. **Requiring Continued Provision of Enhanced Services After a Change of VRS Providers Would Effect a Regulatory Taking.**

Further, the FNPRM suggests that the Commission is considering rules that would effect a regulatory taking of VRS providers’ (and unaffiliated third parties’) *intellectual* property. In the FNPRM, the Commission notes its interest in creating “VRS access technology standards” to ensure that users “will not lose access to enhanced features that have proven to be of particular

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75 Even if constitutional problems could be avoided by permitting VRS providers to seek compensation for their lost property in the Court of Claims, *compare Bell Atlantic Telephone Companies v. FCC*, 24 F.3d 1441, 1445 (D.C. Cir. 1994), the Commission’s rule would unreasonably “expose the Treasury to liability both massive and unforeseen.” *Id.*

76 *Bell Atlantic Telephone Companies*, 24 F.3d at 1446 (“Within the bounds of fair interpretation, statutes will be construed to defeat administrative orders that raise substantial constitutional questions.” *Id.* at 1445).

77 The Commission’s approach to portability may also effect a regulatory taking of VRS providers’ property. Unlike a physical taking, a regulatory taking does not require “permanent physical occupation” of a person’s property. Rather, a regulatory taking occurs when a “regulation has unfairly singled out [a] property owner to bear a burden that should be borne by the public as a whole.” *Yee v. City of Escondido, Cal.*, 503 U.S. 519, 523 (1992). Although determining whether a particular rule has caused a regulatory taking is a fact-specific inquiry, courts generally assess this by considering “the character of the governmental action, its economic impact, and its interference with reasonable investment-backed expectations.” *PruneYard Shopping Ctr. v. Robins*, 447 U.S. 74, 83 (1980). Here, the government has authorized third parties to exclusively use a VRS provider’s physical property to benefit its competitors, for no compensation, and contrary to the reasonable expectations of the VRS providers’ investors. That approach amounts to a regulatory taking.
importance” to them when they switch providers. This suggests that the Commission is contemplating requiring VRS providers who lease telephones to customers to permit other VRS providers to use the original provider’s “enhanced features.” In Sorenson’s case, these enhanced features constitute valuable intellectual property, including patents and property of unaffiliated third parties that Sorenson uses pursuant to a license. In the analogous trade secrets context, the Supreme Court has noted that “the right to exclude others is central to the very definition of the property interest. Once the data that constitute a trade secret are disclosed to others, or others are allowed to use those data, the holder of the trade secret has lost his property interest in the data.” Further, when a person has “investment backed expectations” that the government will not disclose (or force the disclosure of) trade secrets, then the disclosure of such data constitutes a taking. If Sorenson were forced to share its enhanced features with its competitors, its investment-backed expectations would plainly be frustrated. This type of uncompensated regulatory taking is not permissible, and the Commission should not take any action that requires Sorenson to make its enhanced features accessible by other VRS providers.

E. Sorenson Supports Working Toward Interoperability Standards Through a Neutral Third Party, but Imposing an Off-the-Shelf Mandate on VRS Providers Would Effectively Eliminate the Benefits Consumers Receive from Sorenson’s Investments in Better Hardware and Features.

In its opening comments, Sorenson strongly supported standards-setting for the VRS industry, focusing on interoperability, and through the involvement of a neutral third party. Sorenson specifically proposed establishing a working group under the SIP Forum with the

78 See FNPRM ¶ 43.
80 Id. at 1010-14.
81 Sorenson Comments at 62-75.
involvement of Neustar or a similar independent entity through which VRS providers could coordinate documentation of standards and the required testing and transition schedule.  

There is broad agreement among commenters that the Commission should work to facilitate interoperability and consumer data porting standards-setting, and that any such effort should include COTS manufacturers as well as VRS providers.  

Convo, for example, argues that the Commission “should facilitate a joint process between VRS providers and an appropriate technical standards setting body to develop the standard under the auspices of [a] VRS advisory committee” that Convo advocates establishing.  

But “the VRS user community could greatly benefit from being able to use commercially available video conferencing equipment,” so “the Commission [should] approach the establishment of VRS access standards in a manner that is likely to have broader impact beyond VRS.”  

ZVRS similarly maintains that the “VRS market must enable access to new technologies including those being developed by Google, Microsoft, and Apple,” and “the burden should not be placed on VRS companies to solve video equipment interoperability.”  

Sorenson strongly agrees that any serious effort to address interoperability must bring mainstream, non-VRS manufacturers into the process.

82  *Id.* at 66.

83  See Joint Letter from Sean Belanger, CEO, ZVRS, LLC, *et al.*, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 10-51, 03-123 (filed Mar. 6, 2012) (“VRS Providers Joint Letter”); Sorenson Comments at 67 (“Standards facilitating interoperability for both proprietary and mass market hardware would spur competition and offer VRS users many choices.”)

84  Convo Comments at 22.  Sorenson also supports establishing such a Committee.  *See infra* at Section VIII.

85  Convo Comments at 23.

86  ZVRS Comments at 39-40.  ZVRS, however, makes the peculiar claim that the Commission’s “proposed device standards do not allow any of the current VRS CPE to function except for the Sorenson ntouch products.”  *Id.* at 39.  This is simply untrue—Sorenson’s current ntouch products are not fully compatible with the Commission’s proposed device standards.  Like other providers and manufacturers, Sorenson would need to
As Sorenson indicated in its comments, the standards conversions necessary to achieve interoperability should follow a phased transition rather than a flash cut.\textsuperscript{87} Sorenson set forth a proposed transition plan that would take eighteen to thirty-six months, including six to twelve months to develop standards and another twelve to twenty-four months to implement them fully.\textsuperscript{88} Notably, a number of Sorenson’s competitors agree that changes to standards take time. ZVRS, for example, suggests that a transition to new technology standards should take place on a two-year timeline.\textsuperscript{89} Purple appears to suggest that standards would be developed during a twelve-month period following issuance of an Order, and fully implemented over the following thirty-six months.\textsuperscript{90} There is thus broad agreement that the Commission must provide sufficient time for the development and implementation of standards.

In other respects, however, Sorenson strongly disagrees with many of its competitors’ comments on standards-setting. For example, Sorenson opposes calls to codify the standards emerging from the standard-setting process.\textsuperscript{91} As Sorenson noted in its opening comments, “[i]ntegrating particular standards specifications into the Commission’s rules would freeze features and prevent VRS providers and COTS vendors from leveraging the technology and standards improvements that are constantly occurring in the telecommunications and VRS

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\textsuperscript{87} Sorenson Comments at 74-75.
\textsuperscript{88} \textit{Id.} at 75.
\textsuperscript{89} ZVRS Comments at 44.
\textsuperscript{90} Purple Comments, Exhibit 1.
\textsuperscript{91} \textit{See, e.g.}, Convo Comments at 22 (“The resulting standard should then be codified . . .”); Purple Comments at 27 (“A per user model should only be considered in conjunction with clear rules, codified technical standards,…”).
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Indeed, ZVRS appears to recognize that codifying specific standards will lock out the use of CPE from COTS vendors like Cisco, Polycom, and Lifesize; it indicates that “CPE need only be qualified to work within a given VRS Access Provider’s federated network,” and gives a list of “issues” that CPE manufacturers would need to address to ensure broader interoperability. In short, proposals to codify standards run the grave risk of ossifying those standards, which makes no sense in an industry like VRS where the rapid evolution of technology plays a critical role. Moreover, the rapid evolution of technology in this area requires that any standards set should be minimum standards, permitting carriers to go further as advances in technology allow.

Sorenson also strongly opposes efforts to link standards-setting to a mandate that all VRS equipment must be off-the-shelf. Indeed, such efforts appear to miss the basic point of setting standards to begin with. As ZVRS observes, a primary benefit of “requiring standards-based technology” is that it enables innovative approaches to the provision of VRS “without requiring device portability.” It is therefore puzzling that ZVRS goes on to call for a “transition to ‘off-the-shelf’ equipment.” If full interoperability is achieved under industry-wide standards, it should make no difference to other VRS providers whether Sorenson’s users employ off-the-shelf videophones or videophones designed and provided by Sorenson.

93 ZVRS Comments at 40.
94 See, e.g., id. at 43; Convo Comments at 22.
95 ZVRS Comments at 41.
96 Id. at 43.
But, of course, as discussed above, it does make a difference to Sorenson’s competitors, because Sorenson’s equipment and its advanced functionalities are simply better for VRS applications than any existing off-the-shelf product. That is a big part of the reason why VRS users overwhelmingly prefer Sorenson to other VRS providers—Sorenson’s equipment, unlike off-the-shelf equipment, was specifically designed and manufactured for the deaf, hard-of-hearing, and speech-disabled communities, and it is easier to use and provides better functionality. Sorenson’s competitors would thus like to transition to off-the-shelf equipment to eliminate this competitive advantage for Sorenson. Plainly, however, that approach is fundamentally anti-consumer—again, the fact is that VRS consumers prefer Sorenson’s equipment because it was made for them. Requiring consumers to use off-the-shelf equipment made for the mass-market will not merely render Sorenson’s investments in equipment and advanced functionality worthless, but will also eliminate the benefits of those investments for VRS consumers.

F. Sorenson Supports Consumer Data Portability.

Sorenson advocated in its opening comments that it should be a top priority for the VRS industry to “work together in the near term to define standards and processes to ensure that consumers can obtain their personal data such as their speed-dial lists and personal contacts list (i.e., address book) when they change providers.” This is a point on which there is broad agreement among VRS providers and consumer groups, and Sorenson looks forward to

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97 Sorenson believes that its equipment provides a further advantage in that it is less costly than off-the-shelf videophones—costs are reduced by leaving out elements of off-the-shelf videophones that are irrelevant to the provision of VRS.

98 Sorenson Comments at 68.

99 See ASL Holdings Comments at 16; ZVRS Comments at 37; VRSCA Comments at 4; Gallaudet: Accessible Communications Class Comments at 2.
working with the Commission and the industry to move forward quickly on the development and implementation of standards and processes necessary to ensure straightforward portability of consumer-inputted data.

III. THE COMMISSION SHOULD (A) ABOLISH TIERS AND MOVE TO A PRICE-CAP SYSTEM, AS IT PROPOSED; (B) RECOGNIZE THAT RATES CANNOT BE CUT SUBSTANTIALLY WITHOUT DEGRADING SERVICE; AND (C) MOVE AWAY FROM A PER-MINUTE COMPENSATION SYSTEM BY USING EITHER A PER-USER SYSTEM, AS THE COMMISSION PROPOSED, OR A HYBRID SYSTEM, AS THE CONSUMER GROUPS SUGGESTED.

Sorenson’s opening comments supported the Commission’s proposals to abolish the use of tiers; to rely on a price-cap system rather than cost-of-service regulation to adjust rates; and to move from a per-minute compensation system to a per-user system. However, Sorenson pointed out that the rate levels the Commission sought to reach were unrealistically low.

The comments from the other VRS providers confirm that no provider believes it can provide service at a level lower than the $5.14 per-minute blended compensation rate that Sorenson currently receives. Unless the Commission intends to bankrupt or liquidate all VRS providers, or cause them drastically to lower the quality of service they provide, the Commission should not reduce rate levels below $5.14 per minute or its equivalent under a per-user system or a hybrid system.

A number of providers indirectly prove the necessity of a minimum $5.14 rate level by arguing for a slightly adjusted form of tiers with two levels: one for Sorenson and one for all other providers. The implicit rationale for those proposals is that the other providers cannot survive at a rate equivalent to $5.14 per minute. Sorenson agrees that rates should not go below $5.14 per minute or its equivalent, but disagrees that tiers should be continued in any form. The declaration of Professor Katz, submitted with Sorenson’s opening comments, reinforced and elaborated upon the arguments in the FNPRM showing that tiers are inefficient and
unnecessary. No commenter provided any valid justification for perpetually subsidizing providers that are either below scale, inefficient, or both, and the Commission should not deviate from its proposal to abolish tiers, which will save at least $24 million per year.

Many commenters seem to assume that the Commission will use some form of cost-of-service regulation—they seem not to have noticed that the Commission proposed to move to a price-cap system or fail to understand that such a system does not rely on cost-of-service analysis. But as Professor Katz also explained, price-cap regulation is far superior to cost-of-service regulation and the Commission should move to price-cap regulation, as it proposed. Sorenson does not believe the Commission should rely on cost-of-service thinking in initializing rates, but to the extent the Commission does so it must recognize that the “allowable” costs it currently considers are woefully incomplete, as many commenters agree.

