

Before the  
Federal Communications Commission  
Washington, D.C. 20554

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

**COMMENTS OF CSDVRS, LLC**

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## COMMENTS OF CSDVRS, LLC

CSDVRS, LLC d/b/a ZVRS (“CSDVRS” or “ZVRS”) hereby responds to the October 15, 2012 Federal Communications Commission (“FCC” or “Commission”) Public Notice seeking comments on i) CSDVRS’ proposal to facilitate the migration of Video Relay Service (“VRS”) access technologies to exclusively commonly available off-the-shelf hardware by establishing a standard, software based videophone (“VP”) application; ii) CSDVRS’ proposal to enhance the iTRS database to enable the separation of video communication from video interpreting in VRS; and iii) the initial rate change proposed by Rolka Loube Saltzer Associates (“RLSA”), the Telecommunication Relay Service (“TRS”) Fund administrator.<sup>1</sup>

ZVRS believes the current structure must be changed in light of Sorenson’s anti-competitive use of a Video Phone (“VP”) which is not available off-the-shelf. ZVRS reiterates its proposal for the separation of customer premise VPs (including the service of such technology) and interpreting as the necessary next step in reforming the VRS program and will benefit stakeholders by shifting the focus to interoperable technology, quality interpreting and the efficiency of the TRS Fund. However, ZVRS has steadfastly maintained that it would be premature and disruptive to make significant changes to the compensation rate prior to instituting fundamental structural reform measures. Even so, the rates proposed by RLSA fail to provide a solid footing in ZVRS’ capacity to provide adequate services. Thus ZVRS’ comments must begin with a focused discussion about how the proposed rates are not aligned with its actual operating expenses and could cause it to break down because it has not yet achieved sufficient market volume and scale without the necessary restructuring of the VRS program.

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<sup>1</sup>*Additional Comment Sought on Structure and Practice of the Video Relay Service (VRS) Program and on Proposed VRS Compensation Rates*, Public Notice, CG Docket Nos. 03-123 and 10-51, DA 12-1644 (“FCC PN”) (October 15, 2012).

## I. **The RLSA Rate Proposal Is Unsustainable**

The FCC PN solicits comments on the VRS rates proposed by RLSA.<sup>2</sup> RLSA proffers a weighted average cost of \$3.396 (including accounting for the federal income tax liability) based on the weighted average rate of the actual per-minute costs for 2010 and 2011 and the projected per-minute costs for 2012. Based on a three-year phase-in, RLSA proposes that the rates be set initially by reducing the current VRS rates by one-third of the difference between the current rate and the three year weighted average cost of \$3.396 by consolidating Tiers I and II (up to 500,000 minutes) at \$5.2877 per minute, and for Tier III (over 500,000 minutes) at \$4.5099 per minute. The actual per minute costs for 2010 and 2011 and the projected per-minute costs for 2012 includes an 11.25% return on invested capital,<sup>3</sup> defined as “investment in facilities.”<sup>4</sup> ZVRS submits that components of this methodology as proposed by RLSA are significantly flawed and will result in the severe degradation of VRS.

### A. **The Misalignment with Actual Operating Costs**

The overall weighted average calculated cost by RLSA of \$3.396 is significantly lower than ZVRS’ cost. RLSA did not explicitly break down by category the calculated \$3.396 weighted average cost. Therefore we describe in the following categories the discrepancy between the RLSA 2012 calculated weighted average costs with ZVRS’ 2012 projected costs and the inconsistency between RLSA’s 2011 calculated costs and ZVRS’ actual 2011 costs:

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<sup>2</sup> *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, Supplemental Filing of the Telecommunications Relay Services Administrator Regarding Reasonable Rates for VRS Service, CG Docket Nos. 03-123 and 10-51, (“RLSA 2012 VRS Rate Filing”) (October 15, 2012).

<sup>3</sup> *See Representing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers*, Order, CC Docket No. 89-624 (“FCC 1990 Order”) (Rel. December 7, 1990).

<sup>4</sup> *See Prescribing the Authorized Unitary Rate of Return for Interstate Services of Local Exchange Carriers*, Proposed Rule, Section B. 5., CC Docket No. 98-166, FCC 98-222, Federal Register Vol. 63, No. 202, p. 55988 (“FCC 1998 Proposed Rule”) (October 20, 1998).

## 1. Indirect Costs

Indirect costs incorporate the infrastructure to run the business, including operations support, finance, research & development, engineering, legal, risk management, other corporate overhead and a modest executive team. ZVRS' projected 2012 cost per minute for this category is \$1.01 whereas RLSA has calculated a 2012 weighted average of \$.58. ZVRS' 2011 actual indirect costs was \$1.00 per minute compared to RLSA's 2011 weighted average cost of \$.55 per minute.

Within indirect costs, RLSA's calculation for "*Operations Support*" is misaligned. Operations support includes the company's entire customer service organization which supports thousands of customers on a daily basis. Operations support also includes the vice president and two directors and three additional support personnel who oversee and schedule over 380 interpreters at twenty six call centers. The cost not only includes operations support payroll and benefits, but all fixed and variable costs such as rent, supplies, utilities and travel. RLSA calculated a weighted average cost for 2012 of \$.16 per minute, which is significantly lower than CSDVRS' projection of \$.35 per minute. ZVRS' 2011 actual cost was \$.34 per minute compared to the RLSA 2011 calculated weighted average cost of \$.15 per minute.

For "*Other Corporate Overheads*" RLSA calculated a weighted average cost for 2012 of \$.03 per minute compared to ZVRS' projected cost of \$.11 per minute. ZVRS' 2011 actual cost was \$.13 per minute whereas RLSA's calculated weighted average cost for 2011 was \$.02 per minute. "*Other Corporate Overheads*" for ZVRS includes the top executive, an administrative assistant and corporate costs which do not specifically fall into one of the previously specified departments. Such costs also include, among other things, in-house interpreters for our hearing

and deaf employees, common area rent, utilities, state and local taxes not specifically charged to a department, periodic outside services to analyze overall business strategy and provide recommendations to improve efficiency, costs for preparation and attendance of FCC and related meetings and costs to provide requested information to the FCC.

Another example of the shortcoming in this category is RLSA's 2012 weighted average cost of \$.09 for "*Financial/Accounting*," compared to ZVRS's projected cost of \$.16 per minute. ZVRS' 2011 actual cost was \$.17 per minute versus RLSA's 2011 calculated weighted average cost of \$.09 per minute. The finance and accounting department is responsible for the day-to-day financial responsibilities of running a business, analyzing cost to assist the Chief Executive Officer in running a lean organization, as well as preparing and submitting the extremely detailed and time-consuming RLSA monthly reports. In addition, this department is responsible for multiple audits throughout the year, both FCC and non-FCC related (GAAP, State and Federal audits). ZVRS is exceptionally lean in this department, consisting of the Chief Financial Officer, Controller, Senior Accountant, Bookkeeper and Accounts Payable Clerk. In addition to payroll and benefits, other costs necessary to run a finance department such as accounting software licenses and maintenance, rent, telecommunications, bank fees, travel, supplies, audit costs, and tax preparation fees, are included in the total cost of this department.

For "Engineering" and "Research & Development" combined, RLSA calculated for 2012 a weighted average cost of \$.19 per minute compared to ZVRS' 2012 projected cost of \$.27 per minute. ZVRS' 2011 actual cost was \$.27 per minute compared to RLSA's 2011 calculated weighted average cost of \$.18 per minute. The majority of the "Engineering" and "Research and Development" combined expense for ZVRS is payroll and benefits for the personnel to support the platform, network and twenty six call centers. This consists of three system administrators, a

network administrator, two desktop administrators, two system test engineers, a CRM administrator and database administrator. This team is responsible for ensuring the platform is fully operational at all times each day of the year. The remaining staff consists of four application developers responsible for the call routing logic, interoperability with other VRS providers' equipment, E911 support, support of the iTRS database, support for CRM and support of ZVRS' website. In addition to payroll and benefits, other costs associated with this organization include rent, training, supplies and materials used for research and development. The remainder of the expense is associated with software licenses and telecom expenses in associated with the platform and network.

