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

In the Matter of	)	
	)	
Telecommunications Relay Services And Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities	)	CC Docket 98-67
	)	
TRS Fund Size and Payment Formula	)	

To: Chief, Consumer and Governmental Affairs Bureau

COMMENTS ON PROPOSED FUND SIZE AND TRS RATES

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As NECA's Fund Filing recognizes, the VRS rate it derived from the traditional rate calculation, $5.924, is driven by the demand and cost data of one provider. Without that one provider, NECA explains the blended 2005-06 VRS rate would be $7.061, a difference of $1.137. It is well known that the dominant VRS provider distributes VRS customer premises equipment ("CPE") and then blocks its use with other providers' service. That provider also has average answer speeds in the range of 5 to 20 minutes. Because of this provider's call answering and equipment blocking policies, it is both the low cost and the dominant VRS provider. NECA was understandably concerned that this provider's cost and demand figures skewed its calculation of the proposed 2005-06 VRS rate, noting:

> The average cost per minute appears to be driven by the cost and demand characteristics of a single provider. The average produced by the traditional rate development methodology using all providers' data indicates that only one provider's cost per minute is below the average, while all other providers' costs are above the average. Because of the number of open issues before the FCC related to VRS, e.g., answer performance and interoperability and the timing of their resolution, and the likelihood of their adding costs to the provision of TRS, the Commission may wish to explore alternatives to the traditional rate calculation. To that end, NECA also calculated the VRS reimbursement rate

excluding the low cost provider. Without that VRS provider, the reimbursement rate would be $7.061, a difference of $1.137.

Hands On endorses NECA's suggestion that the FCC adopt an alternative to the traditional rate setting methodology for VRS for 2005-06. Failure to do so will likely create a VRS monopoly that will ultimately deny consumers a choice of providers and service.

The FCC must adopt an alternative means to calculate the VRS rate because the $5.924 rate figure is not based on a fair comparison of service costs among providers. That is because it is not based on a standard or uniform service criterion. Although NECA required providers to disclose their target answer speeds so it and the FCC could monitor proposed staffing levels, NECA should have taken or been directed to take steps to normalize costs so that its rate determination achieved an apples to apples comparison.

The principal service quality issue facing VRS is answer speed. Although answer speed currently is waived for VRS, that is no reason to be unconcerned with answer speed in determining the VRS rate. Video interpreter salaries and benefits are the largest component of a provider's VRS costs. If one or more providers estimate their costs inadequately to achieve their targeted answer speed, or estimate their costs for a plainly inadequate answer speed, the effect on the VRS rate is to lower the rate below cost for those providers that estimate their costs to achieve a shorter answer speed. This causes other VRS providers to degrade their service below targeted levels, and perpetuates the current state of excessively long VRS answer speeds. A provider that costs for a long answer speed thus drags down the service levels of all other providers. This is especially so here where just one provider -- with

excessively long answer speeds -- accounts for two-thirds of the impact upon the VRS rate. Adoption of the $5.924 rate will result in a further lowering of service quality as all other providers must reduce their video interpreter costs to meet the decreased rate level.

Long answer speeds are exceedingly dangerous when a deaf or hard of hearing person is faces an emergency. Moreover, long answer speeds threaten injury to deaf and hard of hearing persons even when their situation is not technically an emergency, but merely urgent. There is also substantial risk of injury to the VRS competitive market. Currently, the dominant provider achieves its market position by bundling free VRS CPE with its VRS service and imposing a programming block on this CPE to prevent consumers from using this equipment to access any competing service. That provider thus enjoys a captive audience. If answer speeds for the rest of the VRS providers have to be lowered to make up for the lower VRS rate, there will be no incentive for consumers to use a VRS provider other than the dominant one.

Application of the Justice Department's Herfindahl-Hirshman Index ("HHI") indicates that the VRS market is dangerously concentrated. The dominant provider's 66.3 percent market share alone yields an HHI of 4,396, more than twice the highly concentrated threshold the Justice Department applies in analyzing a market. In light of this market concentration, use of the weighted average employed by the Fund Filing is highly suspect. For these reasons, the FCC should adopt NECA's recommendation to employ an alternative rate setting methodology.

In exercising its discretion under its rules to fashion an alternative rate calculation the FCC must balance the need to preserve adequate service and competition with the need to protect Interstate TRS Fund rate payers. Several reasonable means exist that the FCC could

employ to set the VRS rate using an alternative methodology. Substantial basis exists to support NECA's suggestion of a $7.061 rate in light that the low cost provider's estimate of $5.347 is more than one standard deviation from the mean of the seven reported cost estimates. Applying this same analysis, it would also be a reasonable alternative calculation methodology to eliminate the high cost figure of $10.905, because that figure is also more than one standard deviation from the mean of $7.326.

Still another alternative rate methodology would be to pick the mean of the seven cost estimates, $7.326. Eliminating the low and high cost providers' estimates prior to calculating the mean, results in a similarly reasonable $7.006 rate. Another suitable alternative VRS rate calculation would employ the median cost estimate of $6.644. Finally, the FCC could use a figure that reduces, but does not eliminate, the dominant provider's effect on the VRS rate. In Hands On's view the most appropriate methodology is to use the weighted average method, but to eliminate the low and high cost providers' estimates, since they are greater than one standard deviation from the mean.