Sorenson continues to believe that the Commission should move away from a pure per-minute compensation system, which is a recipe for fraud. However, while Sorenson supports the per-user approach proposed by the Commission, Sorenson could also support the hybrid system suggested by the Consumer Groups, subject to certain conditions. As the Consumer Groups stated, such a system is fully consistent with long-standing regulatory principles that non-traffic sensitive costs should be recovered through fixed rates, and traffic sensitive costs should be recovered through variable rates. Such a system would reduce the incentive for fraud as long as the per-user component of the system would not provide a recovery markedly in excess of a provider’s interpretation costs. At the same time, the per-user element would encourage

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100 See Katz Declaration at Section III.
101 Id. at Section IV.
102 See ASL Holdings Comments at 10-11; Healinc Comments at 6.
103 See Consumer Groups Comments at 48-52.
providers to seek out and serve low-volume customers. However, for the hybrid system to be effective, the following must also be the case: (1) there are no compensation tiers for either the per-user or per-minute portion of compensation; (2) provision of the per-user and per-minute compensation for the default provider can be divorced (compensation for dial-around calls would necessarily go to multiple providers); (3) the per-user component represents a substantial portion of the compensation (all but the interpreter time); and (4) as with a pure per-user system, VRS users select only one default VRS provider for non-workplace use, across all of the user’s endpoints.

Finally, Sorenson agrees with the Consumer Groups that consumer choice must be maintained. That principle undercuts Purple’s appalling proposal that the Commission should adopt market-share caps. The necessary result of such an approach would be to prevent consumers from using their preferred provider in order to prop up other VRS providers that consumers would not choose if they had a free choice.

A. The Commission Must Adopt Rate Levels That Will Not Bankrupt Efficient VRS Providers or Cause Them to Degrade Their Service.

In its opening comments, Sorenson demonstrated that the current blended rate that it receives—$5.14 per minute—is the lowest rate that will sustain any efficient VRS provider actually providing service today. The Commission conducted a “natural experiment” that proved that point in June of 2010 when it slashed the Tier III rate, thus reducing Sorenson’s compensation dramatically. Although Sorenson took steps to avoid adverse effects on users, both because Sorenson prides itself on providing excellent service and because users will switch to other providers if they are dissatisfied with Sorenson’s service, the reduced compensation forced Sorenson to terminate many employees, resulting in an increase in Sorenson’s average.

104 See Sorenson Comments at 34.
speed of answer. Although Sorenson’s speed of answer remains competitive and well within the limits of the applicable rule, the Commission should be attempting to foster service that is functionally equivalent, and telephone users typically obtain a dial tone almost immediately. Sorenson is unquestionably the most efficient provider, so if Sorenson or other providers were compensated at a rate lower than $5.14 per minute, their speed of answer (or some other aspect of their service) necessarily will deteriorate, which would move the industry further from the statutory requirement of functional equivalence. Or they may be forced to reorganize or liquidate. The Commission does not need to conduct another natural experiment to prove that deaf, hard-of-hearing, and speech-disabled Americans would be harmed if the rate were reduced further.

Other providers confirm that conclusion. For example, ZVRS stated, with respect to the $4 per-minute rate referenced in Appendix C to the FNPRM, that “ZVRS and other providers will simply fail at that rate or anything remotely close to that level of compensation.”106 Convo similarly stated that “[n]o business can maintain its current customer service levels if it suddenly loses nearly 40% of its revenue.”107 As those statements demonstrate, the only alternative to failing would be to move away from providing functionally equivalent service, even though deaf, hard-of-hearing, and speech-disabled Americans are entitled to functionally equivalent service under section 225.108

105 Id. at 35.
106 ZVRS Comments at 8.
107 Convo Comments at 29.
108 It bears emphasis that unlike telecommunications services, where technological improvements drive down the cost of providing service over time, labor costs are a major component of VRS costs and there is no reason to believe they will decline. To the contrary, the costs relating to interpreters are likely to increase on a per-unit basis as the need for trained interpreters grows.
The other reforms the Commission proposes in the FNPRM will be of little importance if VRS providers are either put into bankruptcy or forced to degrade the quality of their service on account of the adoption of unreasonably low rate levels. Perhaps because the reduced rate levels mentioned in the FNPRM are in an appendix and would take effect a number of years in the future, they received relatively limited attention in the comments. But it is clear that adoption of such rate levels would have catastrophic effects. In addition, an order implementing a plan leading to such rate levels would have an immediate effect on the ability of VRS providers to obtain financing to continue to provide and improve their service, even if the plan called for reductions many years in the future, because potential sources of financing would doubt the continued viability of VRS.

B. The Commission Should Abolish Tiers.

The Commission demonstrated in the FNPRM that the use of tiers is inefficient and should be abandoned, and Professor Katz confirmed that analysis in his expert declaration. The Commission generously proposed a transition period during which providers may seek to attain “scale” and/or become more efficient. Much as Sorenson would prefer the immediate elimination of tiers such that all providers received the same compensation for providing the same service, Sorenson does not object to a reasonable transition period. It bears emphasis, however, that Professor Katz showed that at least two other providers—Purple and ZVRS—are currently “at scale” and should be able to reform their operations to provide service at the same compensation level as Sorenson in the near future.

109 See FNPRM ¶ 64; see also Katz Declaration at 11-13.
110 See Katz Declaration at 17.
Purple concedes that tiers should be eliminated and argues for a four-year transition.\textsuperscript{111} Sorenson proposed a transition of five years after the implementation phase is complete.\textsuperscript{112} The slightly longer transition that Sorenson proposed gives smaller providers somewhat more time to achieve minimum viable scale, after interoperability and consumer data portability standards are implemented, and the Commission establishes a “new-to-category” payment and support for broadband connections.

Convo similarly stated that “if the Commission ultimately determines to use a single tier, it should be implemented gradually over several years.”\textsuperscript{113} But Convo brazenly argues for a continued subsidy designed to prop up smaller providers. Indeed, it proposes to compensate Sorenson at one rate for all of its minutes of service and every other provider at a higher rate for all of their minutes of service.\textsuperscript{114} It even advocates calculating the division between the tiers by “split[ting] the gap between the average number of VRS minutes relayed monthly by Sorenson and the average number of VRS minutes relayed by the other, smaller providers.”\textsuperscript{115} Of course, neither Convo nor any other commenter has provided any evidence, reasoned analysis, or expert opinion indicating that a tiered system has any merit as a matter of economics or sound policy. Nor do they even attempt to explain that the Commission erred in the FNPRM in concluding that tiers are inefficient. They simply contend that they need a subsidy and, other than Purple, that they will need a subsidy indefinitely.

\textsuperscript{111} See Purple Comments at 3, 23-24, Exhibit 1.
\textsuperscript{112} See Sorenson Comments at 32.
\textsuperscript{113} Convo Comments at 33 n.86.
\textsuperscript{114} See \textit{id.} at 33.
\textsuperscript{115} \textit{Id.}
ZVRS advances a position similar to Convo’s. Even if its unmeritorious proposal to socialize Sorenson’s investment in technology were implemented (see pages 23-25, supra), ZVRS still seeks the use of two tiers to provide it with a subsidy.116 Unlike Convo, ZVRS does not baldly call for one rate for Sorenson and another for all other providers, but it seeks to achieve essentially the same result by proposing that the Commission should “widen” the tiers to ensure that all providers other than Sorenson receive a higher rate than Sorenson.117 What is most striking about all of these comments is their complete lack of even a pretense of economic rationality. That confirms the correctness of the Commission’s conclusion in the FNPRM that tiers should be eliminated.

C. The Commission Should Adopt a Price-Cap Regime and Abandon Cost-Of-Service Analysis.

The Commission properly proposed ultimately to rely on a price-cap regime to adjust compensation.118 Sorenson agrees with that approach. Sorenson does not understand other commenters to oppose the use of price caps, but their comments seem to assume that cost-of-service thinking will continue to play a major role in the establishment of compensation rates. That is not necessarily so. A major advantage of price caps is that a price-cap system provides an incentive for providers to become more efficient because providers earn larger profits by doing so. A regulator may periodically choose to study costs and consider reinitializing rates, but if done too frequently that undercuts the point of price caps—providers will know that if they become more efficient their compensation rate will be cut. Sorenson recommends revisiting

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116 See ZVRS Comments at 24.
117 Id. at 24.
118 See FNPRM ¶ 133.
rates no more frequently than every five years to provide stability and an incentive to become more efficient, and Professor Katz’s analysis supports such an approach.\textsuperscript{119}

Nor should the Commission set rates as an initial matter through the use of cost studies. As discussed above, the Commission conducted a “natural experiment” in 2010 and results show that the most efficient VRS provider cannot provide service at a rate of $5.14 per minute without increasing its wait time, thus moving farther from functional equivalency. Further reducing the rate to below $5.14 per minute or its equivalent would necessarily degrade service.

In any event, to the extent the Commission relies upon costs, it must account for all of the actual costs of providing VRS. The Consumer Groups recognize that the Commission must take research and development costs into account in any cost study in order to provide incentives to innovate.\textsuperscript{120} Similarly, they correctly state that brand name marketing is important to consumers because it “is a critical component of providing service since it allows VRS providers to more effectively reach their markets and allows them to educate potential customers by providing them with information that distinguishes their services from those provided by other companies.”\textsuperscript{121} And as Sorenson previously explained, VRS providers must pay all their taxes and raise money from lenders and/or investors.\textsuperscript{122} Those are real costs of providing service but are not “allowable” costs under the present system.

It is noteworthy, however, that the Commission intends to depart from prior practice and take account of technology costs.\textsuperscript{123} To the extent that cost-of-service analysis is used, this is an

\textsuperscript{119} \textit{See} Katz Declaration at 50-51.
\textsuperscript{120} \textit{See} Consumer Groups Comments at 30.
\textsuperscript{121} \textit{Id.}
\textsuperscript{122} \textit{See} Sorenson Comments at 34.
\textsuperscript{123} \textit{See} FNPRM App. C ¶ 15.
important adjustment. Videophones and other devices suitable for VRS are far more expensive than ordinary telephones, and deaf, hard-of-hearing, and speech-disabled Americans are on average much less affluent than hearing Americans. Yet the Commission until now has operated under the assumption that providers should not be compensated for providing free or discounted videophones. That error should not persist. Moreover, it illustrates the dangers of cost-of-service regulation. If Sorenson (and, more recently, other providers) had not provided videophones for VRS consumers to use without charge—even though the Commission did not “allow” such expenses—far fewer deaf, hard-of-hearing, and speech-disabled Americans would have the benefits of VRS.124

Accordingly, the Commission should move to a price-cap system in part because it would permit providers rather than regulators to determine how best to serve VRS users and get the Commission out of the business of trying to determine issues such as what type of equipment VRS users would prefer and how much should be spent on VRS equipment.

D. The Hybrid Approach Suggested by the Consumer Groups Warrants Serious Consideration.

Many of the other VRS providers argue for the continuation of a per-minute compensation system. To the extent they recognize that a per-minute compensation system that recovers costs that are incurred in non-traffic sensitive as well as traffic sensitive ways encourages minute pumping, they argue that the Commission’s recent reforms will remedy

124 Significantly, Sorenson obtained its large market share in part by taking the risky step of providing videophones for its customers to use without charge. Other providers could have done so. And if they had developed high-quality videophones and coupled that equipment with superior interpreting services, they would have larger market shares now.
matters. No doubt the recent reforms will help. But given the history of fraud and abuse, it would be most unwise for the Commission to retain a purely per-minute compensation system.

While Sorenson supports the Commission’s proposed transition to a per-user system, the hybrid model suggested by the Consumer Groups warrants serious consideration. As they explain, “[t]he Commission has a well-settled and long standing ratemaking policy that non-traffic sensitive costs should be recovered through non-traffic sensitive (fixed) rates and traffic sensitive costs should be recovered through traffic sensitive (per-minute) rates.” Moreover, a hybrid model would solve the potential problem of providers discouraging high-volume callers from using their service. The Commission could adopt rules prohibiting such discouragement, of course, but some forms of discouragement could be subtle and under a pure per-user regime providers could be tempted to try to find creative ways to limit their service to relatively low-volume users while staying inside the letter of the regulations.