## 2. **Marketing & Outreach**

For "*Marketing & Outreach*," RLSA calculated for 2012 a weighted average cost of \$.31, which is significantly lower than CSDVRS' 2012 projection of \$.95 per minute. ZVRS' 2011 actual cost was \$.95 per minute compared to RLSA's 2011 calculated weighted average cost of \$.30 per minute. ZVRS' outreach costs include its sales team, outreach specialists and marketing department. The primary costs associated with these organizations consist of payroll and benefits for sales and marketing employees and the contract labor for the outreach specialists. In addition, other fixed and variable costs such as rent, education, tradeshow and sponsorships, promotion and travel are included in this category. ZVRS discusses below the importance of retaining its capability to vigorously market and conduct outreach and has extensively commented to the Commission about that need.<sup>5</sup>

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<sup>5</sup> See e.g. *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Comments of CSDVRS, LLC., CG Docket Nos. 10-51 and 03-123, Part V. ("ZVRS FNPRM Comments") (March 9, 2012).

### **3. Communication Assistants (CAs)**

For “*Communication Assistants Related*” costs, ZVRS’ projected 2012 cost per minute is \$2.36 whereas RLSA’s 2012 calculated cost is \$1.64. ZVRS’ 2011 actual cost per minute was \$2.16 as compared to \$1.35 calculated by RLSA for 2011. The greater cost is the result of our commitment to high quality interpreters who are required to have certain certifications and qualifications in excess of the mandatory minimum TRS standards in order to achieve functional equivalency objectives.<sup>6</sup>

VRS cannot be effectively delivered without qualified sign language interpreters. ZVRS has made the commitment and investment as a company to only employ interpreters who are certified as one or more of the following:

- NIC, NIC Advanced or NIC Master
- RID CI, CT, IC/TC, CSC, SC:L or MCSC NAD Level IV or V
- ACCI Level IV or V
- Texas BEI-3 or higher

In addition to the listed certifications above, a ZVRS Video Interpreter (“VI”) must also possess the following skill sets:

- Demonstrated adherence to the profession’s Code of Professional Conduct<sup>7</sup>
- Strong receptive / voicing skills
- College level English language proficiency
- Minimum three years of interpreting experience
- Customer focused qualities
- Experience in the Deaf and Hard of Hearing community using ASL, PSE, Signed English and finger spelling
- Familiarity with regional signs

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<sup>6</sup> See ZVRS FNPRM Comments. pp. 35-37.

<sup>7</sup> See [http://www.rid.org/UserFiles/File/NAD\\_RID\\_ETHICS.pdf](http://www.rid.org/UserFiles/File/NAD_RID_ETHICS.pdf)

The training and staffing of such a team of VIs per ZVRS' requirements involves a substantial investment. According to RLSA the industry weighted cost over the last three year period for directly related CA costs is an average of \$1.4864 per minute. In order for the ZVRS to attain such a level, the interpreters would be required to work at a level of 88% occupancy with calls being processed with an 85% utilization rate. In other words, for each hour the interpreter would be on a call with a customer for 52.8 minutes and actually interpreting for 44.88 minutes. In actuality, volume is fluid over a twenty four hour period. If the RLSA calculation was applied, interpreters would need to work the following eight hour shift:

- Scheduled – 480 minutes
- In Session – 422.4 minutes
- Interpreting – 359.04 minutes

If this shift were continuously possible every day over an extended time period, then ZVRS could achieve the RLSA's weighted cost per minute of \$1.4864. This schedule, however, would injure interpreters mentally, emotionally and physically. RID's Standard Practice Paper "Business Practices" states that "[t]o ensure the integrity and accuracy of the interpreted message and to protect the occupational safety of interpreters, some assignments may require a team of two or more interpreters."<sup>8</sup> In community assignments, it is the standard practice to have two interpreters assigned working as a team for any assignment of two or more hours, usually rotating the "ON" interpreter seat every twenty minutes. In VRS, it is not possible to assign two interpreters per work station in order to be comparably supported for the entire scheduled period. ZVRS has committed to its workforce to provide a working environment which is healthy, safe, interpreter and consumer-centric, and can be considered a place where an interpreter can make VRS interpreting their career and not a stepping stone for something else.

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<sup>8</sup> [http://www.rid.org/UserFiles/File/pdfs/Standard\\_Practice\\_Papers/Drafts\\_June\\_2006/Business\\_Practices-Hiring-Billing\\_SPP.pdf](http://www.rid.org/UserFiles/File/pdfs/Standard_Practice_Papers/Drafts_June_2006/Business_Practices-Hiring-Billing_SPP.pdf)

The cost of providing our staff an appropriate work environment includes the following:

- A safe call center location
- Ergonomically correct designed workstation and layout
- Training / Staff Meetings
- Floor support personnel
- Call Center Manager

If the rate is reduced to the level proposed by RLSA without sufficient skill requirements for certified interpreters, the overall quality of interpreting will suffer a severe drop by all providers in either an effort to reduce costs or simply due to the fact that qualified interpreters will refuse to work in an environment that will cause them harm.

In summary, the RLSA and FCC audit reports of ZVRS in no way indicated excessive spending or earnings. Furthermore, ZVRS conducts a third party GAAP audit on an annual basis. ZVRS has received an unqualified (clean) opinion annually since its incorporation in 2006. The specific damage which will flow from the proposed rate will result in a company which no longer innovates, reduces staff, reduces outreach to zero and become a company which goes into decline. The proposed rate cannot support certified interpreters and will incentivize providers to seek cheaper labor outside the country.

**B. Cost Methodology and Economies of Scale**

ZVRS is supportive of using the weighted average projected cost methodology as long as the rates are based on the tiered weighted averages versus industry weighted averages. As the result of one dominant player, the industry weighted average costs for 2010, 2011 and 2012 is dramatically lower than the costs for ZVRS, which is principally a Tier II provider. Based on the information provided by RLSA, we estimate the weighted average cost of Sorenson to be \$2.910

per minute compared to \$5.338 per minute for the other providers.<sup>9</sup> This estimate includes the Return on Investment (“ROI”), adjusted for federal tax liability by RLSA (\$.09 in 2010, \$.08 in 2011, \$.06 in 2012). As discussed in section C below, we strongly disagree with the ROI calculation.

Excluding the ROI and adjusted for tax liability, our estimated weighted average cost for Sorenson is \$2.833 per minute compared to \$5.261 per minute for the other providers. In Section C, Table 1 below, we calculate a reasonable ROI capital at \$.577 per minute for the industry weighted average and \$.669 per minute for a Tier II company. This would result in a fair and reasonable blended reimbursement rate for Tier III (primarily Sorenson) of \$3.41 per minute and for Tier II (other providers) of \$5.930 per minute. This would be the calculated blended rate based on a three tiered rate structure as discussed in Section D below. This rate, however, does not include costs for Customer Premise Equipment (see Section F below), E911 and Numbering (see Section G below). These expenses without question fall within the “real” necessary costs of operating a VRS business and therefore should be included in the rate. Including an estimated cost of \$.36 for customer premise equipment and E911 costs, the blended rate for Tier II providers would increase to \$6.290 per minute.