It is appropriate for the FCC in adopting an alternative rate methodology to employ a safeguard to prevent any provider from earning windfall profits. Hands On suggests the FCC adopt a safeguard that recognizes that differences in VRS costs are directly tied to the provider's quality of service. Hands On, therefore, proposes tying the reimbursement rate to a provider's answer speed such that as answer speed goes up for a provider, the VRS payment rate would go down. This would give providers the incentive to reduce answer speed and thereby improve service to deaf, hard of hearing and speech disabled persons. It would also

serve to protect the Interstate TRS Fund by ensuring that providers with lower costs due to employing relatively fewer interpreters will not enjoy windfall profits. This methodology is also easily implemented as NECA currently obtains speed of answer information as part of the monthly traffic reports each provider submits to obtain payment for VRS.

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COMMENTS ON PROPOSED FUND SIZE AND TRS RATES

Hands On Video Relay Services, Inc. ("Hands On"),[1] by its counsel, and pursuant to Public Notice, DA 05-1175 (April 28, 2005) comments on the National Exchange Carrier Association's ("NECA") April 25, 2005, Payment Formula and Fund Size Estimate for 2005 through 2006 for the Interstate Telecommunications Relay Services Fund ("Fund Filing"). As we show below, the Bureau should adopt NECA's suggestion to employ an alternative rate setting methodology for Video Relay Service ("VRS") in light that one provider's cost estimates are skewing the rate for VRS. In support, the following is shown.

Hands On is one of eight VRS providers, seven of which submitted cost and demand estimates to NECA. Yet, NECA's Fund Filing recognizes that the VRS rate it derived from the traditional VRS rate calculation is driven by the demand and cost data submitted by one provider. *See* Fund Filing at n.32. That one provider is undoubtedly Sorenson

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[1]Hands On is a VRS provider, through contract, to AT&T Corp. ("AT&T"). Hands On is also a certified provider of VRS for the State of Washington's Telecommunications Relay Service ("TRS") program. Hands On has been providing VRS since July of 2002, originally in a developmental mode, since November of 2002 under contract with AT&T, and later with the State of Washington.

Communications, Inc. ("Sorenson"),[2] which touts itself as providing a majority of the minutes of VRS reimbursed from the TRS Fund. NECA points out that with the low cost provider the blended 2005-06 VRS rate would be $5.924; without Sorenson, NECA calculates that the VRS rate would be $7.061, a difference of $1.137.

It is a matter of record before this Commission that Sorenson is the only VRS provider that distributes VRS customer premises equipment ("CPE") and then blocks its use with other providers' service. Sorenson is also the only VRS provider which has an average answer speed in the range of 5 to 20 minutes.[3] Sorenson's answer speed was so bad, it was forced to resort to having its customers make reservations for VRS calls and having its video interpreters call customers back when a video interpreter was available to handle the call. The Commission rightly put a stop to this practice as inconsistent with the provider's common carrier obligations to handle calls in the order they are received. *See Federal Communications Commission Clarifies that Certain Telecommunications Relay Services (TRS) Marketing and Call Handling Practices are Improper and Reminds that Video Relay Service (VRS) May Not be Used as a Video Remote Interpreting Service*, Public Notice, DA–141 (January 26, 2005).

Because of Sorenson's call answering and equipment blocking policies, it is both the low cost and the dominant provider of VRS. NECA was understandably concerned that

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[2]Sorenson recently changed its name to Sorenson Communications, Inc. from Sorenson Media, Inc., apparently as a result of a corporate reorganization.

[3]Sorenson's exact answer speed performance is not publicly available. Nor is the answer speed data of other VRS providers publicly available. The FCC has access to this data from NECA, however.

Sorenson's cost and demand figures skewed its calculation of the proposed 2005-06 VRS rate. At note 32 of its Fund Filing, NECA stated:

> The average cost per minute appears to be driven by the cost and demand characteristics of a single provider. The average produced by the traditional rate development methodology using all providers' data indicates that only one provider's cost per minute is below the average, while all other providers' costs are above the average. Because of the number of open issues before the FCC related to VRS, e.g., answer performance and interoperability and the timing of their resolution, and the likelihood of their adding costs to the provision of TRS, the Commission may wish to explore alternatives to the traditional rate calculation. To that end, NECA also calculated the VRS reimbursement rate excluding the low cost provider. Without that VRS provider, the reimbursement rate would be $7.061, a difference of $1.137.

Hands On endorses NECA's suggestion that the Commission adopt an alternative to the traditional rate setting methodology for VRS for 2005-06. Failure to adopt an alternative calculation will likely result in creation of a VRS monopoly that will ultimately deny consumers a choice of VRS providers. Hands On emphasizes that use of an alternative rate setting methodology is an interim solution. Ultimately, a permanent solution to this problem must be resolved by imposition of a reasonable answer speed and a prohibition on blocking consumers' access to other providers. We discuss below, both the problems presented here and the several possible alternative rate setting methodologies which can serve as an interim solution..

I. The $5.924 VRS rate is based on an apples to oranges comparison.

The fundamental problem with adopting the $5.924 VRS rate set forth in the NECA Fund Filing is that it is not based on a fair comparison of service costs among providers. That is because it is not based on a standard or uniform service criterion. In deriving the $5.924

VRS payment figure, which NECA was careful not to endorse, NECA was plainly aware of the influence of average answer speed on provider cost data. *See* Fund Filing at n.32. Because of the effect of differing answer speeds, NECA suggested the Commission may wish to base the VRS rate on an alternative calculation. *Id.*

In obtaining interpreter related expenses, NECA did ask for and presumably received data on the speed of answer for which providers were costing. *See* Fund Filing at Appendix, Relay Services Data Request Instructions, p.9. However, NECA neither reported this data in this year's fund filing nor normalized the data to obtain an apples to apples comparison. This fact renders the $5.924 rate figure invalid because it is based on an apples to oranges comparison. Although NECA correctly required providers to disclose their target answer speeds so that it and the Commission could monitor providers' proposed staffing levels, NECA should have taken or been directed to take steps to normalize costs so that its rate determination methodology achieved an apples to apples comparison.[4] For this reason, the Commission should adopt NECA's suggestion to employ an alternative method of calculating the VRS rate for 2005-06.