However, to the extent the Commission uses a per-minute component in a hybrid model, the Commission should make sure that the per-minute component is the ancillary form of payment on account of the proven history of abuse by means of traffic pumping schemes. That is, if it adopts a hybrid system the Commission should—in establishing the initial per-minute component of the rate—limit that component to interpreters’ costs and closely related costs that are clearly and immediately traffic sensitive, as well as a reasonable return on VRS providers’ investments in those aspects of their service. In particular, ensuring a reasonable return on

125 See ASL Holdings Comments at 17-18; Convo Comments at 4-7; Healinc Comments at 5.
126 Purple’s recent practice of providing service to call centers employing VRS users illustrates that, despite the Commission’s efforts to eliminate fraud, a per-minute compensation system necessarily encourages schemes to unnaturally increase the number of VRS minutes. See Letter from Christopher J. Wright, Counsel to Sorenson Communications, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 10-51 & 03-123 (filed Mar. 23, 2012).
127 Consumer Groups Comments at 49.
interpreting should assure the Consumer Groups that VRS providers would continue to seek to
serve high-volume users. At the same time, however, it is important to ensure that providers do
not obtain profits that far exceed their cost of providing service plus a reasonable profit because
that would provide motivation to engage in minute-pumping schemes. This problem is best
addressed by ensuring that the per-user component remains substantial, as compared to the
compensation derived from the per-minute component. In that connection, the departure from a
pure price-cap model created by carefully examining the costs of providing interpretation
services is warranted when initializing the per-minute rate to prevent further abuse by means of a
method known to have been widely used. But all other costs should be recovered by means of a
per-user rate that need not rely on a cost-of-service methodology.

That is, if the Commission were to adopt a hybrid model it should use a modified version
of Sorenson’s prior proposal to set the initial price-cap rates. Sorenson proposed in its opening
comments that the Commission move from a per-minute model to a per-user model in a revenue
neutral manner. Thus, Sorenson proposed that the Commission should calculate the initial
per-user rate so that aggregate industry-wide compensation remained the same in the first month
following the conversion from a per-minute system to a per-user system. The same approach
could be used in a hybrid system with one modification. The Commission would first calculate a
lower per-minute rate designed to account only for interpreters’ costs, closely related costs that
are plainly traffic sensitive, and a reasonable return. The Commission would then calculate a
per-user rate by calculating the amount necessary to ensure total revenue neutrality immediately
after the switch to a hybrid compensation regime.

128 See Sorenson Comments at 31.
129 See id. at 31 & 53 n.115.
If the Commission had not yet eliminated tiers at the time of the implementation of a hybrid per-user/per-minute compensation structure, smaller providers (*i.e.*, not Purple or ZVRS, which are already at scale) could be compensated at a higher per-user rate that would be lowered gradually to a single rate, rather than creating tiers of both per-user and per-minute rates. Tiers should not be used even during the transition for the per-minute component in order not to encourage traffic pumping. But although Sorenson recognizes that tiers will be eliminated only gradually, Sorenson reiterates that arguments against the use of tiers in the FNPRM and the declaration of Professor Katz establish beyond any reasonable doubts that tiers must be completely eliminated at the end of a transition.

In addition, as discussed above in Section II.C, the Commission should not adopt ZVRS’s proposal to allow end users to select a default “access” provider and a separate default “interpreting” provider. In order to preserve the incentives to innovate with respect to all parts of VRS service, Sorenson supports a hybrid mechanism that does not forcibly unbundle the access platform from the rest of the VRS service.130

Finally, as discussed further below, in a hybrid rate structure, just as in a pure per-user rate structure, the Commission should compensate only one default VRS provider per end user for non-workplace use, and one default VRS provider per end user for workplace or enterprise use.

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130 ZVRS’s proposal to separate access services from interpretation services and compensate access services providers at a rate of $600 per year is defective in part because, by compensating access at such a low rate, it will be necessary to make the per-minute rate higher. A per-minute rate that recovers more than the cost of providing interpretation services and a reasonable profit will incent minute pumping.
E. In a Per-User or Hybrid Mechanism, the Commission Should Limit Compensation to One Default VRS Provider Per End User for Non-Workplace Use.

Purple and the Consumer Groups argue that if the Commission adopts a per-user compensation mechanism, consumers should be able to designate multiple accounts for per-user compensation. But none actually grapple with the practical implications of that proposal or articulate clearly why it would be necessary.131 Some argue that because hearing users can choose to have different providers for home, mobile and work, VRS users must also have the same choices.132 But this misconceives why hearing users choose multiple providers for non-workplace use, which is not applicable to VRS, and ignores the fact that VRS end users are making the functionally equivalent choice when selecting their underlying wireless or fixed wireline Internet access provider.

For hearing users, when they select a service provider, they generally are also selecting an underlying transmission network. When a consumer selects AT&T Wireless, for example, he is selecting the ability to call using AT&T’s physical transmission network of cell towers, radios and spectrum. The same is true when the consumer selects Verizon Wireless, T-Mobile, Sprint or any other wireless provider. The same is true when the consumer selects a fixed wireline provider, whether affiliated with or separate from the mobile wireless provider. These provider selections are separate because they each involve separate transmission networks: except possibly for “over-the-top” VoIP services, it is not possible to select a single voice-service provider that can operate across all access technologies.

131 See Sorenson Comments at 53-57 (describing the practical complexities and policy challenges associated with permitting multiple providers per end user).
132 See, e.g., Purple Comments at 9; Consumer Groups Comments at 42.
This is not the case for VRS, which operates entirely as an “over-the-top” service divorced from the underlying physical transmission network. A Sorenson user with an ntouch VP is accessing the same VRS as a Sorenson user with ntouch Mobile on an iPhone, iPad or Samsung Galaxy. With VRS, not only is it feasible to select a single VRS provider for both fixed and mobile, but the VRS end user is already making the functionally equivalent network selection when it selects its underlying wireless carrier and/or wireline Internet access provider. Functional equivalence does not require the Commission to permit the designation of multiple non-workplace default providers under a per-user or hybrid compensation mechanism.

F. Purple’s Outrageous “Market Caps” Proposal Should Be Rejected.

Purple proposes establishing rates through “a multi-winner bidding model with share caps” such that “no single provider of VRS should have more than a majority share.” Purple contends that a market cap is necessary because, otherwise, Sorenson would underbid all other providers—that is, Purple believes that “adoption of a reverse winner-take-all auction will result in the dominant provider becoming the sole VRS provider.” As an initial matter, that argument provides further support for Sorenson’s argument that the Commission should not reduce rates below $5.14 per minute or its equivalent because, as Purple evidently believes, no other provider could survive at a rate that Sorenson can accept, and even Sorenson had to increase hold times at that rate.

More fundamentally, however, Purple’s proposal is a brazen and outrageous infringement on consumer choice. Multiple providers currently offer service and users are free to choose among those providers. As Professor Katz explains in his declaration attached to these reply

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133 Purple Comments at 26.
134 Id.
comments, there is no merit to other VRS providers’ claims that Sorenson’s current market share resulted from anti-competitive practices or lock-in.\textsuperscript{135} Accordingly, any large market share attained by Sorenson is the result of decisions by consumers that they prefer Sorenson’s products and service and, as Professor Katz puts it, “[s]hare caps are a transparent attempt to stifle competition.”\textsuperscript{136} A market cap of 50 percent would necessarily mean that some consumers who prefer Sorenson would be forced to use another provider. Purple does not explain exactly how it would have the Commission force consumers to move from their chosen provider to another provider, but the Commission should not ask Purple to spell out its plan. The Commission in particular—and courts and economists in general—have long since moved away from the assumption that “big is bad,” and recognized that the goal should be to support competition rather than competitors.

An example illustrates the point. Apple’s iPad has proven to be a very popular product. Suppose a rival asked the Federal Trade Commission (“FTC”) to limit sales of iPads until competing tablet products obtained a particular market share. Or, more similar to Purple’s proposal, suppose the rival argued that the FTC should require a specified number of iPad users to turn in their iPads for some other tablet. Surely, such a proposal by Apple’s rival would be derided by one and all. Purple’s proposal warrants the same reception.

\textbf{IV. THE COMMISSION SHOULD IMPLEMENT COMMENTERS’ PROPOSALS RELATED TO SPEED-OF-ANSWER, SKILLS-BASED ROUTING, PREFERRED INTERPRETER SELECTION, AND ENABLING HEARING ASL SPEAKERS TO COMMUNICATE POINT-TO-POINT—but with certain limitations and protections.}

As Sorenson noted in its initial comments, it is committed to ensuring and protecting “the ability for an individual who is deaf, hard of hearing, deaf-blind, or who has a speech disability

\textsuperscript{135} Katz Reply Declaration at 9-18.

\textsuperscript{136} Id. at 18.
to engage in communication by wire or radio with one or more individuals, in a manner that is functionally equivalent to the ability of a hearing individual who does not have a speech disability to communicate using voice communication services by wire or radio.”¹³⁷ To that end, Sorenson supports commenters’ proposals to improve the user experience for both VRS and point-to-point communications with respect to speed-of-answer; skills-based routing; and enabling hearing ASL speakers to use point-to-point service, to the extent that such improvements are appropriately compensated and do not run contrary to the “functional equivalence” mandate.

First, Sorenson agrees with the Consumer Groups and Purple that the Commission should consider reducing the speed-of-answer requirement.¹³⁸ As the Consumer Groups aptly note, “[w]ithout prompt answer speed, there cannot be functional equivalence.”¹³⁹ Sorenson believes that requiring an average speed-of-answer of one minute or thirty seconds (measured on a monthly basis as proposed by the Consumer Groups and Purple respectively),¹⁴⁰ would enhance functional equivalence while still offering providers “the opportunity to exceed those standards and competitively differentiate themselves from competitors.”¹⁴¹ However, as Sorenson also

¹³⁷ 47 U.S.C. § 225(a)(3). See also 47 U.S.C. § 225(b)(1) (“In order to carry out the purposes established under section 151 of this title, to make available to all individuals in the United States a rapid, efficient nationwide communication service, and to increase the utility of the telephone system of the Nation, the Commission shall ensure that interstate and intrastate telecommunications relay services are available, to the extent possible and in the most efficient manner, to hearing-impaired and speech-impaired individuals in the United States.”); see also Sorenson Comments at 1-2.

¹³⁸ See Consumer Groups Comments at 11-12; Purple Comments at 17-18.

¹³⁹ Consumer Groups Comments at 12.

¹⁴⁰ Id. at 11-12; Purple Comments at 18.

¹⁴¹ Sorenson Comments at 81.
warned in its comments, speed-of-answer is directly affected by compensation levels.\textsuperscript{142} Thus, if the Commission adopts a lower speed-of-answer minimum standard, it must maintain a compensation level that enables VRS providers to meet that requirement, as well as all other mandatory minimum standards and discretionary quality-of-service enhancements.

Second, Sorenson would support a Commission decision authorizing skills-based routing. Specifically, Sorenson agrees with the Consumer Groups, RID, and Purple that skills-based routing—that is, enabling VRS users to request interpreters who are competent in the specialized vocabulary of areas like medicine, law, mental health, high tech, and science and engineering—would improve the user experience and advance functional equivalence.\textsuperscript{143} Sorenson already has systems in place that permit VRS users to select male or female interpreters,\textsuperscript{144} and believes that gender and skills-based routing is appropriate and consistent with providers’ “dial tone” role.\textsuperscript{145}

Sorenson does not believe, however, that skills-based routing should be mandatory; rather, it should be an optional feature that providers can elect to offer. Moreover, Sorenson cautions that interpreters with a particular linguistic skill may not be available when requested.\textsuperscript{146}

\textsuperscript{142} See id. at 35.

\textsuperscript{143} See Consumer Groups Comments at 9; RID Comments at 3, 4; Purple Comments at 18.

\textsuperscript{144} Recognizing that it may not always be possible to satisfy requests for a particular interpreter gender (only about 15 percent of interpreters are male), the Commission’s rules do not impose a blanket requirement to satisfy all gender requests. Instead, they require providers to “make best efforts” to do so. 47 C.F.R. § 64.604(a)(1)(vi).