The proposal to utilize an industry-wide weighted average methodology, based on either projected or historical costs, will guarantee the eventual elimination of Tier I and Tier II providers, degradation in VRS service levels, elimination of consumer choice, lack of innovation and a reduction of functional equivalency. If adopted, it will ultimately result in a total and exclusive occupancy of the VRS market by the dominant provider.

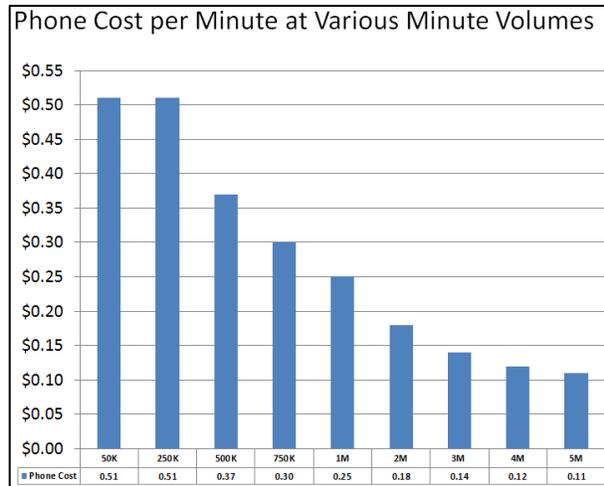
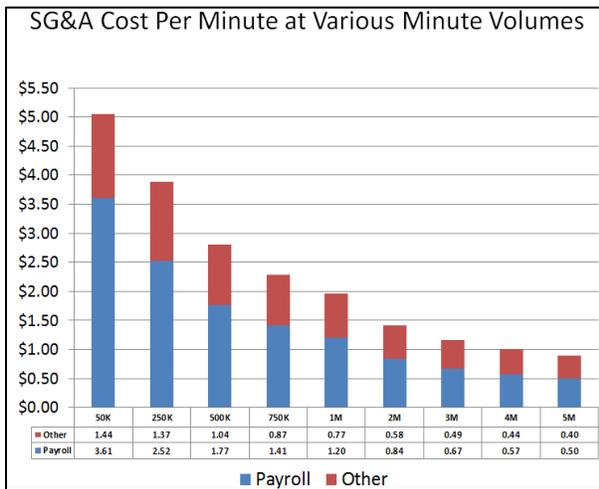
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<sup>9</sup> See RLSA 2012 VRS Rate Filing.

The analyses in Table 1 demonstrate the reduction in cost per minute as the size of the provider increases.<sup>10</sup>

**Table 1: Economies of Scale based on Size of Provider**

MINUTES (monthly):	50,000	250,000	500,000	750,000	1,000,000	2,000,000	3,000,000	4,000,000	5,000,000
CA Related & Non-CA Relay Center Costs	3.61	2.94	2.73	2.71	2.71	2.70	2.68	2.66	2.65
SG&A (Indirect) Costs	5.05	3.88	2.80	2.28	1.97	1.42	1.17	1.01	0.90
<b>TOTAL COST BEFORE NET PHONE COST</b>	<b>\$ 8.66</b>	<b>\$ 6.83</b>	<b>\$ 5.53</b>	<b>\$ 4.99</b>	<b>\$ 4.68</b>	<b>\$ 4.12</b>	<b>\$ 3.85</b>	<b>\$ 3.67</b>	<b>\$ 3.55</b>
Phone Cost per Minute	0.51	0.51	0.37	0.30	0.25	0.18	0.14	0.12	0.11
<b>TOTAL COST</b>	<b>\$ 9.17</b>	<b>\$ 7.34</b>	<b>\$ 5.90</b>	<b>\$ 5.29</b>	<b>\$ 4.93</b>	<b>\$ 4.30</b>	<b>\$ 3.99</b>	<b>\$ 3.79</b>	<b>\$ 3.65</b>



<sup>10</sup> See Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Ex Parte of CSDVRS, LLC, CG Docket Nos. 10-51 and 03-123, Attachments (July 10, 2012).

C. **Return on Invested Capital**

The return on invested capital (“ROIC”) is based on the FCC’s 11.25% rate of return adopted in 1990:

*“It is well established that rate of return prescription under the “just and reasonable” standard requires a balancing of ratepayer and shareholder interests. The regulated company must be allowed the opportunity to earn a return that is high enough to maintain the financial integrity of the company and to attract new capital to the business”*<sup>11</sup>

The Commission subsequently articulated further rationale for the rate of return:

*“The weighted average cost of capital is used to estimate the rate of return that the ILECs must earn on their investment in facilities used to provide regulated interstate services in order to attract sufficient capital investment. Our rules specify that the composite weighted average cost of capital is the sum of the cost of debt, the cost of preferred stock, and the cost of equity, each weighted by its proportion in the capital structure of the telephone companies.”*<sup>12</sup>

The Commission in 2003 reiterated the application of the rate of return to VRS: “. . . the Commission has established a rate of return of 11.25% for return on investment only.”<sup>13</sup>

One of the goals of utilizing a ROIC methodology for Local Exchange Carriers (“LECs”) was to drive investment in, and thus, create improvement of our nation’s telecom infrastructure. The FCC references to the ROIC methodology with LECs indicate that the rates need to be both fair and reasonable and fair to the end user, but at the same time allowing the investors to earn a reasonable return on their investment. As the LEC model is one heavily burdened with capital investment (switches, fiber, copper lines, etc...) the logic behind the treatment of the rate, applied to capital

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<sup>11</sup> FCC 1990 Order.

<sup>12</sup> FCC 1998 Proposed Rule.

<sup>13</sup> *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Order, CC Docket No. 98-67, ¶ 35 (Rel. June 30, 2003).

investment, makes sense. However, utilizing the same approach for the VRS industry, an industry which does not require capital investment anywhere near that of LECs, is not logical or reasonable.<sup>14</sup>

The largest piece of ZVRS' network is its CA workforce, which undoubtedly is also the case with other VRS providers. In VRS, the CA operates on the VRS platform in a manner analogous to how an in-call operator relayed audio calls prior to the development of automatic switches. However in the case of VRS, the "in-call operator" is a highly skilled employee whom does not just connect the call but remains on the call to interpret the conversation. No VRS call could take place without the interpretation of a CA. Thus, the CA is an essential component of the VRS network, and by definition, equivalent to the capital investment in LECs and how the in-call operators were used in LECs in the past. A substantial investment was made to ensure that this VRS network of CAs meet all the minimum standards while providing the relay user with functional equivalency. Several examples of regulated LECs and their capital investments (net assets) as a percentage of total assets compared to ZVRS are provided in Exhibit A below. Exhibit A clearly shows that capital investments are a substantial part of the LEC business whereas for the VRS industry it is minimal. Exhibit A also compares the capital investments of LECs to an adjusted capital investments structure for VRS which includes not only the net assets, but also the CA costs. Adding the CA costs puts the VRS industry more in line with the LECs, yet on average, total VRS investment is still significantly lower than in LECs.

Utilizing RLSA's calculated ROIC, the pre-tax markup is 1% to 2% over costs, or \$.07 for 2010, \$.06 for 2011, and \$.04 for 2012. This data is based on the industry weighted average of capital investment which results in an even lower ROIC than if the calculation were based on tiers. At such minimal rate of return, most providers would never be able to attract future

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<sup>14</sup> See *Structure and Practices of the Video Relay Service Program*, Comments of CSDVRS, LLC, CG Dockets Nos. 03-123 and 10-51, fn. 7 (May 10, 2010).

investors, nor be able to operate at a competitive level and will simply leave the industry. The method as used by RLSA will quash new development efforts of current providers, as there would be no business incentive to operate or innovate.

ZVRS believes the FCC should follow the intent of the 1990 and 2003 Orders of providing a just and reasonable return to attract new capital (new investors funds) to the VRS industry by applying the ROIC methodology to both the invested capital and CA workforce costs (VRS Industries’ network), which in turn would result in growth, allowing for innovation and better service for the VRS consumer.