The principal service quality issue facing VRS is answer speed. Answer speed flows directly from the number of video interpreters available to handle a call. An inadequate number of interpreters increases answer speed and results in dropped calls as consumers simply give up trying to complete a call. Although answer speed currently is waived for VRS, that is no

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[4]This is not to criticize NECA for employing the methodology it employed. NECA believed it was following the methodology the FCC has prescribed. It is therefore incumbent on the FCC to require in the future that TRS rate determinations be made based on a level playing field.

reason to be unconcerned with answer speed in determining the VRS rate. Video interpreter salaries and benefits are the largest component of a provider's VRS costs. Quite simply, if one or more providers estimate their costs inadequately to achieve their targeted answer speed, or estimate their costs for a plainly inadequate answer speed, the effect on the VRS rate is to lower the rate below cost for those providers who estimate their costs to achieve a shorter answer speed. This causes other VRS providers to degrade their service below targeted levels, and perpetuate the current state of excessively long answer speeds for VRS. In essence, a provider that costs for a long answer speed drags down the service levels of all other providers.

This is especially so in this case where just one provider accounts for two-thirds of the impact upon the VRS rate. As NECA points out, the effect of this provider on the calculated VRS rate is such that the rate is decreased to a level where every other providers' cost is above the calculated rate and only this single provider's costs are below the rate. Given this fact, adoption of the $5.924 rate will have two serious related deleterious effects. The first is a further lowering of service quality as all other providers must reduce their video interpreter costs to meet the decreased rate level. The second deleterious effect will be injury to competition.

With respect to speed of answer, a further lowering of VRS answer speeds will adversely impact the public interest. First, such a result is contrary to the plain intent of Section 225 to provide deaf and hard of hearing persons with telecommunications service comparable to that provided hearing persons. Hearing persons have virtually instantaneous dial tone. Although it may be difficult for VRS users to obtain an interpreter immediately, there

is no excuse in making them wait many minutes to place a call. Moreover, the Commission should consider the consumer ramifications of being unable to access the public telephone network in the event of a personal emergency or other urgent matter such as a medical emergency or time sensitive business situation. Long answer speeds endanger the safety and lives of deaf, hard of hearing and speech disabled persons, and risk loss or damage to their property. Although the Commission and VRS providers caution the deaf, hard of hearing and speech disabled public not to rely on VRS for emergency communications, the reality is that many in the community use VRS exclusively for their communications needs. This is particularly true for persons with limited English or typing skills who cannot or do not use TTYs or Internet protocol relay.

In an emergency, seconds count. Either in a fire, a medical emergency, or a crime in progress, seconds count. Deaf persons could die, suffer irreparable personal injury, destruction or damage of property, or financial loss waiting minutes for a VRS interpreter to handle a call. To adopt a VRS rate that will undoubtedly have as its by-product a substantial increase in answer speed throughout the industry, is to risk death, serious injury, destruction of property, or financial loss. Such action is plainly contrary to the public interest.

The issue of non-emergency, but still urgent calls is also implicated here. An investor trying to place a stock trade at 3:45 pm, prior to the exchange closing at 4 pm, but having to wait while the market moves against him, for example, or the mother of a sick child trying to call the doctor's office, having to wait for an interpreter while her sick child cries. Long

answer speeds can cause injury to deaf and hard of hearing consumers even when their situation is not technically an emergency.

There is also the substantial risk of injury to the VRS competitive market. Currently, the dominant provider, Sorenson Communications achieves that market position by bundling the provision of free VRS CPE with its VRS service. Sorenson imposes a programming block on this equipment to prevent recipients of its VRS CPE from using this equipment to access any competing service. No other VRS provider imposes a block on VRS equipment which it distributes. Most other VRS providers do distribute the Dlink 1000 video-phone. However, those providers have no right to impose a block on these devices similar to that imposed by Sorenson.[5]

Sorenson has thus uniquely achieved a captive audience. This is a captive audience because it does not easily have the opportunity to use a substitute product due to the Sorenson block. To be sure, if these persons are sufficiently motivated they can purchase a Dlink, or apply for one from another provider.[6] However, the incentive these persons do have to use

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[5]The Dlink 1000 and the Sorenson VP-100 videophones are essentially the same device. Dlink manufacturers both devices and both devices use the Sorenson SVX chip. It is believed that Sorenson's licensing agreement with Dlink prohibits Dlink from entering into separate branding arrangements with competing VRS providers. On information and belief, another VRS provider sought to privately brand the Dlink, as Sorenson has done, and Dlink refused its entreaties to do so. In addition, as of May 11, 2005, Hands On has verified that all Dlinks contact the same Sorenson LDAP server,

[6]Provider distribution programs, however, are themselves problematic. First, the FCC has ruled that providers may not build into their VRS cost submissions the cost of distributing CPE. Accordingly, if a provider wishes to compete with Sorenson's bundling of CPE and VRS service, the provider must absorb a loss on the equipment. Second, Sorenson in comments to this Commission and in ex parte submissions has suggested that its imposition of the block on the CPE it distributes is necessary to provide it a return on its investment in that CPE. That apparently means that Sorenson is in fact somehow obtaining

another VRS provider is directly tied to whether they can obtain superior service from another such provider, for example, by having to wait less time to obtain a video interpreter than if they used Sorenson. If all other VRS providers must degrade their answer times merely to break even and stay in business, then consumers will have no incentive to go to the time, trouble and possible expense to obtain equipment which will allow them to access a provider other than Sorenson. Hence, if Sorenson is allowed through its dismal answer performance and dominant market position to drive the VRS rate down below the cost of all other providers, Sorenson's dominance of the VRS market will not be countered through competition. Rather, its dominance of the VRS market will increase to the point where it will drive all other VRS providers out of the market. Consumers will then be denied the benefits of VRS competition.