\textsuperscript{145} If it adopts skills-based routing, the Commission should of course maintain critical privacy protections for interpreters. While some callers may learn that particular interpreters are capable of relaying calls the depend on certain specialized vocabulary, this should not be expanded in any way that would result in interpreters disclosing personal backgrounds, ethnicity, religious affiliations, educational backgrounds, or other personal information. Protections must be adopt to guard against this, as disclosing such personal details can result in interpreters feeling vulnerable or threatened.

\textsuperscript{146} In Sorenson’s experience, most ASL interpreters are generalists. While a small number may have some particular expertise, it is not reasonable to expect that an interpreter with requested skills will be available at any time. Accordingly, if the Commission were to adopt
Even when such an interpreter is available when requested, the Commission must clarify that the provider and the interpreter in no way guarantee error-free interpretation of the specialized conversation; rather, it should be made clear that the interpreter with a particular linguistic skill is handling the call in order to advance functional equivalence, but not as a guarantee of the accuracy of the interpretation.\textsuperscript{147} In addition, if the Commission adopts some form of skills-based routing, it must also adopt a compensation level that supports both the additional interpreter training that will be required for skills-based routing, as well as the technical changes to VRS providers’ call routing and user profile systems that will be necessary to implement such routing. Sorenson also echoes Purple’s caution that any “skill-based routing [must be] conditioned on a speed of answer exemption only for those calls which the customer proactively makes the choice to use an interpreter with those unique skills.”\textsuperscript{148} Finally, if the Commission mandates skills-based routing, the Commission must clearly define which particular skills (for example: legal, medical, mental health, high-tech, tax) a caller could request, as limitations will

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\textsuperscript{147} Sorenson anticipates that some VRS users will complain that an interpreter who was supposed to be skilled in a particular area did not effectively relay a specialized conversation. To address this, any skills-based routing rules must state clearly that providers and their interpreters do not guarantee the accuracy of skills-based interpretation but may offer the service as an enhancement that can advance functional equivalence.

\textsuperscript{148} Purple Comments at 18; See also Consumer Groups Comments at 11 (“The answer times for consumers that utilize a selected or preferred CA should not be subject to answer time calculations for purposes of meeting a minimum answer time service standard.”)
be necessary to enable providers to determine how to hire and train interpreters accordingly.\(^{149}\)

If the Commission only authorizes skills-based routing (as it should) without mandating it, these additional rules will not be necessary because VRS providers will be able to decide for themselves what skills-based routing options to offer as a way to attract customers in response to consumer demand. As explained in more detail below, Sorenson also cautions that the Commission should permit the “launch” of skills-based routing features only after it engages in a careful process in collaboration with providers and the Consumer Groups to identify appropriate parameters and the safeguards necessary to make the service effective and to stave off abuse.

Third, subject to the conditions noted below, Sorenson also agrees with the Consumer Groups and RID that providers should be permitted (but not required) to allow VRS users to select individual “preferred” interpreters as an optional enhancement to VRS service.\(^{150}\)

Permitting users to select individual interpreters could greatly enhance functional equivalence by allowing users to work with known and familiar interpreters. This would result in more fluid and natural conversations, since the interpreter and user would not need to devote any time or energy to learning the nuances of each other’s signing. It would also advance functional equivalence by permitting VRS users to select interpreters whom they believe best relay their conversations—a circumstance in which the interpreter more closely resembles an unobtrusive dial tone or transmission medium.

Certain problems related to preferred-interpreter selections are entirely foreseeable, and Sorenson’s support is therefore expressly conditioned on resolving these issues at a minimum. First, VRS providers should not be obliged to connect users to their preferred interpreter

\(^{149}\) The Commission could of course adjust the list over covered subjects over time to better meet the evolving needs of consumers.

\(^{150}\) See Consumer Groups Comments at 10; RID Comments at 3.
whenever requested; since interpreters obviously do not work 24 hours per day, and since they may be handling another call when a “preferred” request comes in, a user’s preferred interpreter often simply will not be available to relay a call.\textsuperscript{151} Second, as noted above with respect to skills-based routing, the speed-of-answer requirements should be waived whenever a user requests a specific interpreter. Third, and most importantly, providers’ interpreters must be permitted to create lists of “blocked” users—that is, a list of users who will never be connected to that particular interpreter—to protect interpreters from users who engage in patterns of abusive, harassing, or inappropriate calls.\textsuperscript{152}

In preparing these reply comments, Sorenson discussed with several Sorenson interpreters the idea of preferred-interpreter lists and requested their feedback. The interpreters themselves suggested a noteworthy alternative that would resolve many of the concerns noted above. Instead of allowing users to create a list of preferred interpreters, the Commission could consider permitting (but not mandating) a feature that allows users to create a list of blocked interpreters. At the end of a VRS call, the VRS user could indicate (without the interpreter’s knowledge) that the user was dissatisfied with the interpretation and would not like to use that interpreter again in the future. Going forward, that notation would automatically ensure that the user’s future calls are not routed to that same interpreter. This blocked-interpreter feature would

\textsuperscript{151} If it permits preferred-interpreter selection, the Commission should adopt rules clarifying that providers offering the enhancement are expected to meet requests for preferred interpreters only when the preferred interpreter is in fact available and only when routing a call to that preferred interpreter would not disrupt efforts to distribute call volume equitably among interpreters on duty. Moreover, providers should be permitted to continue making the staffing and resource allocation decisions that are critical to their operations, and the Commission should therefore not be permitted to review or audit providers’ staffing arrangements to assess whether or how a provider makes preferred interpreters available.

\textsuperscript{152} See Letter from Gil Strobel, Counsel for Sorenson Communications, to Marlene H. Dortch, FCC Secretary, CG Docket No. 03-123 (filed Aug. 8, 2008) (describing some of the abusive, harassing, and inappropriate conduct of some VRS end users).
be superior to a preferred-interpreter feature because, most notably, it would help protect against distorted call allocations among interpreters. Sorenson believes that a preferred-interpreter feature would result in many users identifying the same small subset of particularly skilled interpreters, which would overburden that group and distort staffing and call flow patterns. Since many of these most skilled interpreters would likely be among those with the particular capabilities useful for skills-based routing, a preferred-interpreter list would also undermine the utility of a skills-based routing feature—since individual users could effectively occupy all of those interpreters’ time by including them on their preferred lists. The blocked-interpreters alternative avoids these outcomes, because users would no longer be able to identify the specific interpreters they want to handle their calls.153

With respect to both skills-based routing and preferred-interpreter selections (or the blocked-interpreter alternative), Sorenson notes that it will take substantial time for the Commission and providers to work through the appropriate parameters for these enhancements and to identify and develop the safeguards that will be necessary for callers and interpreters alike. Accordingly, the Commission should not permit providers to launch these features immediately but should instead develop plans (or initiate proceedings) to work with providers and the Consumer Groups to identify appropriate contours and protections. Further consideration could take the form of a separate comment cycle to investigate the difficulties and complexities of offering skills-based routing and preferred-interpreter service (or the blocked- alternate).

153 A blocked-interpreter feature would only be useful, however, if users are limited in the number of interpreters they can block. Otherwise, users could attempt to block every interpreter other than a select few (essentially a back-door way of creating a preferred-interpreter list) or every interpreter whose appearance or demeanor does not satisfy some inappropriate or prurient interest. Sorenson therefore recommends that a blocked-interpreter list be capped at 20 interpreters. If a user finds more than that number of interpreters genuinely unsatisfactory, that is probably a good indication that the user should consider porting to another provider’s service.
interpreter alternative), or it could involve an industry/consumer working group with Commission involvement to explore the difficulties and complexities posed by such features. Once that process is complete—in perhaps eighteen to twenty-four months—providers could begin offering the enhancements.

Finally, Sorenson generally supports other commenters’ proposal to make point-to-point service available to hearing individuals who utilize ASL so that they can communicate more seamlessly with deaf, hard-of-hearing, and speech-disabled end users.\(^{154}\) This would of course advance functional equivalence by enabling direct person-to-person communication between a deaf ASL speaker and a hearing ASL speaker, and it could also generate some savings for the Fund as communications between these parties would no longer have to be routed through a VRS interpreter. Sorenson can support the proposal, however, only if it does not result in VRS providers bearing new costs without compensation—which is an important consideration since providers are not currently compensated for handling point-to-point calls. In particular, the Commission should not require VRS providers to provision numbers to hearing ASL users who want access to non-compensable point-to-point service, to ensure that those numbers are included in the iTRS Numbering Directory, to support emergency calling functionality for these hearing users, to provide other support to them beyond accepting a point-to-point connection to the VRS providers’ deaf, hard-of-hearing, and speech-disabled customers, or to bear the costs of billing and collecting service fees from hearing end users. Instead, the Commission should explore ways in which these functions can be performed by the hearing ASL users’ current numbering providers—that is, the local exchange carriers, interconnected VoIP providers, and

\(^{154}\) See, e.g., Consumer Groups Comments at 27-29; Purple Comments at 19.
wireless providers that already support the hearing users’ numbering needs and already have
direct billing relationships with them.

V.  **TO FACILITATE PROGRAM ADMINISTRATION, THE COMMISSION SHOULD DEVELOP A**
**VRS USER DATABASE PROTECTED BY ROBUST PRIVACY SAFEGUARDS.**

As detailed in its comments, Sorenson supports the implementation of a new VRS User
Database.\(^{155}\) In particular, a VRS User Database would be a critical element in any
compensation mechanism which has a per-user component. Whether compensation is based on a
flat per-user rate or a hybrid model, a VRS User Database would be vital to reducing
administrative barriers and rooting out fraud, waste, and abuse. Nearly every provider has
expressed broad support for the development of a VRS User Database.\(^{156}\) Yet, Sorenson, like the
Consumer Groups, recognizes that the creation of a VRS User Database raises privacy concerns
for VRS users. Thus, Sorenson reiterates its position that the creation of a VRS User Database
must be coupled with robust safeguards to protect the privacy of VRS users and assure that the
information retained in it is treated with the utmost care.

As the Commission recognized, there are several advantages to a VRS User Database.\(^{157}\)
Chief among these advantages is facilitating the administration of a compensation mechanism
that is based to any extent on per-user payments. As Sorenson noted in its comments, the
effective administration of per-user compensation would present insurmountable hurdles without
a centralized database of VRS users.\(^{158}\) The same is true for a hybrid compensation mechanism,

\(^{155}\) Sorenson Comments at 58-61.

\(^{156}\) See VRS Providers Joint Letter; Purple Comments at 11; Healinc Comments at 8; ASL
Holdings Comments at 18 n.28.

\(^{157}\) See FNPRM ¶ 68.

\(^{158}\) Sorenson Comments at 56-60.
as users must again be uniquely identifiable in a rational manner that would enable providers and the TRS Fund Administrator to prevent duplicative payments for a single end user.

The proposed VRS User Database is widely supported by other VRS providers. Indeed, several providers, including Sorenson, submitted a letter supporting the creation of a VRS User Database in order to better calculate the number of VRS users and provide increased transparency in the VRS market.\(^{159}\) While Sorenson sees the principal advantages of a national database to be the effective administration of the TRS Fund, Sorenson agrees that a better understanding of the VRS market is an important corollary to effectively administering the TRS Fund. However, Sorenson fundamentally disagrees with the proposition that the database should in any way provide the industry with information about consumers.\(^{160}\) To the contrary, the Commission should implement a VRS User Database only if it also includes robust protections, including data firewalls that prevent providers from obtaining any information (on an individual or aggregated level) about another provider’s customers. While there are valid reasons to enable providers to access and (if necessary) correct their own customers’ information, this information should otherwise be well protected and used only for the effective administration of the TRS Fund.

As such, Sorenson reiterates its belief that it is crucial for the Commission to establish robust safeguards to protect VRS users’ data. Sorenson agrees with the Consumer Groups that data protection measures regarding access must be in place before a VRS User Database is created.\(^{161}\) To that end, Neustar notes that if it were to expand the iTRS Database to become the envisioned VRS User Database, Neustar could extend the high level of security currently in

\(^{159}\) See VRS Providers Joint Letter.

\(^{160}\) See, e.g., Purple Comments at 11.

\(^{161}\) See Consumer Groups Comments at 45.
place for the iTRS Database to the new database. Sorenson supports this level of security, subject to an additional layer of protection preventing providers from conducting reverse number look-ups. That functionality exists in the iTRS Database today, and Sorenson has petitioned the Commission to direct Neustar to disable it.