A return on “VRS Network” should treat the cost of CAs, call centers, telephony and related technology associated with providing VRS, and the net book value of depreciable assets as capital for the purpose of calculating the ROIC. As demonstrated in Figure 1 below, an 11.25% return on VRS Network results in a per-minute mark-up of \$.5766 based on the industry weighted average (which approximates Tier III) and \$.6694 based on a Tier II Sample Company.

**Figure 1: VRS Network**

	Industry weighted average - Projected 2012	Tier II Sample Company
Communications Assistants' (CA) Related	\$ 1.6418	\$ 2.1500
Non-CA Relay Center	0.3964	0.3100
Facilities	0.2698	0.2500
	2.3080	2.7100
18.75% pre-tax Return on VRS Network <sup>(1)</sup>	0.5326	0.6254
Return on Invested Capital <sup>(2)</sup>	0.0440	0.0440
	\$ 0.5766	\$ 0.6694

<sup>(1)</sup> Post-tax rate is 11.25%, assumed 40% tax rate

<sup>(2)</sup> Per RLSA calculation; RLSA defines ROIC as a return on net book value of depreciable assets

Several examples of regulated LECs and their operating incomes as a reference to establish a basis for calculating a just and reasonable rate of return are provided in Exhibit B.

CSDVRS submits two alternative methods which would result in a sufficient return to incent the providers to continue to grow and deliver better service to the customer.

**Alternative 1: Return on Investment**

Figure 2 below demonstrates the yield on a Return on Investment for a Tier II provider with \$25 million invested. This provider would earn a per-minute return of \$.59.

**Figure 2: Return on Investment Model**

<i>Tier II Sample Company</i>	
INVESTMENT (Owners' capital)	\$ 25,000,000
Pre-Tax Return on Investment (11.25% Post Tax)*	18.75%
Return on Investment	<u>\$ 4,687,500</u>
Annual Minutes	8,000,000
<b>Per Minute (pre-tax) Return on Investment</b>	<b>\$ 0.59</b>

*\*40% tax rate*

**Alternative 2: Consistent Margin**

A Consistent Margin methodology allows the same rate of return (11.25%) for each tier. The methodology sets a fair and reasonable return for each tier based on the cost structure within those tiers. Adopting this structure would allow for competition between tiers by recognizing and addressing the anti-competitive effects economies of scale may produce.

Figure 3 below is an illustration of the Consistent Margin methodology based on companies within each tier group.

**Figure 3: Consistent Margin Model**

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
Revenue	\$ 17,723,077	\$ 118,153,846	\$ 361,125,415
Costs	14,400,000	96,000,000	293,414,400
Income	<u>\$ 3,323,077</u>	<u>\$ 22,153,846</u>	<u>\$ 67,711,015</u>
Pre-Tax Margin %	18.75%	18.75%	18.75%
After Tax Margin % (40% Tax Rate)	11.25%	11.25%	11.25%
Minutes	2,400,000	19,200,000	86,400,000
<i><u>Per Minute:</u></i>			
Cost	\$ 6.0000	\$ 5.0000	\$ 3.3960
Consistent Margin	<u>1.3846</u>	<u>1.1538</u>	<u>0.7837</u>
Reimbursement Rate	<u>\$ 7.3846</u>	<u>\$ 6.1538</u>	<u>\$ 4.1797</u>

Recognizing the concern the FCC may have over cost escalation, ZVRS would propose an annual rate increase not to exceed the consumer price index (“CPI”).

**D. Tiered Rates Preserve Choices**

Insofar as RLSA proposes a reduced tiered rate structure, phased-in over three years, ZVRS submits that it is essential to maintain and widen the three existing tiers based on the understanding that in the current VRS market there are fundamentally three similar scale groups of VRS providers: Segment 1: CAAG, Convo and Gracias; Segment 2: ZVRS and Purple; and Segment 3: Sorenson. The tiers we recommend are consistent with these segments. When the original tiers were set in 2007, the VRS industry was at 65 million minutes annually versus the projected 111 million annually in the 2012/2013 Fund year.<sup>15</sup> This represents a growth of 71% or 46 million minutes within the industry. Furthermore, ZVRS submits that the economies of scale

<sup>15</sup> *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, RLSA’s Interstate Telecommunications Relay Services Fund Payment Formula and Fund Size Estimate, CG Docket No. 03-123, Exhibit 2 (April 30, 2012).

would be more fully realized at a monthly one million minute threshold. Therefore, ZVRS proposes that the Commission widen the tiers needed to reflect industry maturation as follows: Tier I: 0 - 100,000 minutes; Tier II: 100,001 - 1,000,000 minutes; and Tier III: minutes exceeding 1,000,000. The expansion of Tier I and Tier II will encourage smaller providers to grow and innovate and ultimately offer a better service for the VRS consumer.

Accordingly, ZVRS proposes the following tiered rates:

<b>TIERS</b>	<b>Proposed Rates</b>	<b>Off-Shelf Only</b>
Tier I (up to 100,000 minutes)	\$ 6.30	\$ 6.02
Tier II (100,001 TO 1M minutes)	\$ 6.00	\$ 5.86
Tier III (> 1M minutes)	\$ 4.70	\$ 4.56

The rates are calculated based on a tiered weighted average methodology versus an industry weighted-average methodology. The tiered “Proposed Rates” should remain in place until the full transitioning to off-the-shelf technology, at which time the “Off-Shelf Only” rates would be implemented, taking into consideration any cost adjustments at that time. The proposed tiers should also remain in place until the VRS market share is balanced. The proposed change in the tier structure with the proposed reduced rates still results in a cost savings of approximately \$20 million over the 2012/2013 estimated cost. The savings for off-the-shelf technology based VRS is approximately \$36 million over the 2012/2013 estimated cost.<sup>16</sup> ZVRS has extensively detailed the tremendous progress made possible by the tiered rate structure as a stable and predictable funding mechanism which best balances the objectives of progressing towards an ADA-compliant level of relay services and ensuring that providers have the

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<sup>16</sup> Id.

opportunity to realize a reasonable return in providing that level of relay services during a period that substantive changes are being made to the VRS program.<sup>17</sup>

E. **Marketing, Outreach, Research & Development**

ZVRS submits that Marketing, Outreach, and Research & Development are an integral part of the VRS industry and therefore, should continue to be allowed as part of the cost basis for rates.

1. **Research & Development**

The Commission's own rules compel VRS providers to engage in substantial research and development in order to remain in compliance with operational standards.<sup>18</sup> Without funding for research & development, the smaller providers would not be in a position to innovate and grow, thus challenging the larger provider to improve its services for VRS customers.

ZVRS has a very sophisticated automated platform that measures minutes without any human intervention. In addition ZVRS has a platform that performs interoperability with the dominant provider even when that provider does not use standards. ZVRS' platform is capable of firewall traversal for major government accounts and Fortune 500 accounts. ZVRS is an industry-leader in providing VRS in workplaces and through its outreach, developments and phones has brought VRS and job opportunities to countless employees who were previously

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<sup>17</sup> See e.g. *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Comments of CSDVRS, LLC, CG Docket Nos. 10-51 and 03-123 (May 16, 2011).

<sup>18</sup> See, e.g., *In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 03-123, FCC 08-151 (June 24, 2008) (implementing ten-digit numbering); *In the Matter of Structure and Practices of the Video Relay Service Program*, Declaratory Ruling, CG Docket No. 10-51 (February 25, 2010) (emphasizing the prohibition on international-to-international calls).

denied VP access because of firewall and security issues. In the last six years ZVRS has spent over \$6 million building this platform.