As shown by the attached analysis of economic consulting firm Bond & Pecaro Principal John Sanders (attached at Exhibit 1), application of the Justice Department's Herfindahl-Hirshman Index ("HHI") indicates that the VRS market is highly concentrated.[7] In this case, Sorenson's 66.3 percent market share alone yields an HHI of 4,396, more than twice the highly concentrated threshold the Justice Department applies in analyzing a market. Mr. Sanders advises that this type of concentration is atypical in his experience and "raises

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reimbursement in the VRS rate for its equipment distribution efforts.

[7]The HHI is calculated by squaring the market share of each participant in a market and summing these results. For example, if an industry had 10 participants each with a 10 percent market share, the HHI would be 1,000. Markets in which the HHI is in excess of 1,800 are considered highly concentrated. Business combinations that increase the HHI by more than 100 points in a highly concentrated market are considered to raise antitrust concerns and can be presumed illegal. The index approaches zero when many participants have small shares and increases in markets with fewer participants and higher market shares. *See* Exhibit 1, p.4.

questions as to whether all of the cost per minute data points are consistent with an orderly market." *Id.* at p.4.

In light of this market concentration Mr. Sanders suggests that the use of the weighted average employed by the Fund Filing is suspect. As he explains,

> The market share imbalance of the participants and the related concentration of one provider obviously raise questions. The weighted average also varies significantly from the results of the other approaches, such as the straight average, the median, and the straight average with the elimination or outliers. From a mathematical perspective, it is commonly accepted that the nature of a data set may suggest the use of several statistical techniques, as we have done above, and that the brute force application of one technique, such as the weighted average, can be misleading. From a valuation perspective, the simple reliance on a weighted average without giving consideration to qualitative factors is also one of the "common errors" in using guideline companies. As one frequently cited appraisal text notes: "Unless the guideline and subject companies are extremely homogenous in their financial characteristics, the mean or median of the guideline company pricing multiples may not be the most appropriate pricing multiples.....Yet analysts often use the mean or median guideline company pricing multiple with no explanation to justify the implied notion that the subject company''s characteristics indicate it should be valued right at the average of the guideline companies.....Such analysis is little more than common sense, yet it is surprising how often it is ignored."

See Exhibit 1, p.5, citing Pratt, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies* (2000) pp. 255-56. Consequently, Mr. Sanders suggests "reliance on a more representative average, such as the straight average without outliers, or an approach which gives weight to several averages, in the calculation of a VRS reimbursement rate." *Id.*

For these reasons, the Commission should adopt NECA's recommendation to employ an alternative rate setting methodology. Otherwise the result will be a further lowering of service quality for consumers, a reward to providers which implement closed systems, and a

further increase in market concentration. The issue then is what alternative rate calculation should the Commission employ and how should it be employed.

II. The Commission should adopt an alternative calculation methodology that does not permit providers to earn windfall profits.

In fashioning an alternative rate calculation the Commission must balance the need to preserve adequate service and competition with the need to protect Interstate TRS Fund rate payers. We turn to this issue.

A. The Commission has authority to adopt an alternative rate setting methodology.

Preliminarily, it is important to emphasize that the Commission has discretion to depart from the methodology used to derive the $5.924 rate figure. That methodology, employing an average of provider costs, weighted by the relative percentage of proposed minutes, is nowhere set forth in the Commission's rules. It is merely a methodology that NECA has employed previously. FCC Rule Section 64.604(c)(5(E) is the rule section that controls determination of TRS rates. That section merely states that payments for telecommunications relay service shall be based on formulas approved by the Commission. The Commission, therefore, has discretion under this rule to adopt an alternative methodology for calculation the VRS rate along the lines NECA has suggested at note 32 in its Fund Filing.

B. There are several reasonable alternative rate calculations the Commission could employ.

In fashioning an appropriate rate, the Commission has discretion as long as the rate it determines is reasonable. There are several reasonable means the FCC could employ to set the VRS rate using an alternative methodology. Each is discussed below.

We start this analysis by reviewing the rate submissions of the seven reporting providers. The lowest cost provider's rate submission for 2005-06 was $5.347.[8] The other six providers' estimates were $6.007, $6.374, $6.644, $6.866, $9.138 and $10.905. Applying a methodology that weights the providers' estimates based on their number of forecasted minutes, NECA calculated a rate of $5.926. NECA further reported that eliminating the lowest cost provider resulted in a rate of $7.061.[9] Thus, NECA's Fund Filing implicitly suggests an alternative rate calculation of $7.061, determined by dropping the low cost provider.

There is substantial basis to support NECA's suggestion of a $7.061 rate. The low cost provider's estimate of $5.347 is more than one standard deviation from the mean of the seven cost estimates. The mean of those seven cost estimates is $7.326, and the standard deviation is $1.972. Thus, the $7.061 alternative figure NECA calculated appears to be a reasonable rate figure because it eliminates a provider's estimate which is more than a standard deviation from the mean.