VI. THE COMMISSION SHOULD ADOPT MEASURES TO INCREASE VRS AWARENESS AMONG THE HEARING POPULATION AND TO EXPAND VRS PENETRATION IN THE DEAF, HARD-OF-HEARING AND SPEECH-DISABLED COMMUNITY.

As explained below, Sorenson supports the creation of an independent outreach entity that educates the general public about VRS, provided that VRS providers retain responsibility for outreach to the deaf, hard-of-hearing, and speech-disabled community. In addition, to increase VRS deployment to currently unserved deaf, hard-of-hearing, and speech-disabled households, Sorenson supports the creation of a new-to-category incentive-payment system that rewards all providers for recruiting new users. The fact that other commenters oppose these payments says little about the merits of such a program, and instead reveals only that they are focused on poaching customers already served by other providers (principally Sorenson), not on improving the welfare of the deaf, hard-of-hearing, and speech-disabled community as a whole by locating currently unserved customers.

A. Sorenson Supports an Independent Outreach Entity Focused on Marketing to the General Public.

As Sorenson stated in its comments, an independent outreach entity focused on educating the general public about TRS would further the goal of providing functionally-equivalent

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162 See Neustar Comments at 3.
VRS. Sorenson also reiterates, however, that it supports an independent outreach entity only if it focuses exclusively on educating the general public about VRS, as providers themselves are far better equipped to reach the deaf, hard-of-hearing, and speech-disabled community.

Other commenters generally share Sorenson’s support for enlisting a third party to conduct outreach to the general public. For instance, the Consumer Groups “ask the Commission to fund outreach efforts to educate the hearing population regarding the availability and use of all forms of relay services.” ZVRS similarly notes that “the FCC has a critical role in ensuring that outreach to the hearing public occurs so that they understand the purpose of the relay program and do not refuse calls made over relay.” And Purple offers detailed suggestions for specific outreach to the general public to “educat[e] the nation about the availability of iTRS services and remind[] the public about the importance of not hanging up on relay calls.”

If the FCC moves ahead with enlisting an independent third party to conduct outreach, Sorenson reiterates that this effort to educate the general public should not be used as a pretext for reducing compensation to VRS providers. Even with the existence of an independent outreach entity, VRS providers will continue to play the central role in conducting outreach activities to reach the deaf, hard-of-hearing, and speech-disabled community; independent outreach to the general public will not reduce providers’ costs. Instead, the Commission should

164 See Sorenson Comments at 21.
165 Consumer Groups Comments at 5.
166 ZVRS Comments at 47.
167 See Purple Comments at 21.
consider independent outreach to be a new and complementary effort that would greatly increase the general public’s understanding of TRS and reap dividends for functional equivalence.

B. Sorenson Supports New-to-Category Incentive Payments, While Other Commenters’ Opposition Reveals That Their Recruitment Efforts Focus Exclusively on Poaching.

As a provider that is committed to providing VRS to unserved deaf, hard-of-hearing, and speech-disabled individuals, Sorenson supports the Commission’s proposed new-to-category incentive payments, as long as those incentives are offered to providers on a non-discriminatory basis. Non-discriminatory new-to-category incentive payments would serve as an effective means for expanding VRS penetration and providing functionally equivalent service to eligible users who currently lack the life-changing services. Sorenson agrees with the Consumer Groups that “the Commission’s proposal to provide a new-to-category payment . . . could effectively award providers for increasing outreach activities to unserved deaf and hard of hearing consumers.” Sorenson also reiterates its firm opposition to any incentive payment system that would exclude Sorenson.

Sorenson is disappointed, but not surprised, that even given the Commission’s discriminatory proposal—which would permit incentive payment to all VRS providers except for Sorenson—other providers nearly uniformly oppose new-to-category incentive payments that would reward the expansion of VRS to unserved users. Opposition to such a proposal can be explained only by that fact that other providers’ business models are built on poaching consumers who already use another provider’s service (primarily Sorenson’s), rather than expanding overall access to VRS.

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169 See Consumer Groups Comments at 31.
170 See Sorenson Comments at 14-16.
171 See FNPRM ¶ 38.
For instance, Purple notes that “[p]roviders should be motivated to expand the market simply through the economics of the per-minute or per-user models and to make profits through those mechanisms alone,” yet it offers no support for the proposition that it expends any resources on, or has been successful in, expanding the overall VRS market.\textsuperscript{172} ZVRS opposes the proposal as “unworkable and inadvisable”\textsuperscript{173} because of the difficulties it sees with validating new-to-category users. But its rationale is curiously at odds with its support for a VRS user database that, ZVRS acknowledges, would “support[] the ability to clearly identify eligible VRS users and associate with a single individual all of his or her phone numbers and choices of providers.”\textsuperscript{174}

As Sorenson explains in Section V above, a VRS User Database, would effectively reduce the administrative burdens related to identifying new-to-category users, as well as combat fraud, waste and abuse. And as Neustar noted, the type of “data contemplated for inclusion in the database”—including “allowing for the identification of new-to-category users”—“could easily be added to the iTRS Directory currently administered by Neustar.”\textsuperscript{175}

\section*{VII. Sorenson Concurs That Providers Must Employ Only Well-Qualified Interpreters, But Requiring NAD-RID Certification (or Any Other Specific Certification) Would Degrad Service Quality and Raise Provider Costs.}

Sorenson also concurs with the Consumer Groups that ensuring highly skilled interpretation is critical to the goal of achieving functional equivalence.\textsuperscript{176} Moreover, Sorenson

\begin{itemize}
\item \textsuperscript{172} See Purple Comments at 21. Indeed, as noted in n.126 above, Purple appears to have decided to grow its business not by locating currently unserved consumers, but instead by employing VRS end users in call centers.
\item \textsuperscript{173} ZVRS Comments at 46-47.
\item \textsuperscript{174} Id. at 31.
\item \textsuperscript{175} Neustar Comments at 2.
\item \textsuperscript{176} See Consumer Groups Comments at 11.
\end{itemize}
also agrees that interpreters who have been certified by reputable organizations like RID are often highly qualified and provide excellent interpretation.\textsuperscript{177}

That said, requiring NAD-RID certification for all VRS interpreters would be counterproductive, and Sorenson therefore opposes the proposal. There are several reasons that requiring NAD-RID certification (or any particular certification) would disserve consumers and increase costs. As a practical matter, many states—including Texas and Michigan—currently require ASL interpreters to meet a different certification standard.\textsuperscript{178} Imposing a new NAD-RID certification requirement on them would effectively prevent long-established and highly skilled interpreters from working for VRS providers.\textsuperscript{179} While those established interpreters could conceivably take the largely bureaucratic step of attempting to obtain NAD-RID certification as well, the certification process is expensive, time-consuming, and, as Sorenson understands it, will soon require prospective certificate holders to earn a bachelor’s degree to become certified (even though holding a BA has no connection to someone’s ability to interpret). These substantial hurdles will undoubtedly prevent many prospective interpreters and also many currently working (but not NAD-RID certified) interpreters from obtaining the certification such a rule would require.

Of course, imposing a narrow certification requirement of any kind would immediately shrink the pool of potential VRS interpreters. The principles of supply and demand dictate that

\textsuperscript{177} See id.; RID Comments at 3, 4.
\textsuperscript{178} Texas and Michigan require interpreters to be certified by the Board for Evaluation of Interpreters (“BEI”).
\textsuperscript{179} An example illustrates this point. One of Sorenson’s most valued interpreters is based in Texas and is BEI-certified. Since she is not NAD-RID certified and does not have a bachelor’s degree, however, imposing the proposed certification standard would require Sorenson and this interpreter to part ways, at least until she decides to bear the expense and burden of earning a college degree and navigating the NAD-RID certification system—which is an effort that would serve the interests of no one outside of NAD-RID.
this would result in higher interpreter compensation which, of course, would strain providers (and, indirectly, the TRS Fund itself). This unnecessary burden would fall heavily on all providers, as there is a very modest number of NAD-RID certified interpreters, and many of them are already employed by VRS providers. Moreover, requiring VRS providers to seek interpreters only from this smaller pool of potential candidates would, by definition, mean that fewer of these interpreters would be available to fill other interpreting needs in their communities, which would negatively impact deaf, hard-of-hearing, and speech-disabled individuals more broadly.

Moreover, the Commission must recognize that there simply are currently not enough NAD-RID-certified interpreters in the world to handle existing VRS call volumes. Imposing a certification requirement would surely be a boon for the certifying agencies, but it would also generate huge backlogs as multitudes of currently non-NAD-RID-certified (yet often highly skilled and already working) interpreters would simultaneously seek to become certified by NAD-RID. As a result, if the Commission adopts any kind of certification requirement (which, again, it should not), it must phase the requirement in very slowly over a period of years and it must accept several credible and valid certification options rather than require all VRS

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180 In effect, a narrow certification requirement would give a single certifying body absolute monopoly control over the supply of interpreters—which is a perilous prospect considering that interpreters are one of the most important elements of VRS. Because it would be the gatekeeper for all VRS interpreters, the sole certifying body would find itself able to charge almost any price for its certification services, as providers and interpreters alike would have no alternative.

181 The possibility of certification delays and application logjams (and, as a result, underserved consumers) would be particularly severe if the certification body postpones testing or puts the testing programs on hold, as NAD-RID it has done in the past. Indeed, NAD-RID has in the past changed its certification and testing requirements, which has forced some applicants to wait for months to learn their results. Moreover, on one occasion in the past, NAD-RID found itself with such an extreme backlog of pending certification applications, with waits of up to 18 months, that it solicited donations from Sorenson (and perhaps from other providers as well) to enable it to hire more evaluators to process the applications.
interpreters to be certified by a single body; otherwise, there simply will not be enough “compliant” interpreters to relay VRS calls.182

In addition, while NAD-RID certification often signals that an interpreter is highly skilled, that is not always the case. Sorenson has hired many NAD-RID certified interpreters and has generally been pleased with their interpreting, but it has also found that many NAD-RID certified individuals simply do not have the interpreting skills that Sorenson requires.183 (Notably, Sorenson has learned that many of the NAD-RID certified applicants it has rejected due to inadequate skill have gone on to work for Sorenson’s competitors.) Taken together, these concerns reinforce Sorenson’s view that Sorenson itself is best situated to locate, hire and train the skilled interpreters it needs. While NAD-RID certification (or other specific certifications) can often help in identifying qualified interpreters, it is not a foolproof shortcut for ensuring that providers employ only high quality VRS interpreters.

NAD-RID certification alone cannot fully prepare someone to work as a VRS interpreter. Indeed, Sorenson has found that every new interpreter it hires (whether NAD-RID certified or

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182 Requiring NAD-RID certification would also likely open the door to an entirely new grievance process. While VRS users can currently complain to their providers and also to the Commission if they are unsatisfied, a rule requiring NAD-RID certification for all interpreters would create a new administrative burden for providers and interpreters as complaints could also be filed with NAD-RID asserting violations of the organization’s code of conduct. This could result in NAD-RID seeking access to call data, personnel records, and other sensitive information that should remain subject to robust protections, and it would also result in delay and expense as it is Sorenson’s understanding that NAD-RID grievance processes can take up to a year to resolve.

183 Sorenson notes in addition that NAD-RID does not certify bilingual and trilingual interpreters. As a result, imposing a NAD-RID certification requirement would completely undermine providers’ ability offer ASL-to-Spanish VRS and it would effectively terminate VRS employment options for the interpreters who currently handle those calls. (The majority have Sorenson’s ASL-to-Spanish interpreters are not NAD-RID certified even for ASL-to-English interpretation, and they would therefore lose their qualification overnight if the certification requirement were imposed.)
Adopting the proposed certification requirement would suggest that the Commission believes that a stamp of approval from the certifying body means an interpreter is automatically qualified to relay VRS calls, but Sorenson’s experience demonstrates that this is simply not the case.

Accordingly, Sorenson reiterates its view that a national certification requirement is not necessary or advisable, and that there is no basis for adopting specific training or certification qualifications that differ from the requirements currently set forth in the Commission’s rules. Rather, Sorenson believes that VRS interpreter quality and training is an important area in which providers can differentiate themselves from one another. There is no need to artificially level the playing field through the imposition of national certification requirements. Sorenson is proud of its robust, in-depth in-house training program and its superior interpreter quality, and believes that other providers could similarly increase their in-house training and recruiting programs to attract and provide high-quality VRS interpreters that users expect and demand.