## 2. **Marketing & Outreach**

Provider marketing and outreach efforts benefit VRS consumers and promote functionally equivalent service. As such, these expenses should be compensated.

ZVRS's marketing and outreach efforts are directed to introducing consumers to VRS as well as new products, features and services. Marketing and outreach expenses are necessary expenses of providing VRS. Providing the public and consumers with information on services, product availability, and training on use is a necessary element of functional equivalency. Marketing and outreach efforts principally educate consumers as to the availability of service, service providers and service options. The hearing public has the benefit of the substantial marketing efforts of competitive telecommunications providers. Far from being a static market, VRS continues to grow. It cannot logically be growing by providers enticing each other's users away; rather the service is growing because more and more deaf and hard of hearing consumers are using VRS for their communications needs.

Marketing and outreach efforts plainly benefit VRS consumers. First, these efforts advise consumers of the services and the specific features available from various providers which meet their unique functionally equivalent needs for communicating. Marketing and outreach efforts are thus necessary to allow consumers to reap the benefits of competition. This is especially important given the existing structure of the VRS industry, where one provider has amassed a dominant market share as a result of systematic anticompetitive behavior. Marketing and outreach expense is necessary to allow other providers a chance to acquire those customers

previously locked-in to the dominant provider as a result of its monopolistic control of VRS subscriber equipment. Conversely, preventing providers from marketing to existing users will cement the dominant provider's market position, essentially rewarding it for its history of anti-competitive conduct.

F. **Customer Premise Equipment ("CPE")**

ZVRS submits that the FCC should consider the reasonable costs for VPs as part of the rate setting process. Certainly the Commission can appreciate that in the current market structure, VRS simply would not be appropriately available without the provision of subsidized VPs. Indeed, the Commission's longstanding support of ten-digit numbering and rulings on VP functionality are emblematic of the acknowledgement of the need for provider supported VPs to enable VRS. As such, ZVRS would urge the Commission to include in the rate a per minute cost for VPs and their service.

The only true competition with the dominant provider is with VPs. Over the past 3 years (2010 through September 2012) ZVRS has spent approximately \$5,000,000 on VPs, excluding the cost of customer support. This expenditure further emphasizes that the providers who distribute hardware to customers, namely Sorenson and ZVRS, have higher costs. ZVRS' costs are greater than Sorenson's because ZVRS distributes new VPs whereas Sorenson's VPs have been in the market place for years and are being recycled. RLSA calculated a total cost of approximately \$.10 per minute using the industry-wide weighted average methodology. As discussed in Section D above, we submit that a tier methodology be used which would result in a higher cost per minute for Tiers I and II of approximately \$.25 to \$.30.

G. **E911 and Numbering Costs**

ZVRS submits that the FCC should include the costs supporting E911 and Ten Digit Numbering (“Numbering”) in the rate setting process. We cannot be in compliance with the E911 and Numbering requirements without covering the costs incurred for:

- Supporting E911
- Supporting Ten Digit Phone Numbers
- Supporting Customer Number Portability

The monthly costs of providing E911 and Numbering, as required by the FCC’s June and December 2008 Numbering Orders,<sup>19</sup> can range from \$0.80 to \$0.90 per month per number depending upon the volume of numbers that a provider has issued. Furthermore, each number costs \$7.50 at the point of acquisition, and even a two-year amortization of this cost yields a monthly cost of approximately \$0.31. Before any fixed costs or labor specifically dedicated to supporting E911/Numbering is applied, monthly compliance is approximately \$1.16 per number for a Tier II provider. In addition, ZVRS’ personnel costs for supporting E911/Numbering are approximately \$6,300 per month. Figure 4 provides the estimated cost structure of a Tier II provider:

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<sup>19</sup> See *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, *E911 Requirements for IP-Enabled Service Providers*, WC Docket No. 05-196, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 11591(2008); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123, CC Docket No. 98-67, *E911 Requirements for IP-Enabled Service Providers*, WC Docket No. 05-196, Second Report and Order and Order on Reconsideration, 24 FCC Rcd 791 (2008).

**Figure 4: E911/Ten-digit Numbering Costs**

<i>Tier II Sample Company</i>		
	<u>Per Month</u>	<u>Per Minute</u>
Acquisition Cost per Number/Customer (amortized over 24 mos.) <sup>(1)</sup>	\$ 0.3125	\$ 0.0125
Monthly Recurring Cost per Number	0.3000	0.0120
E911 Monthly Recurring Maintenance Cost Per Number	0.5500	0.0220
Variable Costs	<u>\$ 1.1625</u>	<u>\$ 0.0465</u>
Monthly Support of E911/Numbering <sup>(2)</sup>	\$ 6,300.00	\$ 0.0126
<b>Total E911/Numbering Cost per Minute</b>		<u><b>\$ 0.0591</b></u>
<sup>(1)</sup> Assuming an average of 25 minutes per user and amortization		
<sup>(2)</sup> Assuming 40,000 numbers issued and active		

The monthly cost of sustaining 40,000 numbers, excluding manpower or new telephone number costs, is \$0.034 per minute. ZVRS submits that a fair per-minute reimbursement rate for those providers issuing and supporting phone numbers should be approximately \$0.06 per minute and be incorporated in the VRS rates.

**H. The Proposed Rates will Undermine Functional Equivalency**

ZVRS has unwaveringly supported the cardinal principle that the ADA’s mandate of functional equivalency must serve as the prevailing standard for assessing any action considered, proposed, or taken with respect to VRS.<sup>20</sup> RLSA’s 2012 VRS Rate Filing contains no substantive assessment of the proposed rate’s impact on functional equivalency, or even for that matter to maintain the current level of services and technological innovation. VRS is still far where it must be as a functionally equivalent service; ZVRS has described a multitude of

<sup>20</sup> See ZVRS FNPRM Comments, p. 5; See also *Sorenson Communications, Inc., v. Federal Communications Commission and the United States of America*, Uncited Preliminary Answer Brief (Public Version) (10<sup>th</sup> Cir. 2010) (the Commission vigorously defended the interim tiered rate as reasonable, balanced and advancing the “functional equivalency mandate.”).

remaining linguistic, cultural and technology barriers in VRS.<sup>21</sup> The significantly lower proposed rate makes it safe to assume that it will affect provider capacity to refine service and technology offerings to achieve functional equivalency goals; ZVRS has described in its discussion above the drastic impact of the significant rate reduction on its operations. Here ZVRS reiterates the call for the establishment of a “blue ribbon” advisory committee to support the Commission on the rate issue similar to the very successful consensus built and experience validated work of the FCC’s Video Programming and Emergency Access Advisory Committees.<sup>22</sup>

## II. VRS Access Technology and Interpreting Must Evolve

*John Q., one of the tens of thousands of new deaf adult Americans each year, desires a VP to telecommunicate. He settles on Sorenson because that’s what everyone seems to have. Only the nTouch is available to him and he is shocked that he is unable to independently download the software. He is unable to find in stores a compatible off-the-shelf solution. After months of frequent pleas, he is notified that Sorenson is finally ready to provide him with a nTouch. His heart sinks when he learns that he is not able to use nTouch to video chat with people using a different VP. He becomes worried when he cannot use the nTouch at work due to its firewall and encryption shortcomings. Frankly, with the long wait time for Sorenson VIs and their obvious lack of certification in many instances, he wonders what the fuss for them is all about and how they achieved their dominant position in the first place. He reads online about Sorenson’s long history of locking in customers to only being able to call Sorenson VRS or other Sorenson customers, requiring the use of Sorenson VRS in order to keep their VPs, its refusal to make its VPs portable, its fight against interoperability and now making nTouch only fully compatible with Sorenson service and products and not interoperable with all of the other VPs already in use for VRS. He considers Sorenson a service manipulator in the same way AT&T once was with the rotary phone. He wonders why the FCC doesn’t do something to put things right.*

### A. Transitioning to a New VRS Structure

ZVRS’ response is that the Commission has been diligently working to put things right in the VRS program and has provided opportunities for stakeholders to contribute reform ideas

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<sup>21</sup> See e.g. ZVRS FNPRM Comments, p 13-15.