Applying this same analysis, it would also be a reasonable alternative calculation methodology to eliminate the high cost figure of $10.905 as well, because that figure is also more than one standard deviation from the mean of $7.326. Since NECA did not calculate what the rate would be if the high cost provider were eliminated, we cannot know with certainty what the rate would be if both the high and low cost providers are excluded. However we can

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[8]This is a blend of 2005 and 2006 data, and includes an adjustment for return on working capital.

[9]That indicates that the lowest cost provider's impact on the 5.924 rate figure was approximately 66 percent. That is derived from the equations: $5.347A + 7.061B = 5.924$; $A + B = 1$.

make some reasonable assumptions. It is logical to assume that the highest cost provider is so because it estimated a relatively fewer number of VRS minutes compared to all the other providers. Since we know that the lowest cost provider proposed approximately 66 percent of VRS minutes, we therefore know that the other six providers together proposed approximately 34 percent of VRS minutes. This is an average of 5.66 percent each. Assuming the highest cost provider proposed no more than one-third the average of these six providers leads to a conclusion that the highest cost provider's effect on the VRS rate is likely no more than 1.88 percent. This would indicate then that elimination of both the highest cost provider and the lowest cost provider would yield a VRS rate of approximately $6.836, and more likely closer to $7.00 if we have overestimated the proposed minutes of the highest cost provider.[10]

Still another alternative rate methodology would be to pick the mean cost estimate, $7.326. Choosing this figure has the advantage that it does not allow any provider to skew the VRS rate based on the number of minutes proposed by that provider. Eliminating the low and high cost providers prior to calculating the mean, results in a rate of $7.006.

Similarly, a suitable alternative VRS rate calculation would be to employ the median cost estimate, i.e, the fourth of the seven estimates. This figure is $6.644.

Finally, the Commission could employ a figure for the VRS rate which reduces, but does not eliminate, the effect the dominant provider has on the VRS rate. For example, limiting the effect the dominant VRS provider has on the rate to one-seventh, results in a rate

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[10]This is shown by the following equation: (7.061 - ((100/34) * 0.0188 * 10.905)) / ((100/34) * 0.3212) = $6.836.

of $6.816. Reducing the effect the dominant provider has on the rate to 25 percent results in a rate of $6.633. Limiting the effect the dominant provider has on the rate to two-sevenths would place the rate at $6.571, and eliminating one-half the effect that the dominant VRS provider has on the rate, from 66 percent to 33 percent, results in a rate of $6.490.

Any of these alternative rate calculations would be appropriate for the Commission to adopt on an interim basis pending action on outstanding proceedings, including those on answer speed and interoperability. In Hands On's view the most appropriate methodology is to use the weighted average method but with the elimination of the low and high cost providers' estimates since they are greater than one standard deviation from the mean. This would be approximately $7.00.

C. The Commission should adopt a means to prevent providers from being unjustly enriched.

The Commission may be concerned about how use of an alternative methodology may affect the overall contribution and size requirements of the Interstate TRS Fund. We emphasize that the overall size of the TRS Fund should not be a factor in the FCC's decision on the VRS rate. That decision should be based on principles of functional equivalence which Congress imposed when it adopted Section 225 of the Act. However, it is at least an arguable FCC concern whether one or more VRS producers may be earning substantially more than allowed under the TRS regulations by virtue of excessively long answer speeds. In this connection it is completely understandable that the FCC should be concerned to prevent a provider with an abysmal answer speed from making windfall profits as a result of its business decisions which have resulted in that low service level. Adoption of any of the alternative rate

methodologies discussed above would plainly increase the VRS rate. If in fact the dominant VRS provider's true costs are as it reported to NECA, application of that rate to the dominant provider could result in allowing that provider to earn a windfall profit despite offering inferior service.

Accordingly, it would be appropriate for the Commission in adopting an alternative rate methodology to adopt a safeguard to prevent any provider from earning excessive profits. Any such safeguard should not reward providers for poor service, yet should not penalize them for efficient operation. Hands On discusses two possible such safeguards below.

A first possible safeguard would be implementation of one of the alternative VRS rate calculation methodologies discussed above, but with a true-up at the end of the rate period or at certain other specified intervals to prevent any provider from earning in excess of a sum certain. Although this methodology has the advantage of preventing any provider from earning excessive profits, it suffers from difficulty of implementation and fails to control for differences in service between providers. The second possible safeguard discussed below, however, has the advantage that it does control for differences in service levels and could easily be implemented.

This second possible safeguard is designed to recognize that differences in VRS costs are directly tied to the video interpreter workforce the provider employs and the number of video interpreters is in turn directly related to answer speed. Thus, a provider that employs a relatively larger number of video interpreters will have higher costs but a lower answer speed, whereas a provider that employs fewer video interpreters will have lower costs but a higher

answer speed. Hands On, therefore, proposes tying the reimbursement rate to a provider's answer speed.