VIII. Sorenson Agrees That The Commission Should Establish a Blue Ribbon Advisory Panel Composed of Representatives From All Stakeholders.

Sorenson reaffirms its general support for the formation of a “blue ribbon’ advisory committee to address VRS issues.” Like many other providers and the Consumer Groups,

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184 To ensure that all of its interpreters are fully capable of interpreting VRS calls, Sorenson has created its own dedicated training team and training materials. Sorenson has found that its training program is necessary for virtually all new interpreter hires, including those who come to the job with NAD-RID certification or other forms of certification. Among a large range of topics, Sorenson trains its interpreters on interpreting automated messages, handling conversations related to drugs and pharmaceuticals, finger-spelling and numbers, legal issues in VRS, maximizing visual gestural skills, and semantic equivalence in ASL.

185 See Sorenson Comments at 80-81.

186 Id.

187 See id. at 81 (discussion of Sorenson’s interpreter training program).

188 VRS Joint Providers Letter at 2.
Sorenson agrees that a VRS advisory board or working group composed of interested stakeholders could assist the Commission in its efforts to ensure that the VRS program remains efficient and viable as the Commission moves forward with its reform efforts. Sorenson’s support for establishing such a panel is conditioned, however, on a requirement that all providers are entitled to participate fully and on the adoption of measures to ensure that blocs of like-minded stakeholders are barred from preventing others from making their views known.

Sorenson’s concerns in this regard are not merely hypothetical. The Interstate TRS Fund Advisory Council—a group generally tasked with providing input related to administration of the TRS Fund—is composed of representatives from a subset of industry stakeholders. Representatives from only two providers—who are elected by all providers—serve on the council at any one time. While a Sorenson representative routinely seeks one of the two “provider” seats on the council, its competitors have blocked the candidacy every time, effectively denying Sorenson a voice. To avoid a similar problem with the proposed “blue ribbon” panel tasked with advising the FCC on its proposed reforms, the Commission should ensure that measures are in place to guarantee that all interested stakeholders have a seat at the table and an opportunity to participate fully.

IX. Conclusion

As set forth in Sorenson’s opening comments, Sorenson supports the Commission’s proposed transition to a per-user compensation system, as well as the elimination of inefficient rate tiers from the VRS compensation regime. But reform of the compensation system, like all VRS reforms, must be undertaken with the goal of achieving true functional equivalence between relay service and hearing service. Functional equivalence requires strong consumer

189 See id.; ZVRS Comments at 30-31; Convo Comments at 17-19.
protections, such as anti-slamming and CPNI rules, and improvements to the user experience, such as improved speed of answer, and allowing skills-based or interpreter-preference based routing. But functionally equivalent services cannot be built amid the rubble of a financially-ruined VRS industry—which is exactly what would result if the FCC were to adopt the rate level proposals in the FNPRM.

Respectfully submitted,

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March 30, 2012
Appendix A

REPLY COMMENTS REGARDING VRS POLICY REFORM

Declaration of Michael L. Katz
REPLY COMMENTS REGARDING VRS POLICY REFORM

Declaration of Michael L. Katz

March 30, 2012
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I. INTRODUCTION AND OVERVIEW

1. At the request of counsel for Sorenson Communications, Inc., I conducted an economic analysis of the likely effects on consumer welfare and the attainment of the Commission goals of several proposals to reform the VRS program. My broad conclusion was that the Commission’s fundamental approach to promoting consumer welfare in the VRS marketplace should be to promote undistorted competition. Rather than trying to impose a particular structure and vision on market participants, the Commission should adopt policies that promote undistorted competition. Doing so will be more efficient and will create improved incentives for providers to serve all eligible users.

2. My specific findings were the following:

- 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.

- A cost-based compensation system stifles innovation and promotes inefficiency.

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• Compensation rates should be set using an “incentive-regulation approach” that incentivizes providers to invest in quality and to lower costs.
  
  o The base, or initial, compensation rate should be set sufficiently high to encourage an efficient provider to compete by offering high-quality services to users.
  
  o In order to preserve investment and innovation incentives, compensation rate adjustments over time should not seek to recapture all of the gains associated with increased provider efficiency.
  
  o The compensation rate should be reviewed periodically. However, doing so too frequently would create program risk that could raise providers’ cost of capital and discourage investment in VRS.

• Excessive or overbroad standards can stifle product variety and innovation, thus denying deaf and hard-of-hearing users access to the most advanced technologies and attractive services.

3. I have been asked by counsel for Sorenson Communications, Inc. to conduct an analysis of the central economic arguments made in filings submitted in this proceeding contemporaneously with my previous declaration.2 Briefly, my findings regarding these arguments are the following:

2 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.
• Comments filed by other providers support my conclusion that economies of scale in the provision of VRS are limited. ZVRS provides evidence that interpreter costs and many other costs—including most of the costs associated with call centers—vary with service volume, and that the fixed costs associated with providing VRS services are small and not a source of significant scale economies

• Claims made by Sorenson’s rivals that Sorenson engages in anticompetitive lock-in have no basis in economic logic and are contradicted by the facts. Evidence cited by other VRS providers indicates that Sorenson’s business model led to substantial growth in the industry and benefited deaf and hard-of-hearing users as well as other people who communicate with them. Furthermore, despite Purple’s claims that actions taken by Sorenson prior to 2006 gave it an unfair advantage that persists today, more than half of Sorenson’s customers chose Sorenson after the Commission prohibited the practices that Purple objects to. Market data thus demonstrate that these practices are not a major driver of Sorenson’s success. There is also no evidence that advanced features that Sorenson currently offers its customers create lock in. Rather, the evidence suggests that Sorenson achieved and maintained its current market position by offering an attractive product to consumers.

• Purple’s proposal to cap the market shares of successful providers would reduce VRS availability and harm competition, consumers, and program efficiency. Purple’s arguments in support of the market-share cap confuse: (a) the competitive effects of mergers, which may, in some cases, harm consumers, with (b) the effects of organic
growth, which indicates that the growing firm is benefiting consumers. Market-share caps would benefit Sorenson’s rivals at the expense of consumers.

- **ZVRS’ proposal to separate equipment from interpreting services fails to account for the realities of efficient VRS provision, and—if implemented—would run the risk of stifling innovation, reducing availability and, thus, harming consumers and program efficiency.** Setting compensation rates specifically for equipment would be very difficult, and any rate that did not adequately account for the risky nature of investments made to develop high-quality equipment would dampen incentives to innovate.

- **Requiring off-the-shelf equipment would harm consumers by denying them the benefits of competition.** The history of VRS indicates that consumers benefit when providers compete to offer attractive equipment regardless of whether it is proprietary or off-the-shelf. Moreover, the widespread risk of off-the-shelf equipment could threaten interoperability absent broad cooperation.

4. 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 DEMONSTRATE THAT ECONOMIES OF SCALE IN THE PROVISION OF VRS ARE LIMITED**

5. My earlier declaration cited evidence that: (a) interpreter costs and many other costs—including most of the costs associated with call centers—vary with service volume and are not subject to significant economies of scale beyond a relatively low threshold, and (b) the fixed costs associated with providing VRS services are small and not a source of significant scale
economies. Hence, economies of scale are exhausted at a sufficiently low level that a compensation scheme with a single rate could induce an industry structure that promotes quality competition without over-compensating the largest providers. As I will now discuss, comments filed by other parties corroborate this analysis.

6. The fact that the vast majority of the costs of providing VRS are variable was also described by ZVRS, which stated in its comments that:

… for all providers, big or small, as usage increases, more interpreters have to be hired, more equipment has to be bought, additional call centers have to be opened, and more human resources personnel and management must be hired. 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. More telephone trunks must be ordered and larger internet access lines must be in place. The key driver of all of these costs is traffic, the actual minutes of VRS use.

7. Interpreter costs are the largest expense incurred by VRS providers and, thus, merit particular attention. As ZVRS put it:

All other necessary expenses pale in comparison to the interpreter costs. This is true without regard to whether a VRS provider is servicing five thousand minutes of VRS per month or five million minutes a month. Interpreter costs are directly related to the amount [sic] of minutes a VRS provider handles.

8. ZVRS puts forth an example of the interpreter costs of a provider attaining a 50 percent utilization rate for interpreters, while asserting a “non-scale” provider typically will

\[\text{footnote}

3 Katz Declaration, § III.B.
5 Id. at 6.
achieve only 30 percent utilization. In my earlier declaration, I analyzed an Erlang model, which showed that interpreter economies of scale are exhausted at a low percentage of industry output. Although there may be some VRS providers with both low traffic volumes and low rates of interpreter utilization, it does not follow that there is a causal relationship. For reasons explained in my earlier declaration, the Commission must be careful not to mistakenly infer the existence of economies of scale from the existence of variation in costs across firms; the latter may well be driven by differences in management and past investment.

Next, consider the additional evidence that other fixed costs are limited and, thus, do not generate large economies of scale. As I demonstrated in my earlier declaration, although management and administration costs give rise to some economies of scale, the magnitude is very likely small in part because some management and administration costs almost certainly grow as traffic volume increases and, thus, do not generate economies of scale. ZVRS’s comments support the finding that G&A costs are not fixed. In addition to the quotation cited in paragraph six above, ZVRS stated that “[a]s size increases, G&A costs increase, but at a slower pace, until economies of scale are reached.”

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6 Id. at 6 and note 7.

In my earlier declaration, I referred to the average percentage of time that each interpreter is actively engaged in handling a call as VRS efficiency.

7 Katz Declaration, § III.B.1.

8 Id., § III.B.5.

9 Id., § III.B.4.

10 ZVRS Comments at 10.
10. ZVRS also cites record evidence indicating that any economies of scale due to the presence of fixed costs must be small. In particular, ZVRS states\textsuperscript{11} 

Although we support continuation of tiered rates, the evidence of record, specifically the record that led to the adoption of the 2010-11 VRS rates, now shows that contracting the tiers from three to two would better align compensation to costs. That evidence showed that small and medium size providers have substantially similar cost structures; hence the Commission adopted for compensation of VRS in 2011-2012 Tier I and Tier II rates which varied by only .0055 cent per-minute \[sic\]. [Internal footnotes omitted.]

The actual difference is .0055 dollars per minute, but even this corrected level implies that the size of any fixed costs must be very small indeed.

11. A simple algebraic analysis demonstrates why. Assume that the total cost incurred by firm $i$ is equal to $F + mx_i$, where $F$ indicates fixed costs, $m$ is the marginal cost per minute of traffic provided, and $x_i$ is the number of minutes provided by firm $i$. The provider’s average cost per minute is equal to $m + F / x_i$. The Commission chose rates intended to compensate a provider with less than 50,000 minutes as well as a provider with between 50,000 and 500,000 minutes. If the Commission analysis is correct and the Commission is providing reasonable compensation, then the implied fixed costs are negligible. To see this, consider the average costs per minute of a provider serving 50,000 minutes per month relative to a provider serving 225,000 minutes per month. If the per-minute compensation for these two providers is designed to be equivalent, then $m + F / 50,000 = m + F / 225,000 + .0055$, which

\textsuperscript{11} Id. at 24.
implies $F = 353.57 \). In fact, the fixed costs of being a VRS operator are greater than $354 per month. Nevertheless, this calculation shows that the Commission’s analysis implies that fixed costs are low.

12. Purple estimates that it has an 11 percent share of the market. This market share corresponds to almost one million minutes per month. As I showed in my initial declaration, providers operating at this scale can achieve the vast majority of the benefits of scale economies. For example, a firm operating at one million minutes per month could achieve 98.8 percent of the potential queuing efficiencies associated with the scale of interpreter operations. Moreover, in my initial declaration, I introduced a model to calculate an upper bound on administrative fixed costs. Using the resulting upper-bound estimate that 41 percent of administrative costs are fixed, a provider accounting for 11 percent of VRS minutes would have total costs per minute just 6.3 percent higher than a hypothetical firm operating at a scale equal to 100 percent of the minutes in the VRS marketplace. My earlier analysis of administrative costs, coupled with the quotations of ZVRS’s comments in paragraphs six and

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12 Although this calculation is an approximation, a wide range of alternative assumptions supports the same fundamental conclusion that fixed costs must be small.