<sup>22</sup> ZVRS FNPRM Comments, pp. 30-31; See also *Structure and Practices of the Video Relay Service Program*, Joint letter to the Commission from CSDVRS, LLC, Sorenson Communications, Inc., Snap Telecommunications, Inc., and Convo Communications, LLC, Further Notice of Proposed Rulemaking, CG Docket Nos. 10-51, 03-123 (“Joint Provider Letter”) (March 6, 2012).

which maintain the progress towards functional equivalency for relay users while ensuring the integrity of the program. In its comments in response to the Commission’s December 2011 Further Notice of Proposed Rulemaking (“FNPRM”),<sup>23</sup> ZVRS laid out the case for the separation of the provision of VRS access technology and VRS interpreting and provided a detailed proposal to accomplish that separation.<sup>24</sup> ZVRS’ proposed creating a bifurcated system in which eligible VRS consumers select and register a default VRS Access Provider responsible for accomplishing the customer’s access to VRS and separately select and register a default VRS Interpreting Provider to supply the interpreting for the customer’s VRS calls. Similar to the breakup of AT&T, a separation of VRS access technology and VRS interpreting service provider is appropriate in a market where the dominant provider engaged in the anti-competitive use of equipment to attain a monopoly of consumers and their usage. ZVRS explained that the segregation of technology and interpreting services would focus providers on serving their customers, support consumer choice, motivate the provision of quality interpreting services and innovative products, ensure the interoperability and portability of VRS access technology, promote competition, help providers reach scale and enhance the efficiency of TRS Fund expenditures.<sup>25</sup>

The Commission received wide agreement<sup>26</sup> with the FNPRM premises that the lack of interoperability and portability have caused VRS users to become “locked in” and that the VRS

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<sup>23</sup> *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Further Notice of Proposed Rulemaking, CG Docket Nos. 10-51 and 03-123; FCC 11-184, 77 FR 4948, (“FCC FNPRM”) (December 15, 2011).

<sup>24</sup> See ZVRS FNPRM Comments, Part III. A.; See also *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Ex Parte of CSDVRS, LLC., CG Docket Nos. 10-51 and 03-123 (“ZVRS May 9, 2012 Ex Parte”) (May 9, 2012).

<sup>25</sup> See ZVRS FNPRM Comments, pp.16-17, 21.

<sup>26</sup> See e.g., *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Comments to Further Notice of Proposed Rulemaking of Deaf and Hard of Hearing Consumer Advocacy Network, Telecommunications for the Deaf and Hard of Hearing, Inc., National Association of the Deaf, the Association of Late Deafened Adults, Inc.,

access technology standards are insufficiently developed to facilitate VRS users' access to off-the-shelf technology and ensuring that providers have a "real opportunity to compete."<sup>27</sup> The dominant provider has rolled out new VP technology – nTouch – which has been documented as not being fully interoperable with pre-existing VRS access technology.<sup>28</sup> The Commission has the authority and obligation to eradicate these obstructions by regulating access technology consistent with the statutory mandate to "ensure" that VRS is "available, to the extent possible and in the most efficient manner."<sup>29</sup> Consumer groups have expressly agreed with the Commission that "all VRS access technology hardware used to make compensable VRS calls be 'off-the-shelf'" to eliminate barriers to the "availability" of VRS, and "reduc[e] VRS user lock in."<sup>30</sup>

The Commission must facilitate VRS access technology to bridge the gap to the full use of off-the-shelf technology and to ensure that VRS remains available to everyone during the

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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 Alexander Graham Bell Association for the Deaf and Hard of Hearing, CG Dockets No. 03-123 and 10-51, p. 14 ("Consumer FNPRM Comments") (March 5, 2012).

<sup>27</sup> FCC FNPRM, Part III B.

<sup>28</sup> *Structure and Practices of the Video Relay Service Program*, Ex Parte of CSDVRS, LLC., CG Docket No. 10-51 (December 5, 2011); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, Letter of Gallaudet University's Technology Access Program on Video Relay Service interoperability, CG Docket Nos. 03-123 and 10-51, Attachments (August 9, 2012).

<sup>29</sup> 47 U.S.C. § 225(d) (3). *See also* 47 U.S.C. § 617(a) and (b), Twenty-First Century Communications and Video Accessibility Act of 2010 ("CVAA"), Pub. L. No. 111-260, 124 Stat. 2751 (2010) which ZVRS holds as providing the Commission with a mandate to drive interoperable video conferencing services to facilitate the widespread access and use of off-the-shelf technology for people with disabilities, *see e.g.*, ZVRS FNPRM comments, p. 22; *Implementation of Section 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010; Amendments to the Commission's Rules Implementing Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; In the Matter of Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision*, CG Docket Nos. 10-213 and 10-145, WT Docket No. 96-198, Reply Comments of CSDVRS, LLC (May 23, 2011) (*But see*, comments of Sorenson Communications which oppose the application of the CVAA's interoperability requirements to VRS providers (November 22, 2010)). In addition, ZVRS made clear in Part III. C. of its FNPRM comments that the statute also plainly provides the Commission with the authority to use the TRS Fund to support VRS access technology.

<sup>30</sup> Consumer FNPRM Comments, p. 14.

migration.<sup>31</sup> In support of the transition, ZVRS proposed the Commission issue a Request for Proposal (“RFP”) for vendor(s) to provide standardized VRS video connectivity software which would operate across commonly available off-the-shelf technology as a downloadable software application.<sup>32</sup> The software VP application would allow users to use a selected default provider for VRS but also allow the user to simply click a button to dial around to another provider. Both a fully executable generic version should be made available as well as a reference design where VRS companies can modify and brand the application as theirs as well as offer any features which enhance the quality of the caller’s experience and advance functional equivalency objectives. The vendor’s technology platform, in conjunction with the iTRS database, should support the routing of all VRS, point-to-point (“P2P”) and e911 calls placed through the software VP application. The maintenance and updates of the software application should be a part of the vendor obligations under the RFP or from the VRS provider when using the reference design. ZVRS successfully demonstrated several times to the Commission a universal software application which operates on a range of off-the-shelf technology to confirm that it is readily available on the market today.

ZVRS proposed that within a 3 year transition period, the Commission would phase out the compensation of VRS calls made through non-off-the-shelf technology. ZVRS recommended that a stipend become available under the TRS Fund to assist individuals in obtaining an approved off-the shelf device such as an iPad to ensure that it is available for an eligible user who needs it to access VRS.

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<sup>31</sup> As noted in the FCC FNPRM (§17), VRS providers have been unable to develop common technical standards which enable consumers the continued full use of VPs after porting, resulting in them being “effectively “locked in” to their existing providers....”

<sup>32</sup> See *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Ex Partes of CSDVRS, LLC, CG Docket Nos. 10-51 and 03-123 (June 1, 2012, July 10, 2012 and August 27, 2012).