It would work as follows. Assuming the Commission determined that it was appropriate as an interim measure to disregard both the high cost and low cost providers' estimates, the Commission would set the VRS reimbursement rate at approximately $7.00. That $7.00 rate, however, would be paid to a provider only if that provider's answer speed was equal to or better than 85 percent of calls answered within one minute. For higher answer speeds, the rate would be reduced three percent per increment, per the following table.[11]

Answer Speed	**VRS Payment Rate**
Minute or less	$7.00
One to two minutes	$6.79
two to three minutes	$6.58
four to five minutes	$6.37
five to ten minutes	$6.16
ten to fifteen minutes	$5.95
fifteen to twenty minutes	$5.75
twenty minutes or more	$5.53

This methodology has several advantages. First, from a consumer standpoint, it gives providers the incentive to reduce answer speed and thereby improve service to deaf, hard of hearing and speech disabled persons. Currently providers have an incentive to minimize costs, including video interpreter costs, to reduce their costs below the rate. Answer speed often suffers as a result. Applying this methodology, maintaining an adequate answer speed rewards providers.

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[11]The Commission could also award a premium, such as 103 percent of the rate for maintaining an average answer speed of under 20 or 30 seconds.

Second, this methodology protects the Interstate TRS Fund by ensuring that providers with lower costs due to employing relatively fewer interpreters will not enjoy windfall profits. For example, NECA forecasts some 35.5 million minutes of VRS traffic during the 2005-06 rate period. At $5.924 per minute this is a funding requirement of some $210.5 million. Were we to assume that providers with 66 percent of VRS traffic will have an average wait time of 15 to 20 minutes, that providers with 17 percent of traffic will have wait times of one to two minutes and that the remaining 17 percent of providers will have wait times of under a minute, then the funding requirement for VRS will be as follows:

Minutes (in millions)	**Payment Rate**	**Fund Requirement**
23.454	$5.740	$ 134.628
6.041	$6.790	$ 41.020
6.041	$7.000	$ 42.289
	Total:	$ 217.938

As the table above shows, there would likely be little impact upon the Interstate TRS Fund by adopting as a interim measure a mechanism that pegs the VRS payment rate to answer speed performance.

Third, this methodology is easily implemented. NECA currently obtains speed of answer information as part of the monthly traffic reports each provider submits to obtain payment for VRS. There would be virtually no additional effort required of NECA to calculate the VRS payment due providers based on answer speed performance. NECA would simply multiply the number of minutes the provider reports times the appropriate payment rate based

on the provider's answer speed performance. There would be no need for end of term audits and true up payments back to the TRS Fund from providers.[12]

Fourth, this methodology has implications for the ongoing issue of continuation of the speed of answer waiver. Arguments for continuing the answer speed waiver have focused on the alleged lack of an adequate number of interpreters. Pegging the VRS payment rate to speed of answer is likely to encourage providers to intensify efforts to recruit and train video interpreters. Moreover, to the extent a provider finds that it cannot hire a sufficient number of interpreters to meet an answer speed requirement, that provider is not faced with being denied VRS reimbursement altogether. Instead, the provider's VRS payments are reduced in recognition that its costs are lower.[13] This is perhaps a fairer way to handle the answer speed waiver issue.[14]

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[12]Providers would of course be subject to audit based on answer performance as they are now and would continue to be subject to audit based on their number of reported minutes.

[13]Hands On has argued vigorously for elimination of the answer speed waiver and the setting of reasonable answer speed criteria for VRS. By these comments Hands On does not retract that position; rather, Hands On notes that the methodology set forth above amounts to a means to encourage providers to increase answer speed and avoid the apples to oranges comparison that results when providers cost for differing answer speeds.

[14]A variant of this approach would based the compensation rate on minute of use processed during the month as well as service quality. This would have several beneficial effects. For the consumers it would encourage new entrants into the market, which would foster competition and innovation. In addition, for providers to earn additional revenues they would have to do so while maintaining service quality, rather than simply growing minutes at the cost of poor service. For service providers it would create an attractive market for new entrants who can choose to make investments in technology developments knowing they have a pathway to recover their investment. Moreover it lessens the risk that one or two service providers could force rates down in a manner that would injure competition. From the standpoint of the Commission and rate payers, this approach would lessen growth of the TRS Fund, while helping to create and maintain a competitive marketplace. It also addresses service quality concerns and lessens the chance that one

III. Conclusion.

In sum, the rate calculated in NECA's 2005-06 Fund Filing results from an apples to oranges comparison of provider costs. That rate is driven by one provider, which proposed 66 percent of VRS minutes. That provider's extremely long average answer speed is well known. It is dominating the VRS market due to its distribution of equipment which is not interoperable with other providers' service. Allowing that one provider to drive the VRS rate will have the effect of forcing all other VRS providers to lengthen their answer speeds and to degrade their service. This will eliminate any consumer incentive to use any providers' service other than the dominate provider. The dominant provider will thus further its domination in this market which is already dangerously concentrated under traditional Justice Department analysis. Competition in the VRS market will thus be substantially lessened, if not eliminated altogether by adopting the $5.924 rate. Resolution of FCC proceedings concerning answer speed and equipment interoperability will not only affect the cost of VRS, but will impact upon the

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provider's demand and cost estimates could skew the payment rate. The following matrix illustrates how this approach could work:

	Quality of Service: Answer Time				
Conversation Minutes	0-1 min	1-2 min	2-3 min	4-5 min	5+ min
0-50,000 minutes	$ 7.00	$ 6.79	$ 6.58	$ 6.37	$ 6.16
50,000 - 100,000	$ 6.79	$ 6.58	$ 6.37	$ 6.16	$ 5.95
100,000 - 250,000	$ 6.58	$ 6.37	$ 6.16	$ 5.95	$ 5.75
250,000 - 500,000	$ 6.37	$ 6.16	$ 5.95	$ 5.75	$ 5.53
500,000 - 1 million	$ 6.16	$ 5.95	$ 5.75	$ 5.53	$ 5.40
>1 million	$ 5.95	$ 5.75	$ 5.53	$ 5.40	$ 5.25

distribution of traffic among providers. Because of these reasons the FCC should adopt NECA's suggestion to employ an alternative rate setting methodology.