15 Katz Declaration, § III.B.

16 Id., § III.B.4.
nine above suggest that actual percentage of fixed costs may be lower.\textsuperscript{17} Under the alternative assumption that 30 percent of total administrative expenses are fixed, a provider accounting for 11 percent of VRS minutes would have total costs per minute just 4.5 percent higher than a hypothetical firm operating at a scale equal to 100 percent of the minutes in the VRS marketplace.\textsuperscript{18}

\textbf{III. SORENSON’S COMPETITORS MAKE ALLEGATIONS OF ANTIMONOPOLISTIC BEHAVIOR THAT ARE CONTRADICTED BY MARKET FACTS AND ECONOMIC LOGIC}

13. Purple attacks what it calls “Sorenson’s improper accumulation of market share.”\textsuperscript{19} Similarly, ZVRS contends that “one provider has amassed a dominant market share as a result of systematic anticompetitive behavior.”\textsuperscript{20} However, Purple’s and ZVRS’s claims are not supported by either economic logic or available data.

\textbf{A. CLAIMS OF ANTIMONOPOLISTIC CONSUMER LOCK-IN ARE BASELESS}

1. \textit{Industry history demonstrates that lock-in is not responsible for Sorenson’s success.}

14. According to Purple, “Sorenson became the dominant provider through unfair practices that were ultimately prohibited by the Commission.”\textsuperscript{21} Specifically, Purple asserts that Sorenson’s policy of offering consumers free, specialized access equipment with a “tight

\begin{itemize}
\item \textsuperscript{17} \textit{Id.}
\item \textsuperscript{18} \textit{Id.}
\item \textsuperscript{19} \textit{Purple Comments} at 4.
\item \textsuperscript{20} \textit{ZVRS Comments} at 46. Elsewhere, ZVRS identifies Sorenson as the “dominant” VRS provider. (\textit{Id.}, note 41.)
\item \textsuperscript{21} \textit{Purple Comments} at 7.
\end{itemize}
linkage” to its VRS beginning in 2003 was anti-competitive and that the Commission prohibited these practices in 2006.\textsuperscript{22, 23} As I will now show, the equipment policies that Sorenson adopted when it entered the market (a time at which it manifestly lacked market power or any advantage of lock-in), benefited consumers. Moreover, more than half of Sorenson’s customers began patronizing Sorenson only after 2006. In other words, Sorenson’s current market position is due to the fact that it offers consumers superior value while being paid a lower average compensation rate than are any of its rivals.

15. First, consider Sorenson’s entry strategy. Purple’s and ZVRS’s predecessor companies were already offering VRS without great success when Sorenson entered the market and began to offer VRS in 2003.\textsuperscript{24} ZVRS’s comments explain how Sorenson benefitted deaf and hard-of-hearing consumers:\textsuperscript{25}

\begin{quote}
The phenomenal growth and acceptance by deaf and hard of hearing persons of VRS did not occur until the widespread availability of videophone equipment
\end{quote}

\textsuperscript{22} Purple Comments at 6 and 7.

\textsuperscript{23} Purple goes further and claims that the Commission recognized that Sorenson’s actions were anti-competitive. The Commission did not, in fact, find that Sorenson was engaged in such practices or any form of anti-competitive behavior. Indeed, the Commission explicitly highlighted the competitiveness of the industry, stating “[t]he growth in minutes and the number of providers has contributed to a competitive VRS environment and marketing plans by the providers seeking to increase their minutes and market share.” [Footnote omitted.] (Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket No. 03-123, Declaratory Ruling and Further Notice of Proposed Rulemaking, May 9, 2006, (hereinafter 2006 Declaratory Ruling) ¶¶ 13, 29.)


\textsuperscript{25} ZVRS Comments at 29.
and software specifically tailored for VRS provided free or at very low cost from providers. Prior to 2003, consumer use and acceptance of VRS was limited. … [D]espite the enormous potential VRS offered for bringing functionally equivalent telecommunications to deaf and hard of hearing persons, few ASL signers could make use of the service. That changed with the introduction of provider distributed videophones and video software tailored for VRS use. VRS use skyrocketed. [Footnote omitted.]

In short, consumer behavior demonstrates that Sorenson’s policy was good for consumers: they got the videophones they wanted and needed, and Sorenson did not receive any additional compensation for providing this equipment.

16. As further evidence of the benefits that Sorenson’s generated for consumers, consider the response of rival providers to Sorenson’s entry. It is my understanding that, shortly after Sorenson began to deploy the VP-100®, multiple other providers began deploying the D-Link i2Eye.26 The i2Eye offered video quality identical to that of the VP-100, but Sorenson differentiated its product by offering features, such as external flashers, that were specifically designed for deaf and hard-of-hearing users and by investing in quality interpreters.27 As a result of the customer value offered by Sorenson, demand for its VRS was so great that it could not immediately meet all of the demand; customers often waited substantial periods of time to obtain a VP-100.28

27 D-Link was an OEM licensee of Sorenson and the hardware was identical to the VP-100. (Interview with Mike Maddix, Director of Government and Regulatory Affairs, Sorenson Communications, Inc., March 27, 2012. See also 2006 Declaratory Ruling, ¶ 14.)
28 Interview with Mike Maddix, Director of Government and Regulatory Affairs, Sorenson Communications, Inc., March 27, 2012.
17. Despite the fact that Sorenson’s actions created tremendous consumer benefits—which were generated by Sorenson offering greater value to consumers while receiving the same per-minute compensation as VRS providers who failed to offer the same combination of hardware and interpreter quality—some rival carriers attempt to portray Sorenson’s actions as anticompetitive.

18. According to ZVRS:\textsuperscript{29}

For example, from April 2002 to March 2003, providers serviced only 1,010,633 minutes of VRS. Following the introduction of the Sorenson VP-100, in April of 2003, provided free to Sorenson’s users, providers serviced 4,111,244 VRS minutes through March of 2004. Through its free distribution of the VP-100 videophone and by blocking consumer access to other providers, Sorenson quickly rose to dominate the VRS market. Results from April 2004 through March 2005 are even more startling as 14,436,252 minutes of VRS were provided, some 80 percent of which was processed by Sorenson. The comparable period for 2005 through 2006 saw 31,898,551 minutes of VRS, again with Sorenson dominating the market through its videophone/service tie-in arrangement.

As the Commission has recognized, “the practice of distributing and installing VRS equipment at consumers’ premises at no charge” benefited consumers and expanded the industry.\textsuperscript{30} Furthermore, there is no evidence that the lack of interoperability contributed in any significant way to Sorenson’s success. Rather, the evidence cited by ZVRS along with the evidence that I discuss below indicate that Sorenson is—and has been—a strong competitor that generated a lot of consumer benefit and greatly increased VRS accessibility.

19. Commenters make other allegations regarding Sorenson’s conduct that have no basis in economic logic and fail to recognize how the VRS compensation system operates. For

\textsuperscript{29} ZVRS Comments, note 41.

\textsuperscript{30} 2006 Declaratory Ruling, ¶¶ 13 and 15.
example, Purple references filings that describe Sorenson’s allegedly “integrated, yet restricted equipment tie-in arrangement.” Purple objects to a policy that Sorenson adopted for its VP-100 videophone. Initially, Sorenson required a customer to use at least 30 minutes of VRS per month in order to qualify for receiving a free videophone. The 30-minute requirement was intended to allow Sorenson to recoup its costs of providing equipment (by collecting compensation for the associated minutes of use) given that Sorenson received no direct compensation for providing valuable customer equipment at no charge to the consumer. This policy, thus, was a pro-consumer business-model innovation. As I discuss above, Sorenson’s decision to provide high-quality, innovative equipment to customers at no charge led to tremendous growth in the industry and benefits to customers. In addition, it is my understanding that Sorenson never enforced the 30-minute rule, and that it voluntarily removed the rule upon request by the Commission.

20. Next, consider Sorenson’s competitive success after 2006. Specifically, note that Sorenson doubled its annual number of minutes served between 2006 and 2009, and more than half of Sorenson’s customers began patronizing the firm only after 2006. Clearly, these customers did not choose Sorenson because of lock-in. Fundamental economic logic and common sense indicate that these consumers chose Sorenson because it best met their needs.

31 Purple Comment at 6-7.
32 Sorenson removed the 30-minute requirement by June 2003, well before the Commission issued any orders addressing minimum usage requirements. (Interview with Mike Maddix, Director of Government and Regulatory Affairs, Sorenson Communications, Inc., March 29, 2012. See also Telecommunications Relay Services And Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CC Docket No. 98-67 and CG Docket No. 03-123, Declaratory Ruling, January 26, 2005, ¶ 8.)
33 Data from Sorenson Communications, Inc.
As a result of its continuing ability to attract new customers, Sorenson’s share of VRS minutes in 2010 was the same as in 2006, even though the overall market had grown tremendously.\textsuperscript{34}

21. These market data also indicate that customers chose Sorenson in the same proportion even after the Commission implemented rule changes that required VRS hardware to provide the capability to place or receive a call through any of the VRS providers’ relay services.\textsuperscript{35} This fact pattern is inconsistent with Purple’s claims that Sorenson’s success is due to its having engaged in “anti-competitive” and “unfair” practices that gave it improper advantage over its competitors. Rather, these facts suggest that Sorenson competed by offering consumers a high-quality product that benefited consumers and expanded the size of the market.

2. **Claims that current practices create lock-in are contrary to economic logic and consumer comments.**

22. Several commenters allege that current VRS practices lock in consumers to their existing provider and inhibit competition between providers. These commenters argue that users are “locked in” because some providers offer beneficial features that consumers would not want to give up when they switched to providers that did not offer those features. For example, Purple argues that “VRS users are ‘effectively ‘locked in’ to their existing providers’ and that users are ‘reluctant to switch to a new default provider’ due to costs

\textsuperscript{34} Data from Sorenson Communications, Inc.; *In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Docket 03-123, Interstate Telecommunications Relay Services Fund, Payment Formula and Fund Size Estimate, NECA, April 29, 2011, Exhibit 3-7.

\textsuperscript{35} *2006 Declaratory Ruling*, ¶ 29.
associated with changing providers, including the loss of functionality.\textsuperscript{36, 37} Similarly, ASL Holding argues that “[s]ubscribers ultimately fear relinquishing the equipment and serving provider, on the perception that they will lose critical service capabilities and features. This constitutes an anti-discriminatory lock on a dominant provider’s subscribers contrary to the Commission’s requirements.”\textsuperscript{38}

23. The Commission must be careful to distinguish between: (a) factors that lead to lock-in, and (b) quality-based competition that allows successful providers to attract and retain customers. Providing free equipment does not create consumer lock-in. This is so because there is no sunk investment by consumers. There is no more lock-in in this situation than there would be if the consumer had yet to buy anything. Similarly, providing equipment with features that customers find beneficial does not create anti-competitive lock-in, although it

\textsuperscript{36} Purple Comments at 25 [footnote omitted].

Purple asserts that the Commission reached the reached the same conclusion in 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, (released December 15, 2011) (hereinafter FNPRM), ¶ 17. In fact, the FNPRM states only that the Commission is concerned that this problem may arise.

\textsuperscript{37} Although here asserting that lock-in is a source of harm, elsewhere in its comments, Purple expresses its opposition to provider behavior aimed at reducing consumer lock-in. Specifically, “…Purple is opposed to term contracts and the ability of deep pocketed providers to buy out consumer contracts by paying for early termination fees on behalf of the consumer.” (Purple Comments at 28.)

\textsuperscript{38} 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 ASL Services Holdings, LLC (hereinafter ASL Holdings Comments) at 16.
will attract customers to those providers that provide the best features. The Commission has recognized that quality is an important dimension of competition in the VRS industry.39

24. Sorenson videophones offer several features that its customers find attractive (sometimes referred to as “advanced features” or “Gold Services”). Sorenson executives believe that one of the most important features on its videophones is their ability to signal to external flashers to indicate incoming calls.40 This basic functionality is available even if a user ports to another VRS provider while retaining his or her Sorenson videophone.41 Enhanced flasher functionality, which makes different flashing patterns available based on the identity of each caller, is not available after a user has ported to another VRS provider because this functionality requires access to data stored on Sorenson’s servers.42

25. It is critical to recognize that the fact that a user has to give up receiving a particular element of Sorenson’s VRS service when he or she chooses another VRS provider is not evidence of lock-in. To conclude otherwise would be to conclude that a consumer is locked-

39 \textit{FNPRM, ¶ 14}. See also \textit{Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities and E911 Requirements for IP-Enabled Service Providers}, CG Docket No 03-123, CC Docket No. 98-67, and WC Docket No. 05-196, Second Report and Order and Order on Reconsideration, ¶ 63 (“However, at this time based on the record before us, we disagree with GoAmerica’s request that a default provider that furnishes CPE to a consumer must ensure that the CPE’s enhanced features (e.g., missed call list, speed dial list) can be used by the consumer if the consumer ports his or her number to a new default provider and uses the CPE with the new default provider. Providers may offer such features on a competitive basis, which will encourage innovation and competition.” [footnote omitted])

40 Interview with Grant Beckmann, Vice President, Engineering, Sorenson Communications, Inc., March 16, 2012.

41 Interview with Scot Brooksby, Director of Engineering, Sorenson Communications, Inc., March 28, 2012.

42 \textit{Id.}
in to a particular restaurant because he really likes the service. Taking such a position would be nonsensical. Commenters ostensibly objecting to lock-in are, in fact, objecting to quality competition.