The appropriate structure during the transition period to off-the-shelf technology would be the proposed system of discrete default providers for VRS Access Technology and VRS Interpreting and separately compensating providers for providing customers the technology to make VRS/P2P video calls and for the interpretation of VRS calls, thus requiring a new default selection period.<sup>33</sup> ZVRS indicated in meetings with the Commission its support for Neustar to manage the default provider selection as part of enhanced iTRS database operations and provided the Commission with sample webpages for consumers to independently make online their selection of default providers.<sup>34</sup> VRS Access Technology providers during the transition period must offer only tested and certified interoperable VPs and support its range of enhanced features regardless of the consumer's choice of default provider or if it is used to dial around to a different provider. ZVRS has said that a third party test and certification system must be established to have the CPE (hardware and software) and gateways tested and certified as interoperable.<sup>35</sup> When selecting a VRS Interpreting Provider different from the VRS Access Provider, all hardware and software features must stay intact including, but not limited to, address book, caller-ID, and video mail. All VRS providers must support the software VP application within a recommended 3 month deadline.

**B. Establishing Standards**

The lack of overall adoption of consumer based video communications has caused in VRS the inconsistent implementation of standards, the use of proprietary methods, and in general multiple silos of users with mixed capability to connect. Without any mandating of a specific

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<sup>33</sup> See ZVRS FNPRM Comments, Part III. A.

<sup>34</sup> See *Structure and Practices of the Video Relay Service Program*, Ex Parte of CSDVRS, LLC, CG Docket No. 10-51 (June 13, 2011). See also ZVRS FNPRM Comments, p. 21 (proposing that “registration be administered by an independent non-provider affiliated entity to ensure that consumers get the benefit of equal access to information about their registrations and to mitigate the possibility of fraudulent registrations or impermissible incentives to register.”)

<sup>35</sup> ZVRS FNPRM Comments, p. 44.

standards for communication or interoperability, ZVRS and others are forced to glue together proprietary solutions from Sorenson, which utilize H.323 or SIP, but do so in a proprietary manner. Connectivity between different silos of users seldom happens without some economic benefit being shared among parties which Sorenson as the dominant provider is loath to relinquish. Until there is a mandate enforced by the FCC and a mechanism to support it, these networks will remain separate and will not interoperate in a uniform, consistent or reliable manner.

ZVRS supports the creation of a common set of interoperability standards including defining the common network elements.<sup>36</sup> ZVRS believes interoperability should not be relegated to the customer premises equipment (“CPE”). It should include interoperability via common network elements. Interoperability between VRS Access Providers must be established. Interoperability test labs need to be established to ensure interoperability. CPEs need only be qualified to work within a given VRS Access Provider’s federated network. To support the Commission in this work, ZVRS likewise recommends that a “blue ribbon” advisory committee comprised of industry technology experts and consumers be established and charged with providing consensus built and experience validated deliverables within specific timelines.<sup>37</sup>

Following industry standards and leaders in video technology such as Cisco, Polycom, and Lifesize which offer off-the-shelf video CPE and software applications, using SIP, H.323 and even XMPP Jingle based signaling, will provide both residential and enterprise consumers the ability to communicate through VRS utilizing the best and most up-to-date technology.

ZVRS could not have accomplished its industry-leading product innovation without utilizing the

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<sup>36</sup> ZVRS FNPRM Comments, Part IV. B.

<sup>37</sup> While ZVRS has been a consistently engaged participant in industry interoperability activities such as the one hosted by Neustar, these activities have unfortunately become the go-to excuse for Sorenson in delaying achieving interoperability while advocating that market forces should be allowed to resolve it. VRS stakeholders despise the ongoing non-interoperability and we call upon the FCC to establish a mandate and a mechanism to carry it out within a deadline.

technology of the commercial video industry experts. Google, Microsoft and Apple are making great strides in providing video capabilities in software on mobile and personal computers as well as cloud-based solutions. The interoperability standard must specify video, audio and text codecs supported. It must enable VRS users access to new technologies including those being developed by Google, Microsoft, Apple and others.

ZVRS provided in response to the Commission's February 17, 2011 Public Notice about emerging technologies<sup>38</sup> a thorough discussion of the features and functions of off-the-shelf<sup>39</sup> equipment, services, and software which are needed to effectively use VRS.<sup>40</sup> ZVRS posited that in order to allow for multiple communications protocols to be utilized by different devices, then either all devices and software must adopt all of the available communications standards or a network elements (gateway) must be installed that will enable interoperability between the different communication protocols. Currently, most of the available off-the-shelf technology being used in VRS supports H.323 or SIP. For other technologies to be deployed, gateways would either need to be added or developed for the existing networks to support interoperability. Establishing interoperability standards for server based routing will allow for off-the-shelf CPE to be supported.

When VRS Access Providers employ CPE that are based upon video industry standards, interoperability will be achieved by routing calls through a series of gateways. VRS call routing is accomplished via FQDN (Fully Qualified Domain Name) within DNS (Domain Name Service) server-based routing rather than equipment based routing. Server-based routing, using

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<sup>38</sup> *Consumer and Governmental Affairs Bureau Seeks Comment on Application of New and Emerging Technologies for Video Relay Service Use*, Public Notice, CG Docket 10-51, DA 11-317A1, (February 17, 2011).

<sup>39</sup> ZVRS has defined "off-the-shelf" to include products within the telepresence industry, and interoperable using industry standards based protocols as advertised in the iTRS database as well as allowing support for cloud-based, desktop, laptops, tablets, and mobile software applications. ZVRS FNPRM Comments, p. 43.

<sup>40</sup> *Structure and Practices of the Video Relay Service Program*, Comments of CSDVRS, LLC, CG Docket No. 10-51 ("CSDVRS April 1, 2011 Comments") (April 1, 2011).

session border controllers, to “peer” with other federated networks is another key that VoIP service providers do and is functionally equivalent. By placing the call routing on the server side and requiring standards-based technology between VRS Access Providers and VRS Interpreting providers, innovative new CPE signaling approaches can be afforded without requiring device portability. As new video telepresence technologies such as WebRTC are added to all consumer web browsers, without SIP or H.323 signaling of any kind, any web browser capable device implementing that new HTML5 standard may access their VRS Access Provider’s website to use it as a portal to other SIP and H.323 standards based devices in the VRS world. VRS Access Provider CPE need only qualify for that VRS Access Provider’s federated network. It is not necessary for the VRS Access Provider CPE to be usable directly with another VRS Access Provider’s federated network. What really matters is the interoperability between peering VRS Access Providers. So long as calls are interoperable between VRS Access Provider common network elements, any off-the-shelf technology may be used for any given VRS Access Provider’s CPE. This allows for innovation and for interoperability between the deaf and hard of hearing users of VRS.

ZVRS believes that any interoperability standard must allow VRS Access Providers to provide fully functional CPE where all features must stay intact when selecting an alternate VRS Interpreting Provider or when making a dial-around call. The standard must also address portability and Next Generation 9-1-1 (“NG9-1-1”) services.

Due to evolution from a web-centric model to an application-centric model, it is easy to deploy software for a personal communications device that services the needs of a given customer base. This is why ZVRS supports the addition of a software VP application model to the VRS program which works on a myriad of platforms including personal computers, laptops,

tablets, and smartphones allows the ability to access VRS without being tied to a singular hardware platform.<sup>41</sup> ZVRS believes the need is made acute by the fact that only two providers, Sorenson and ZVRS, make available built for VRS hard VPs. Companies which manufacture VPs are rapidly phasing out product lines as cheaper off-the-shelf devices become commonly available, thus forcing providers to estimate the near future end of life for these purpose built VPs. The introduction of a standard software VP application would ensure the availability of VRS regardless of the sustainability of purpose built VPs, eliminate interoperability problems and port battles, focus providers on the quality of interpreting, even out market share, and enhance the efficiency of the TRS Fund.

The Commission must also modify its existing rules to ensure that the information that is placed into a consumer's list of contacts/videophone address book remains available to the consumer should s/he port to a different provider (one method that could be adopted is the existing vCard 3.0 standard).<sup>42</sup> Mandating such ownership to the consumer, rather than the provider will allow VRS customers to move that information to another provider's system or a current off-the-shelf product.