The FCC has discretion to choose among several reasonable alternative rate calculations. In Hands On's view, the one that makes the most sense is to eliminate the high and low cost providers' estimates because both of these costs estimates are more than one standard deviation from the mean. This would likely yield a rate of approximately $7.00. Other acceptable alternative methodologies would be to reduce the effect of the dominant VRS provider on the rate to either 1/7, 25 percent, 2/7's or 1/3, or to set the rate at the mean or median of the cost estimates.

Whatever, alternative rate the Commission chooses to apply, it should implement safeguards to prevent providers from earning windfall profits at the expense of the TRS Fund. In Hands On view, pegging the VRS payment rate to answer speed performance would achieve the best balance in encouraging consumer service and protecting the TRS Fund. Moreover, such a methodology would have the advantage of ease of application since providers are already reporting their answer speed data to NECA along with their VRS minutes.

Respectfully submitted,

HANDS ON VIDEO RELAY SERVICES, INC.

By_____
George L. Lyon, Jr.
Its Counsel

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May 12, 2005

EXHIBIT 1

BOND & PECARO

JAMES R BOND, JR
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May 12, 2005

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Dear Mr. Lyon:

You requested that Bond & Pecaro, Inc. review the calculation of a proposed Video Relay Service ("VRS") reimbursement rate that was recently prepared by the National Exchange Carrier Association, Inc. ("NECA") in an April 25, 2005 submission to the Federal Communications Commission ("FCC").[1] In this letter, we will review the calculation made by NECA and provide comments regarding the calculation of averages.

Background

NECA, based upon data submitted by seven of the eight VRS providers, calculated an average cost per minute for VRS by dividing the total cost of $321,049,465 from the seven providers by the 54,948,999 minutes of service provided to yield an average cost per minute of $5.843. Adding a 1.4% provision for working capital requirements to this yielded a reimbursement allowance of $5.924 per minute.

NECA indicated that the $5.924 rate was driven by a single provider, and that the reimbursement rate would be $7.061 if the average were based upon an average of the six other providers. While the data employed in the survey of VRS providers

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1 National Exchange Carrier Association, Inc., Interstate Telecommunications Relay Services Fund Payment Formula and Fund Size Estimates, April 25, 2004, Submission to Federal Communications Commission, CC Docket 98-67, Exhibit 1E.

was consolidated to maintain confidentiality, data is available on the average cost per minute from each provider:[2]

Provider	Average Cost per Minute
A	$5.347
B	6.007
C	6.374
D	6.644
E	6.866
F	9.138
G	10.905

Because the total costs, the total minutes, the average cost per minute, the average cost per minute of the lowest cost provider, and the average cost per minute of the other providers were available, it is possible to calculate the total minutes of both the lowest cost provider and the remaining providers as a group. The results of the calculation are as follows:

Total Minutes	54,948,999
Total Cost	$325,491,023.27
Average Cost Per Minute	$5.924
Carrier A Minutes	36,435,662
Times Carrier A Rate	$5.347
Equals Carrier A Costs	$194,821,485
Remaining Carrier Minutes	18,513,337
Times Remaining Carrier Rate	$7.061
Equals Remaining Carrier Costs	$130,722,673

Based upon the foregoing, Provider A accounted for 36.4 million minutes out of a total of 54.9 million, representing a total market share of 66.3%.

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[2] Telecommunications Relay Services Advisory Council meeting, April 19, 2005. These costs include a 1.4% working capital provision.

Use of Averages

Bond & Pecaro, Inc. routinely employs calculated averages in its economic analyses. Various techniques may be appropriate based upon both the purpose of the analysis and the characteristics of the data, such as sample size and dispersion. We will discuss some of these below.

Weighted Average

This is the method that was employed by NECA. This method gives more weight to the largest participants in the sample; in this case, provider A's cost per minute was given more weight because Provider A accounted for more minutes. While this method has the advantage of providing an average based upon the total costs of an industry, it does not necessarily provide the cost of an average firm, particularly when, as is the case here, a single provider accounts for a preponderance of the market. In this case, the weighted average yields a value that approximates the cost structure of a single provider rather than an average provider.

Straight Average

A straight average gives equal weight to all participants. In this case, the straight average of the costs per minute of the seven providers is $7.33.

Median

The median is the middle value when a set of numbers are ranked in order. In other words, there are as many observations above the median as below it. In this case, the median of the seven cost per minute observations is $6.64.

Mode

The mode is the most frequent value in a series of numbers. For example, if there were more 10 year olds in a class than any other age, that would be the mode. Due to the small number of observations in the case of VRS per minute costs, we do not view this as a meaningful approach.

Refinements

Refinements are often made to make averages more meaningful. In particular, Bond & Pecaro, Inc., will often exclude the highest and lowest observations in a

data to eliminate the impact of "outliers". Insufficient data was available to calculate the weighted average on this basis, although the straight average calculation excluding the highest and lowest calculations is $7.01.

Qualitative Factors

In calculating averages, we believe it is also important to understand qualitatively what the numbers represent. Two observations are noteworthy here.

First, all of the averages outlined above simply represent a brute force calculation based upon sets of data. They do not reflect considerations such as quality of service, value, and related factors. For example, a higher cost option may still be the most economical based on other qualitative factors such as quality, durability, service quality, delivery time, and the like.