26. A second important feature that Sorenson offers is SignMail®, which is Sorenson’s video mail technology. It is my understanding that Sorenson’s video mail offers certain features not offered by other providers, including the ability quickly to navigate through messages and view the number of messages and the identities of callers without scrolling through all messages. These advanced features are not available after a customer ports to another provider, although the porting customer still has access to old messages (through an email link) for the same amount of time as an ongoing Sorenson user. As with Sorenson’s flasher technology: (a) the lack of portability is due to the fact that the video mail service relies on data stored on Sorenson servers, and (b) the fact that access to Sorenson’s advanced voicemail features is available to Sorenson consumers but not to those who port to other VRS providers is not evidence of lock-in but rather an example of competition based on quality.

27. Third, Sorenson offers its users contact lists and speed-dial lists, as do other VRS providers. To the extent that creating a contact list requires a significant sunk investment by a user, the fact that contact lists cannot be ported across providers could create lock-in effects. However, I understand that Sorenson supports industry efforts to develop standards and

43 Id.
44 It is my understanding that Sorenson deletes video mail from its servers after 30 days for all users. (Interview with Grant Beckmann, Vice President, Engineering, Sorenson Communications, Inc., March 16, 2012.)
45 Id.
processes that would allow consumers to transfer personal data including contact lists and speed-dial lists if they switch providers.\textsuperscript{46} This simple solution would eliminate any lock-in associated with access to personal data.

28. In closing this discussion of alleged lock-in due to non-porting features, it is also important to recognize that forcing competitors to share sources of competitive advantage that they have obtained through investment and innovation will undermine future investment and innovation, to the detriment of users and program efficiency. Forcing a VRS provider to share specific features of its equipment with other providers will lead to free riding by these other providers and attenuate investment and innovation incentives. Innovation will be stifled because: (a) other VRS providers would know that they could benefit from the costly investments made by the innovating provider without having to undertake costly investment of their own, and (b) the potential innovator would recognize that it would be unable to reap many of the benefits of its investments and, thus, would not have incentives to make those investments.

29. Lastly, to the extent that comments by VRS provider are intended to imply that lock-in arises because certain equipment does not interoperate with all providers, these comments are at odds with those of consumer groups who argue that the dial-around rules work well.\textsuperscript{47}


\textsuperscript{47} 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 to
B. PURPLE’S DISCUSSION OF CONCENTRATION AND A MARKET-SHARE CAP ARE ILLOGICAL, AND ITS PROPOSALS WOULD HARM COMPETITION AND CONSUMERS

30. Purple makes several incorrect statements about concentration and the effects of certain policies that would limit it.

1. Purple confuses competitive effects of a merger with the effects of organic growth.

31. Purple attempts to use the Commission’s recent concerns about potential adverse competitive effects of the proposed AT&T/T-Mobile merger as a justification for limiting Sorenson’s organic growth.\(^{48}\) This attempt is without merit. Purple implicitly adopts the view that any increase in concentration harms consumers, without regard for the cause of the increase. Even within the four corners of merger policy, that view is widely recognized as mistaken. Mergers that increase concentration in one or more relevant markets are routinely

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\(^{48}\) Purple appears to be confused in other respects as well. Purple asserts that “… the concentration of market share by Sorenson is greater than the combined market share of AT&T, Verizon, Sprint, and T-Mobile in the United States market for wireless communications services.” (Purple Comments at 8.) The combined share of the four leading wireless carriers on a national basis is greater than 90 percent. (Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 10-133, Fifteenth Report, June 27, 2011, ¶ 31.) Purple itself assumes that Sorenson’s market share is less than this. (Purple Comments, note 11.) Purple appears incorrectly to equate the Herfindahl-Hirschman Index, which is a function of market shares, with market shares themselves.
approved when they are found to generate sufficient efficiencies that consumers will benefit from the mergers.

32. Moreover, there is a fundamental difference between an increase in concentration due to a merger and an increase in concentration due to a competitor’s offering a superior product that attracts additional consumer patronage. A merger could increase concentration while reducing consumer welfare. Organic growth, however, is the result of the supplier’s offering more attractive products to consumers. The Commission itself makes this distinction. Whatever concerns it had about the effects of the proposed AT&T/T-Mobile merger on concentration, the Commission would not prohibit AT&T from acting on its own to lower its prices or increase its quality in order to attract more consumers, even though doing so could increase market concentration. More broadly, it is a fundamental principle of competition policy that a firm that acquires a large market share by virtue of offering the best product and/or the lowest prices should be allowed to grow, because doing so benefits consumers.

2. Share caps are a transparent attempt to stifle competition.

33. Purple proposes a four-year transition to a unitary, per-minute compensation rate coupled with a cap on the market share that a VRS provider could obtain. More specifically, Purple advocates moving to an auction model and imposing the requirement that no single VRS provider be allowed to attain a share of greater than 50 percent. If Commission chooses to move to an auction model, it should adopt an auction format that allows multiple

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49 Purple Comments at 3.
50 Id. at 26.
providers to offer service in order to promote quality competition.\textsuperscript{51} However, establishing a compensation mechanism that allows multiple VRS providers to compete and lets each consumer choose his or her most-preferred provider is very different from Purple’s proposal, which would restrict the shares that competitors could obtain. Purple’s comments are notably silent on how such a cap would be applied. For example, if 60 percent of consumers expressed a preference to be served by Sorenson, would one-sixth of those consumers be told that they could not use their first choice and instead be forced to patronize a VRS provider against their will?

34. The only discernible economic logic in Purple’s proposal is that it would use the VRS program to disadvantage Sorenson and favor Purple. This is not a public interest rationale.

IV. ZVRS’S SEPARATION PROPOSAL

35. ZVRS argues that Sorenson and other VRS providers should be blocked from manufacturing CPE.\textsuperscript{52}

Similar to the breakup of AT&T, a separation of equipment manufacturer and VRS interpreting service provider is appropriate. We recognize the challenge this presents to certain providers and believe this should be accomplished over a two year transition period. At the end of two years, all CPE should be acquired in the open market and VRS Access Providers will no longer be allowed to manufacture CPE.

36. It is worth noting at the outset that ZVRS’s proposal is not similar to the breakup of AT&T at all. First, the economic rationale for the breakup of AT&T was based on the fact that AT&T’s possessed monopoly power in local exchange services (indeed, it had

\textsuperscript{51} Katz Declaration, § V.A.2.

\textsuperscript{52} ZVRS Comments at 35.
government-sanctioned local monopolies) and was using customer premises equipment to evade regulation of its local exchange services.53 Manifestly, Sorenson is not a monopolist and it is not earning excess profits from the sale of VRS customer premises equipment given that it does not charge for that equipment.

37. More important than the flaws in the analogy is the fact that ZVRS’ proposal to separate equipment from interpreting services fails to account for the realities of efficient VRS provision, and—if implemented—would run the risk of stifling innovation, reducing availability and, thus, harming consumers and program efficiency.

38. A system that separates equipment and service would have to draw a dividing line between the two. Trying to draw a clean line between equipment and service could be extremely difficult given the nature of cloud-based services and the fact that many of the features that a consumer associates with his or her customer premises equipment (e.g., enhanced flasher services and video mail) could actually be being provided by a remote server. Because the provider has to actively supply those features on an ongoing basis and maintain a relationship with the customer, such features are more appropriately viewed as elements of service than of equipment.

39. As I discussed in my initial declaration, the Commission’s goal of providing functional equivalence is supported by subsidizing customer equipment.54 ZVRS’s proposal to separate equipment and interpreting services raises difficult issues regarding the


54 Katz Declaration, § V.A.3.
Commission’s ability to set effective equipment subsidies. Any proposal that does not adequately account for investments made to develop high-quality equipment risks dampening incentives to innovate going forward. Compensation rates focused specifically on equipment, which requires up-front investment with highly uncertain returns, would be particularly difficult. Moreover, VRS service comprises multiple dimensions of quality, including both equipment and interpreting services. Under the current compensation system, where the Commission sets a single rate that effectively covers both interpreting and equipment, a VRS provider has incentives to make efficient decisions in choosing where to invest: if a dollar of investment in equipment innovation is expected to increase the number of minutes of traffic by more than would a dollar of investment in additional interpreter training, then the VRS provider has incentives to choose the former over the latter. If there were separate compensation rates for equipment and service, those rates might induce the provider to invest in interpreter training even when investing in equipment would generate greater consumer benefits per dollar invested. There could be many other dimensions along which such distortions could occur.

V. **REQUIRING OFF-THE-SHELF EQUIPMENT WOULD HARM CONSUMERS BY DENYING THEM THE BENEFITS OF COMPETITION**

40. ZVRS “supports requiring all VRS CPE equipment to be ‘off-the-shelf’ and/or mainstream products including both hardware and software applications.”

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55 See generally *Katz Declaration*, § V.A.3.(c).
56 *ZVRS Comments* at 43.
41. As discussed in my initial declaration, even if it chooses to facilitate the use of off-the-shelf equipment, the Commission should not mandate the use of such equipment. To do so would be directly to limit and distort competition.\textsuperscript{57} The history of competition in the VRS industry demonstrates that both proprietary and off-the-shelf equipment can best serve consumer interests, depending on the situation. If off-the-shelf equipment is lower cost or more attractive to users, then VRS providers will have incentives to offer that equipment to VRS users in order to obtain competitive advantage. If a VRS provider can offer greater benefits to consumers using proprietary product designs that meet the interoperability requirements, then doing so will benefit consumers and make the program more efficient. If the Commission took away the option of gaining competitive advantage by offering customized equipment to VRS users, the only beneficiaries would be particular VRS providers who were insulated from competition.

42. Because user interests are best served when the Commission lets users decide which equipment best serves their needs, a much better approach than mandating the use of off-the-shelf equipment is to have the industry agree to baseline interoperability standards and then allow VRS providers to offer any equipment that meet those standards (including off-the-shelf equipment). In this way, consumers and VRS providers will have the \textit{option} to use off-the-shelf equipment.

43. It should also be noted that increased emphasis on off-the-shelf products may raise issues of its own. For example, I understand that most efforts to create interoperability

\textsuperscript{57} \textit{Katz Declaration}, ¶ 90.
between VRS providers have focused on proprietary equipment and have not included third-party manufacturers.\textsuperscript{58} Purple goes so far as to recommend that devices with proprietary hardware (e.g., Sorenson’s access devices) be held to higher interoperability and portability standards than off-the-shelf devices.\textsuperscript{59} Absent an effort to include third-party firms in the interoperability planning, increased usage of off-the-shelf products may increase interoperability concerns. And imposing asymmetrical requirements of the sort advocated by Purple would harm competition and consumers.

VI. CONCLUSION

44. Several parties have submitted comments attempting to convince the Commission to favor certain providers over others. Adopting policies that distort competition to favor particular providers would harm efficiency, availability, and consumer welfare. Policies that attempt to benefit inefficient service providers by diverting share from more efficient service providers, which will raise program costs. Policies that limit the incentives of providers to engage in quality competition will likewise harm consumers. In short, attempts to favor or privilege certain classes of VRS provider in any form should be rejected.

\textsuperscript{58} Interview with Mike Maddix, Director of Government and Regulatory Affairs, Sorenson Communications, Inc., March 27, 2012.

\textsuperscript{59} Purple Comments, Figure A.
I declare, under penalty of perjury, that the foregoing is true and correct.

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Michael L. Katz

March 30, 2012