### **III. Enhanced iTRS Database Operations**

VRS providers have uniformly supported the development of a database which provides an accurate count of VRS users and their usage.<sup>43</sup> ZVRS proposed that the current iTRS database be expanded to "clearly identify eligible VRS users and associate with a single individual all of his or her phone numbers...."<sup>44</sup> ZVRS also proposed that the iTRS database include VRS users' choices of default VRS Access Technology and VRS Interpreting providers (by adding a Carrier

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<sup>41</sup> ZVRS FNPRM Comments, p. 40 ("the proposed standard is only met by the dominant provider that provides a proprietary videophone that is not available "off-the-shelf."").

<sup>42</sup> See CSDVRS April 1, 2011 Comments, p. 9.

<sup>43</sup> See e.g. Joint Provider Letter.

<sup>44</sup> ZVRS FNPRM Comments, p. 31.

ID field) as part of the separation of access technology and interpreting services and to properly route calls to the user's choice of VRS Interpreting provider.<sup>45</sup>

The Commission in the PN goes further in the conceptualization of an enhanced iTRS database by seeking comment on the following additional possible functions and services:

**A. User registration and validation.**

As discussed above, ZVRS has supported a third party such as Neustar conducting the registration of VRS users' selection of default providers. It would appear to be efficient and likely more accurate in terms of user accounting for a third party to manage the entire registration of VRS consumers including their eligibility for use of VRS. However, consistent with universal design and access principles, we want to be mindful about creating a registration method and directory which ultimately allows the registration of anyone's video phone number, whether they have a disability or not.<sup>46</sup> As with Consumer Organizations,<sup>47</sup> ZVRS adamantly opposes the creation of any system which would undermine the privacy of personal information<sup>48</sup> or require evidence of medical conditions and/or ASL proficiency as a condition for eligibility.<sup>49</sup> ZVRS supports per-call user verification through the iTRS database to help ensure the compensability of VRS calls handled. The combination of a VP database for all plus a standardized software application will help drive the availability and prevalence of VPs in public spaces such as educational institutions, governmental agencies, places of transportation and

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<sup>45</sup> Id; ZVRS' May 9, 2012 Ex Parte.

<sup>46</sup> See ZVRS FNPRM Comments, pp. 31-32. The North American Numbering Plan ("NANP"), operated by Neustar, should continue to be a model for the Commission in how communications service providers register their customers in the Neustar clearinghouse to enable their calls.

<sup>47</sup> Consumer FNPRM Comments, p. 45.

<sup>48</sup> See *Structure and Practices of the Video Relay Service Program*, Comments of CSDVRS, LLC to Petition for Clarification or Waiver Filed by Purple Communications, Inc., CG Docket No. 10-51 (July 16, 2010) (submitting that the Commission should extend the Consumer Proprietary Network Information ("CPNI") rules to VRS).

<sup>49</sup> ZVRS FNPRM Comments, pp. 31-32.

accommodation etc., and support progression towards a readily accessible telecommunications environment regardless of the individual's abilities and whereabouts.

**B. Call Routing.**

The iTRS database enables the proper routing of VRS provider customers' calls. ZVRS proposed enhancing the iTRS database to enable calls routed to the user-chosen default VRS Interpreting provider unless the user dials around to a different interpreting provider. As is done with the routing of calls through Neustar clearinghouses to communications service providers, the iTRS database should route video calls to the providers' front door for service. Providers are best able to manage the distribution of calls among its call centers and require the flexibility to make on the spot adjustments to accommodate fluid conditions while retaining services within the TRS mandatory minimum standards such as speed of answer and facilitate the prompt handling of emergency calls. ZVRS supports enhancing the iTRS database to better support 911 call routing.<sup>50</sup>

**C. VRS Access Technology.**

ZVRS proposed modifying the iTRS database to indicate the user's choice of the default VRS Access Technology provider. In its FNPRM comments, ZVRS described a multitude of obligations of a default VRS Access Technology provider including: installation, training, support, testing, maintenance, network and platform operations, engineering (including ensuring interoperability) and failed unit repair and replacement.<sup>51</sup> For the transition period to off-the-shelf technology, we recommend using VRS providers with the sanctioned capacity, technology, expertise and personnel to support customers in the deployment and use of VRS access

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<sup>50</sup> Certain changes may be needed to support NG9-1-1. In addition, the escalation of mobile technology makes imperative better tracking of user location including their multiple regular addresses. Also, more communities are using phone directories to provide emergency alerts to citizens.

<sup>51</sup> ZVRS FNPRM Comments, p. 18.

technology, rather than the iTRS database administrator. From the inception of VRS, a bedrock principle of functional equivalency is to enable consumer choice and sustain vigorous competition among providers to promote innovative and quality services. This principle should determine that multiple and competitive VRS providers are the best means to support video communication services ZVRS described above as necessary as a default VRS Access Technology provider. Once we fully transition to off-the-shelf technology, VRS Access Technology providers are then no longer needed as consumers will use commercially available communications service providers for all of their video communication and technology needs, whether they use VRS or not. There is thus no need for the iTRS database administrator to assume the role of a VRS Access Technology provider. Finally, with respect to the FCC PN inquiry regarding the development and distribution of VRS access technology such as a common application, ZVRS has proposed that the Commission issue a RFP for a standard software VP application to support the transition to off-the-shelf technology. The critical criteria for such VRS access technology are its functionality, usability, accessibility, interoperability and portability rather than its fit within an enhanced iTRS database.

#### **IV. Conclusion**

ZVRS believes that the FCC should not only maintain tiers in a multi-year rate structure, but also expand the tiers to more adequately account for the real economies of scale, using the weighted average costs within each tier as opposed to a weighted average for the entire industry. All costs required to provide the services and to be in compliance with the FCC regulations should be included in the rate-setting process, particularly marketing, outreach, research & development, video phones, E911 and ten-digit numbering costs. In addition, the Commission should implement a ROI methodology which is applicable to the VRS industry - specifically

considering the CA costs - to ensure that investors receive a fair and reasonable return on their investment so that the VRS industry will continue to grow and provide better services for their intended customers. Finally, ZVRS recommends separating the provision of VRS access technology from interpreting and transitioning to off-the-shelf hardware with the addition of software based VRS to ensure the growth of smaller providers, ameliorate the monopoly in the VRS market, promote competition and innovation, provide better services to the customer, reducing the costs of the providers and thus enhancing the efficiency of the TRS Fund.

VRS has changed lives by opening the door to functionally equivalent telecommunications. This positive change has been immeasurable and limitless. We should not risk this transformation by adopting an insufficient rate which would cause a drastic step back in the accessibility and opportunities for individuals who rely on VRS.

Respectfully Submitted,

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## Exhibit A

LEC	Net Capital Investments as a % of Total Assets	Gross Capital Investments as a % of Total Assets*
Windstream Corp	39.7%	59.5%
Hickory Tech Corp	63.1%	81.5%
CenturyLink Inc.	34.6%	44.6%
Frontier Communications	43.2%	57.9%
Shenandoah Telecommunications Consolidated Communications	64.7%	76.4%
	27.8%	55.0%
CSDVRS (net/gross capital investments)	4.9%	11.4%
CSDVRS (net/gross capital investments plus total CA)	33.7%	36.9%

*\*Total assets, excluding accumulated depreciation*

## Exhibit B

<b>LEC</b>	<b>Operating Margin</b>
Windstream Corp	22.59%
Hickory Tech Corp	12.02%
CenturyLink Inc.	13.19%
Frontier Communications	17.16%
Shenandoah Telecommunications	12.86%
Consolidated Communications	16.71%