Second, the use of averages typically assumes that the constituent sample values are developed consistently in an orderly market. This may not be the case due to the large impact of Provider A. For example, the US Department of Justice often employs a technique known as the Herfindahl-Hirshman Index ("HHI").[3] This is calculated by squaring the market share of each participant in a market and summing these results. For example, if an industry had 10 participants each with a 10% market share, the HHI would be 1,000. Markets in which the HHI is in excess of 1,800 are considered highly concentrated. Business combinations that increase the HHI by more than 100 points in a highly concentrated market are considered to raise antitrust concerns and can be presumed illegal. The index approaches zero when many participants have small shares and increases in markets with fewer participants and higher market shares.

In this case, the 66.3% share of Participant A alone yields an HHI of 4,396, over twice the highly concentrated threshold. This type of concentration, which is in our experience atypical, raises questions as to whether all of the cost per minute data points are consistent with an orderly market and may warrant further research. Even if Participant A's share of total costs of 59.9% is employed as a measure of market share, an HHI of 3,588 results.

Conclusions

Based upon the foregoing, the use of a weighted average in the computation of a VRS reimbursement rate appears to be suspect. The market share imbalance of the

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[3] *http://usdoj.gov/atr/public/testimony/hhi.htm*, May 11, 2005.

participants and the related concentration of one provider obviously raise questions. The weighted average also varies significantly from the results of the other approaches, such as the straight average, the median, and the straight average with the elimination or outliers.

From a mathematical perspective, it is commonly accepted that the nature of a data set may suggest the use of several statistical techniques, as we have done above, and that the brute force application of one technique, such as the weighted average, can be misleading.[4] From a valuation perspective, the simple reliance on a weighted average without giving consideration to qualitative factors is also one of the "common errors" in using guideline companies. As one frequently cited appraisal text notes:

> ...Unless the guideline and subject companies are extremely homogenous in their financial characteristics, the mean or median of the guideline company pricing multiples may not be the most appropriate pricing multiples...Yet analysts often use the mean or median guideline company pricing multiple with no explanation to justify the implied notion that the subject company's characteristics indicate it should be valued right at the average of the guideline companies....Such analysis is little more than common sense, yet it is surprising how often it is ignored![5]

Consequently, we would suggest reliance on a more representative average, such as the straight average without outliers, or an approach which gives weight to several averages, in the calculation of a VRS reimbursement rate.

Bond & Pecaro's Experience

The professional staff of Bond & Pecaro has been retained to appraise over 4,500 media and communications businesses. Members of the firm have extensive experience in the areas of market research, valuation related tax matters, financial and economic analysis, communications engineering, acquisition evaluation, and litigation matters. Senior members of the staff testify routinely as expert witnesses on issues related to the value of communications companies and their assets.

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4 See, for example, John E. Freund, Modern Elementary Statistics (Englewood Cliffs: Prentice-Hall), 1979.

5 Shannon P. Pratt, et. al., Valuing a Business: The Analysis and Appraisal of Closely Held Companies. (New York: McGraw Hill), 2000, pp. 255-256.

The firm's clients include AT&T, Belo, Cable One, CBS, Citadel, Clear Channel, Comcast, Cox Enterprises, Cumulus, Fox - News Corp., Gray Television, The Hearst Corporation, Lin Television, Media General, National Geographic, NBC/Univision, Newhouse, New York Times, Paramount, Pulitzer, Radio One, Time-Warner, Viacom, The Washington Post, Young Broadcasting, and many others.

Mr. Lyon, I hope this information is responsive to your request at this time. Please let me know if you have any questions or if I can be of further assistance.

Sincerely,

BOND & PECARO, INC.

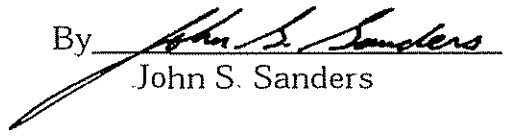
By 
John S. Sanders

EXHIBIT A

QUALIFICATIONS OF JOHN S. SANDERS

PROFESSIONAL EXPERIENCE AND QUALIFICATIONS

JOHN S. SANDERS

John S. Sanders is a principal in the firm of Bond & Pecaro, Inc., a Washington-based consulting firm specializing in valuations, asset appraisals, and related financial services for the communications industry. Prior to his association with Bond & Pecaro, Inc., Mr. Sanders was Manager, Appraisal Group, with Frazier, Gross & Kadlec, Inc. He worked for that firm in various analytical and managerial positions between 1982 and 1986.

Mr. Sanders has been actively involved in both fair market valuations and asset appraisals of over 2,000 television, radio, hardline and wireless cable, radio common carrier, newspaper, technology and related communications businesses. He has also assumed primary responsibility for a number of expert testimony and similar special projects, including economic analyses of specific communications industry issues.

Mr. Sanders has spoken on financial issues for the Cellular Telecommunications Association, the Personal Communications Industry Association, the National Association of Broadcasters (NAB), the Broadcast Cable Financial Management Association, the Telecom Publishing Group, and other organizations. His commentaries have also been published in the trade press, including Cellular Business, PCIA Journal, Open Channels, Broadcasting, and Communications magazines and the Broadcast Financial Journal. He has been interviewed by publications including The Washington Post, The Orlando Sentinel, Boston, Business Journal, thestreet.com, Communications, PCS News, Wireless Week, and Telephony.

Mr. Sanders received a B.A. Cum Laude in Economics and International Studies (Honors) from Dickinson College. He also holds a Masters Degree in Business Administration from the University of Virginia in Charlottesville, Virginia.